BAY AREA AIR QUALITY MANAGEMENT DISTRICT

BOARD OF DIRECTORS SPECIAL MEETING DECEMBER 15, 2021

THIS MEETING WILL BE CONDUCTED UNDER PROCEDURES AUTHORIZED BY ASSEMBLY BILL 361

- **THE PUBLIC MAY OBSERVE THIS MEETING THROUGH THE WEBCAST BY CLICKING THE LINK AVAILABLE ON THE AIR DISTRICT'S AGENDA WEBPAGE AT**

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BOARD OF DIRECTORS SPECIAL MEETING AGENDA

WEDNESDAY
DECEMBER 15, 2021
8:30 A.M.

Chairperson, Cindy Chavez

1. **CALL TO ORDER - ROLL CALL**

   PLEDGE OF ALLEGIANCE

   PUBLIC MEETING PROCEDURE

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

   This meeting will be webcast. To see the webcast, please visit www.baaqmd.gov/bodagendas at the time of the meeting. Closed captioning may contain errors and omissions and are not certified for their content or form.

   Public Comment on Agenda Items *The public may comment on each item on the agenda as the item is taken up. Members of the public who wish to speak on matters on the agenda for the meeting, will have three minutes each to address the Board. No speaker who has already spoken on that item will be entitled to speak to that item again.*

CLOSED SESSION

2. **PUBLIC EMPLOYEE PERFORMANCE EVALUATION**
   Pursuant to Government Code Section 54957 (b)(1)

   Title: Chief Executive Officer/Air Pollution Control Officer

3. **PUBLIC EMPLOYEE PERFORMANCE EVALUATION**
   Pursuant to Government Code Section 54957 (b)(1)

   Title: Acting District Counsel

OPEN SESSION

CONSENT CALENDAR (ITEMS 4 -15)

4. Continuation of Remote Teleconferencing per Assembly Bill (AB) 361 (Rivas)

   J. Broadbent/5052
   jbroadbent@baaqmd.gov

   The Board of Directors will consider approving a resolution reauthorizing Air District Board and Committee meetings remote teleconferencing through February 6, 2022.

5. Minutes of the Board of Directors Special Meeting of December 1, 2021

Clerk of the Boards/5073

The Board of Directors will consider approving the draft minutes of the Board of Directors Special Meeting of December 1, 2021.

6. Board Communications Received from December 1, 2021, through December 14, 2021

J. Broadbent/5052
jbroadbent@baaqmd.gov

A copy of communications directed to the Board of Directors received by the Air District from December 1, 2021, through December 14, 2021, if any, will be distributed to the Board Members by way of email.

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

J. Broadbent/5052
jbroadbent@baaqmd.gov

In accordance with Section (b) of the Air District 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 months.

8. Consider Adopting Proposed Amendments to the Air District's Administrative Code, Division II: Fiscal Policies & Procedures, Section 5 Allowable Expenses, 5.1 Director Travel Expenses

J. Broadbent/5052
jbroadbent@baaqmd.gov

The Board of Directors will consider adopting amendments to the Air District's Administrative Code, Division II: Fiscal Policies & Procedures, Section 5 Allowable Expenses, 5.1 Director Travel Expenses.

9. Consider Amending the Air District's Classification Plan to Combine the Air Quality Inspector and Air Quality Instrument Specialist Classification Series with the Air Quality Specialist Classification Series and Approve a New Assistant Air Quality Specialist I/II Classification

J. Broadbent/5052
jbroadbent@baaqmd.gov

The Board of Directors consider amending the Air District's Classification Plan to combine the Air Quality Inspector and Air Quality Instrument Specialist Classification Series with the Air Quality Specialist Classification Series and approve a new Assistant Air Quality Specialist I/II Classification.

10. Consider Approval of Hiring Recommendation at Step E of Salary Range 128 for the Air Quality Inspector II Positions

J. Broadbent/5052
jbroadbent@baaqmd.gov

The Board of Directors will consider approving hiring recommendation at Step E of Salary Range 128 for the Air Quality Inspector Positions.

11. Authorization to Amend Air Monitoring Operations Budget with Schedule X Fees

J. Broadbent/5052
jbroadbent@baaqmd.gov

The Board of Directors will consider authorizing the Executive Officer/APCO to amend the Fiscal Year Ending (FYE) 2022 budget for Air Monitoring Operations by $450,000, funded by fees collected through Schedule X.

12. Management Audit Vendor Qualification Recommendation **J. Broadbent/5052**
jbroadbent@baaqmd.gov

The Board of Directors will consider authorizing the Executive Officer/APCO to execute a contract for management audit services with Sjoberg Evashenk, Inc., in an amount not to exceed $250,000.

13. Administration Committee Meeting

CO-CHAIRS: C. Chavez and C. Groom **J. Broadbent/5052**
jbroadbent@baaqmd.gov

13.1 **ACTION REQUESTED:** Receive Committee Chair Summary Report of December 1, 2021

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

13.2 Report of the Administration Committee Meeting of December 1, 2021

The Committee will present to the Board the following as informational:

Formation of an Executive Support Standing Committee:

1) *The current Ad Hoc Executive Support Committee is tasked with developing the final composition of the future oversight standing Committee that includes minimally the Board Chair, Vice Chair and past or recent past Chair.*

2) *Set at a minimum quarterly meeting with the Committee and the Executive Officer to review current and planned actions and activities and discuss how they connect to the Board's goals.*

3) *Set at a minimum quarterly meeting with the Committee and the District Counsel to review current and upcoming legal actions and any other relevant information.*

4) *Perform an employee 360* or other innovative evaluation of the Executive Officer every 3 years to gain clarity about how District employees perceive the direction of the agency under the leadership of the Executive Officer. Evaluation reports should be written with an emphasis on confidentiality.*

5) *Perform an employee 360* or other innovative evaluation of the District Counsel every 3 years to gain clarity about District employees' opinion of the current legal direction of the agency. Evaluation reports should be written with an emphasis on confidentiality.*

6) *Retain outside counsel to assess the current annual evaluation process.*

7) *Work with outside counsel to create a standardized annual evaluation process, including performance measures and a standardized set of evaluation questions.*

8) *Create an annual practice of providing each board member with a list of the annual evaluation questions, past years' materials, and previous evaluations at the beginning of the year to help inform their future assessment.*

14. Community Equity, Health and Justice Committee Meeting

CO-CHAIRS: D. Hurt and T. Jue **J. Broadbent/5052**
jbroadbent@baaqmd.gov

14.1 **ACTION REQUESTED:** Receive Committee Chair Summary Report of December 2, 2021

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

14.2 Report of the Community Equity, Health and Justice Committee Meeting of December 2, 2021

The Committee recommends Board of Directors approval of the following:

ACTION REQUESTED: Discussion on Process for Filling Vacant Seats for Path to Clean Air Community Emissions Reduction Plan (CERP) Community Steering Committee:

1) *Approve the recommended slate of four candidates to fill the current vacancies in the Path to Clean Air Steering Committee with the following applicants: Simren Sandhu, Marisol Cantú, Daniella Zacky, and Michelle Gomez Garcia. In addition, request staff to develop and propose a new procedure for filling future vacancies and reserves list that the Committee may review and provide input to then be implemented to fill a future reserves list.*

15. Mobile Source and Climate Impacts Committee Meeting

CO-CHAIRS: D. Canepa and K. Rice **J. Broadbent/5052**
jbroadbent@baaqmd.gov

15.1 **ACTION REQUESTED:** Receive Committee Chair Summary Report of December 6, 2021

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

15.2 Report of the Mobile Source and Climate Impacts Committee Meeting of December 6, 2021

The Committee recommends Board of Directors approval of the following:

A) **ACTION REQUESTED:** Projects and Contracts with Proposed Grant Awards Over $100,000

1) Approve recommended projects with proposed grant awards over $100,000 as shown in Attachment 1; and

2) Authorize the Executive Officer/APCO to enter into all necessary agreements with applicants for the recommended projects.

END OF CONSENT CALENDAR

PUBLIC HEARING

16. Public Hearing to Consider Adoption of Proposed Amendments to Regulation 2, Rule 1: General Requirements (Rule 2-1) and Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants (Rule 2-5) and Adoption of a Negative Declaration Pursuant to the California Environmental Quality Act (CEQA) **M. Tang/4778**
mtang@baaqmd.gov

The Board of Directors will consider adoption of proposed amendments to Regulation 2, Rule 1: General Requirements (Rule 2-1) and Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants (Rule 2-5) and adoption of a Negative Declaration pursuant to the California Environmental Quality Act (CEQA).

END OF PUBLIC HEARING

COMMENDATION/PROCLAMATION/AWARDS

17. *The Board of Directors will recognize outgoing Board Chairperson Cindy Chavez for her outstanding leadership as Chair of the Board of Directors in 2021, and dedication to protecting air quality in the Bay Area.*

PUBLIC COMMENT ON NON-AGENDA MATTERS

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

Members of the public who wish to speak on matters not on the agenda for the meeting, will have three minutes each to address the Board.

BOARD MEMBERS' COMMENTS

19. *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

20. Report of the Executive Officer/APCO

21. Chairperson's Report

22. Time and Place of Next Meeting:

    Wednesday, January 19, 2022, at 9:30 a.m., Pleasant Hill Community Center, 320 Civic Drive (Pavilion Room), Pleasant Hill, CA 94523 and, via webcast, pursuant to procedures authorized in accordance with Assembly Bill 361.

23. Adjournment

    The Board meeting shall be adjourned by the Board Chair.

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

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

Accessibility and Non-Discrimination Policy

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

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

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

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

Questions regarding this Policy should be directed to the Air District's Non-Discrimination Coordinator, Terri Levels, at (415) 749-4667 or by email at tlevels@baaqmd.gov.

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

EXECUTIVE OFFICE:
MONTHLY CALENDAR OF AIR DISTRICT MEETINGS

DECEMBER 2021

TYPE OF MEETING	DAY	DATE	TIME	ROOM
Advisory Council Meeting	Monday	13	8:30 a.m.	Webcast only pursuant to Assembly Bill 361
Board of Directors Special Meeting	Wednesday	15	8:30 a.m.	Webcast only pursuant to Assembly Bill 361
Board of Directors Administration Committee - CANCELLED AND RESCHEDULED TO WEDNESDAY, DECEMBER 1, 2021 AT 11:00 AM	Wednesday	15	11:00 a.m.	Webcast only pursuant to Assembly Bill 361
Board of Directors Legislative Committee - CANCELLED AND RESCHEDULED TO THURSDAY, DECEMBER 9, 2021 AT 2:00 PM	Wednesday	15	1:00 p.m.	Webcast only pursuant to Assembly Bill 361
Board of Directors Stationary Source and Climate Impacts Committee	Monday	20	9:00 a.m.	Webcast only pursuant to Assembly Bill 361
Board of Directors Mobile Source and Climate Impacts Committee – CANCELLED AND RESCHEDULED TO MONDAY, DECEMBER 6, 2021, AT 1:00PM	Thursday	23	9:30 a.m.	Webcast only pursuant to Assembly Bill 361

JANUARY 2022

TYPE OF MEETING	DAY	DATE	TIME	ROOM
Board of Directors Meeting – Cancelled	Wednesday	5	9:30 a.m.	Webcast only pursuant to Assembly Bill 361
Board of Directors Community Equity, Health and Justice Committee - Cancelled	Thursday	6	9:30 a.m.	Webcast only pursuant to Assembly Bill 361
Board of Directors Stationary Source and Climate Impacts Committee - Cancelled	Monday	17	9:00 a.m.	Webcast only pursuant to Assembly Bill 361
Board of Directors Special Meeting/Retreat	Wednesday	19	9:30 a.m.	Webcast pursuant to Assembly Bill 361 and LOCATION: Pleasant Hill Community Center 320 Civic Drive Pleasant Hill, CA 94523
Board of Directors Administration Committee – cancelled	Wednesday	19	9:30 a.m.	Webcast only pursuant to Assembly Bill 361
Board of Directors Legislative Committee - Cancelled	Wednesday	19	1:00 p.m.	Webcast only pursuant to Assembly Bill 361
Board of Directors Mobile Source and Climate Impacts Committee - Cancelled	Thursday	27	9:30 a.m.	Webcast only pursuant to Assembly Bill 361

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Cindy Chavez and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: December 6, 2021

Re: Continuation of Remote Teleconferencing per Assembly Bill (AB) 361 (Rivas)

RECOMMENDED ACTION

The Board of Directors will consider approving a resolution reauthorizing Air District Board and Committee meetings remote teleconferencing through February 6, 2022.

BACKGROUND

AB 361 (R. Rivas) – Open meetings: state and local agencies: teleconferences.
Allows until January 1, 2024, a local agency to use teleconferencing without complying with the teleconferencing requirements imposed by the Ralph M. Brown Act, when a legislative body of a local agency holds a meeting during a declared state of emergency, as that term is defined, when state or local health officials have imposed or recommended measures to promote social distancing, during a proclaimed state of emergency held for the purpose of determining, by majority vote, whether meeting in person would present imminent risks to the health or safety of attendees, and during a proclaimed state of emergency when the legislative body has determined that meeting in person would present imminent risks to the health or safety of attendees, as provided. The law requires a resolution every 30 days to provide this flexibility.

DISCUSSION

When the COVID-19 pandemic started, local agency boards struggled to conduct their meetings in compliance with the Brown Act's public accessibility requirements while still abiding by stay-at-home orders. As a result, Governor Newsom signed several executive orders to grant local agencies the flexibility to meet remotely during the COVID-19 pandemic. The Governor's executive orders allowed public agencies to meet remotely and did not require physical public access to those meeting locations. Those executive orders expired on September 30, 2021. The State of Emergency Declaration of March 4, 2020, continues to remain in effect.

AB 361 provides additional flexibility for local agencies looking to meet remotely during a proclaimed state of emergency, however, the legislative body is required to consider and vote on this flexibility on a monthly basis. Excerpts of the bill amending Section 54593 of the Government Code provide the following guidance:

(e) (1) A local agency may use teleconferencing without complying with the requirements of paragraph (3) of subdivision (b) if the legislative body complies with the requirements of paragraph (2) of this subdivision in any of the following circumstances:

(A) The legislative body holds a meeting during a proclaimed state of emergency, and state or local officials have imposed or recommended measures to promote social distancing.

(B) The legislative body holds a meeting during a proclaimed state of emergency for the purpose of determining, by majority vote, whether as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees.

(C) The legislative body holds a meeting during a proclaimed state of emergency and has determined, by majority vote, pursuant to subparagraph (B), that, as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees.

The following guidance on exercising this flexibility is also contained in the amended Section 54593 of the Government Code:

(3) If a state of emergency remains active, or state or local officials have imposed or recommended measures to promote social distancing, in order to continue to teleconference without compliance with paragraph (3) of subdivision (b), the legislative body shall, not later than 30 days after teleconferencing for the first time pursuant to subparagraph (A), (B), or (C) of paragraph (1), and every 30 days thereafter, make the following findings by majority vote:

(A) The legislative body has reconsidered the circumstances of the state of emergency.

(B) Any of the following circumstances exist:

> *(i) The state of emergency continues to directly impact the ability of the members to meet safely in person.*
>
> *(ii) State or local officials continue to impose or recommend measures to promote social distancing.*

(4) For the purposes of this subdivision, "state of emergency" means a state of emergency proclaimed pursuant to Section 8625 of the California Emergency Services Act (Article 1 (commencing with Section 8550) of Chapter 7 of Division 1 of Title 2).

(f) This section shall remain in effect only until January 1, 2024, and as of that date is repealed.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Alan Abbs
Reviewed by: Jack P. Broadbent

Attachment 4A: Draft Resolution of The Board of Directors of the Bay Area Air Quality Management District Proclaiming a Local Emergency Persists, Re-Ratifying the Proclamation of a State of Emergency by Governor Newsom on March 4, 2020, and Re-Authorizing Remote Teleconference Meetings of the Legislative Bodies of the Air District for the Period January 6, 2022 to February 6, 2022 Pursuant to Brown Act Provisions.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

RESOLUTION NO. 2021-

A Resolution of The Board of Directors of the Bay Area Air Quality Management District Proclaiming a Local Emergency Persists, Re-Ratifying the Proclamation of a State of Emergency by Governor Newsom on March 4, 2020, and Re-Authorizing Remote Teleconference Meetings of the Legislative Bodies of the Air District for the Period January 6, 2022 to February 6, 2022 Pursuant to Brown Act Provisions.

WHEREAS, the Bay Area Air Quality Management District (District) is committed to preserving and nurturing public access and participation in meetings of the Board of Directors; and

WHEREAS, all meetings of District's legislative bodies are open and public, as required by the Ralph M. Brown Act (Cal. Gov. Code 54950 – 54963), so that any member of the public may attend, participate, and watch the District's legislative bodies conduct their business; and

WHEREAS, the Brown Act, Government Code section 54953(e), makes provision for remote teleconferencing participation in meetings by members of a legislative body, without compliance with the requirements of Government Code section 54953(b)(3), subject to the existence of certain conditions; and

WHEREAS, a required condition is that a state of emergency is declared by the Governor pursuant to Government Code section 8625, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by conditions as described in Government Code section 8558; and

WHEREAS, a proclamation is made when there is an actual incident, threat of disaster, or extreme peril to the safety of persons and property within the jurisdictions that are within the District's boundaries, caused by natural, technological, or human-caused disasters; and

WHEREAS, it is further required that state or local officials have imposed or recommended measures to promote social distancing, or, the legislative body meeting in person would present imminent risks to the health and safety of attendees; and

WHEREAS, the Board of Directors previously adopted a Resolution on October 6, 2021, finding that the requisite conditions exist for the legislative bodies of District to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, as a condition of extending the use of the provisions found in section 54953(e), the Board of Directors must reconsider the circumstances of the state of emergency that exists in the District, and the Board of Directors has done so; and

WHEREAS, emergency conditions persist in the District, specifically, the Covid-19 state of emergency remains active and the Governor's Covid-19 Emergency Proclamation of March 4, 2020 remains in effect; and

WHEREAS, social distancing has been ordered by state and local public health authorities due to the imminent health and safety risks of in person contacts and meetings during the COVID-19 emergency; and

WHEREAS, the Board of Directors recognizes the social distancing orders of state and local public health authorities, and hereby finds that the state of emergency related to Covid-19, and the risk of contagion of Covid-19 for attendees at in-person meetings has caused, and will continue to cause, conditions of peril to the safety of persons within the District that are likely to be beyond the control of services, personnel, equipment, and facilities of the District; and

WHEREAS, the Board of Directors desires to affirm a local emergency exists, re-ratify the proclamation of state of emergency by the Governor of March 4, 2020, and re-ratify the state and local orders of public health authorities for social distancing; and

WHEREAS, as a consequence of the local emergency persisting, the Board of Directors does hereby find that the legislative bodies of District shall continue to conduct their meetings without compliance with paragraph (3) of subdivision (b) of Government Code section 54953, as authorized by subdivision (e) of section 54953, and that such legislative bodies shall continue to comply with the requirements to provide the public with access to the meetings as prescribed in paragraph (2) of subdivision (e) of section 54953; and

WHEREAS, the District is publicizing in its meeting agendas zoom links for members of the public to participate remotely in meetings of the District's legislative bodies.

NOW, THEREFORE, THE BOARD OF DIRECTORS OF DISTRICT DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. Recitals. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.

Section 2. Affirmation that Local Emergency Persists. The Board of Directors hereby considers the conditions of the state of emergency related to Covid-19 in the District, proclaims that a local emergency persists throughout the District, recognizes that social distancing orders have been issued by state and local public health authorities, and finds that in person meetings would present imminent risks to the health and safety of attendees.

Section 3. Re-ratification of Governor's Proclamation of a State of Emergency. The Board hereby ratifies the Governor of the State of California's Proclamation of State of Emergency, effective as of its issuance date of March 4, 2020.

Section 4. Remote Teleconference Meetings. The Staff and legislative bodies of District are hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution including, continuing to conduct open and public meetings in accordance with Government Code section 54953(e) and other applicable provisions of the Brown Act.

Section 5. Effective Date of Resolution. This Resolution shall take effect immediately upon its adoption and shall be effective until the earlier of (i) February 6, 2022, or such time the Board of Directors adopts a subsequent resolution in accordance with Government Code section 54953(e)(3) to extend the time during which the legislative bodies of District may continue to teleconference without compliance with paragraph (3) of subdivision (b) of section 54953.

The foregoing resolution was duly regularly introduced, passed, and adopted at a regular meeting of the Board of Directors of the Bay Area Air Quality Management District on the motion of _____, seconded by _____, on the 15TH day of DECEMBER 2021, by the following vote of the Board:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____

Cindy Chavez
Chair of the Board of Directors

ATTEST:

_____

John J. Bauters
Secretary of the Board of Directors

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Cindy Chavez and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: December 6, 2021

Re: Minutes of the Board of Directors Special Meeting of December 1, 2021

RECOMMENDED ACTION

Approve the attached draft minutes of Board of Directors Special Meeting of December 1, 2021.

DISCUSSION

Attached for your review and approval are the draft minutes of the Board of Directors Special Meeting of December 1, 2021.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Justine Buenaflor
Reviewed by: Vanessa Johnson

Attachment 5A: Draft Minutes of the Board of Directors Special Meeting of December 1, 2021

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

Board of Directors Special Meeting
Wednesday, December 1, 2021

DRAFT MINUTES

Note: Audio recordings of the meeting are available on the website of the Bay Area Air Quality Management District at www.baaqmd.gov/bodagendas

This meeting was conducted under procedures in accordance with Assembly Bill 361. Members of the Board of Directors participated by teleconference.

CALL TO ORDER

1. **Opening Comments:** Board of Directors (Board) Chairperson, Cindy Chavez, called the meeting to order at 8:01 a.m.

   Roll Call:

   Present: Chairperson Cindy Chavez; Vice Chairperson Karen Mitchoff; Secretary John Bauters; and Directors, Teresa Barrett, Rich Constantine, Pauline Russo Cutter, John Gioia, David Haubert, Lynda Hopkins, David Hudson, Davina Hurt, Tyrone Jue, Mark Ross, and Lori Wilson.

   Absent: Directors Margaret Abe-Koga, David Canepa, Carole Groom, Erin Hannigan, Myrna Melgar, Nate Miley, Rob Rennie, Katie Ric, Brad Wagenknecht, and Shamann Walton.

CONSENT CALENDAR (ITEMS 2 – 17)

2. Continuation of Remote Teleconferencing per Assembly Bill (AB) 361 (Rivas)
3. Minutes of the Board of Directors Special Meeting of November 17, 2021
4. Board Communications Received from November 17, 2021, through November 30, 2021
5. Notices of Violations Issued and Settlements in Excess of $10,000 in the Month of October 2021
6. Quarterly Report of the Executive Office and Division Activities for the Months of July 2021-September 2021
7. Quarterly Report of California Air Resources Board Representative – Honorable Davina Hurt
8. Notice of Proposed Amendments to the Air District's Administrative Code, Division II: Fiscal Policies & Procedures, Section 5 Allowable Expenses, 5.1 Director Travel Expenses
9. Proposed Regulatory Agenda for 2022

10. Authorization to Accept 2022 Carl Moyer Program and Greenhouse Gas Reduction Fund State Grant Funds from the California Air Resources Board
11. Authorization to Approve Proposed Grant Awards for the Fiscal Years 2021/2022 James Cary Smith Community Grant Program
12. Authorization to Amend Current Grant Agreement with Community Health Protection Grants Program Grantee, All Positives Possible
13. Authorization to Adopt CalPERS Resolution to Pay and Report the Value of Employer Paid Member Contribution
14. Advisory Council Meeting

14.1 **ACTION REQUESTED:** Receive Committee Chair Summary Report of November 8, 2021

14.2 Report of the Advisory Council Meeting of November 8, 2021

15. Stationary Source and Climate Impacts Committee Meeting

15.1 **ACTION REQUESTED:** Receive Committee Chair Summary Report November 15, 2021

15.2 Report of the Stationary Source and Climate Impacts Committee Meeting of November 15, 2021

16. Richmond Area Community Emissions Reduction Plan Steering Committee Meeting

16.1 **ACTION REQUESTED:** Receive Committee Chair Summary Report of November 15, 2021

16.2 Report of the Richmond Area Community Emissions Reduction Plan Steering Committee Meeting of November 15, 2021

17. Administration Committee Meeting

17.1 **ACTION REQUESTED:** Receive Committee Chair Summary Report of November 17, 2021

17.2 Report of the Administration Committee Meeting of November 17, 2021

The Committee recommends Board of Directors approval of the following:

A) **ACTION REQUESTED:** Management Audit Vendor Qualification Recommendation

1) Enter discussions with vendors (Sjoberg Evashenk or TAP International) qualified under Request for Qualifications No. 2021-011, to establish a contract for management audit services in an amount not to exceed $250,000.

B) **ACTION REQUESTED:** Request to Amend Fiscal Year Ending 2022 Budget to Increase Staffing

1) Amend the Fiscal Year Ending 2022 Budget to authorize the creation of four additional full-time positions (a Senior Deputy Executive Officer, Senior Assistant Counsel, Director/Officer, and Assistant Counsel) for immediate recruitment;

2) Request that the vendor selected, to conduct the Air District's management audit, review the creation of the aforementioned positions and recruitment before offers of employment are made; and

3) Direct Air District staff to present a status update to the Board on the work of MEB Consulting Group, no later than February 2022.

Public Comments

No requests received.

Board Comments

Board Chair Chavez thanked Adan Schwartz Acting Legal Counsel and the Legal team for updating the NOV language to make it easier for the public to navigate.

Board Action

Director Wagenknecht arrived 8:11 a.m.

Director Haubert made a motion, seconded by Director Cutter, to **approve** the Consent Calendar Items 2 through 17, inclusive; and the motion **carried** by the following vote of the Board:

AYES:	Barrett, Bauters, Chavez, Constantine, Cutter, Gioia, Haubert, Hopkins, Hudson, Hurt, Jue, Mitchoff, Ross, Wagenknecht, Walton, Wilson.
NOES:	None.
ABSTAIN:	None.
ABSENT:	Abe-Koga, Canepa, Groom, Hannigan, Melgar, Miley, Rennie, Rice.

PRESENTATION

18. Environmental Justice Training Module: Structural Racism and Environmental Injustice

The Board of Directors (Board) participated in the second Environmental Justice Training session with a focus on progress towards building relationships, partnerships and trust with communities, and how these partnerships can accelerate progress towards protecting air quality and public health. The second module builds upon the first module which focused on the historical connection between racial segregation and structural racism and current day environmental injustices in the Bay Area, and across our nation. The first part of the training was led by Azibuike Akaba, Acting Senior Policy Advisor, in which he led the Board through an exercise to draw and share a "mental map" of where they grew up; Board members were asked to analyze their "map" and how it influenced them today; Veronica Eady, Senior Deputy Executive Officer, reviewed the definition of procedural justice in relation to building trust with the community; staff shared a video clip of Ms. Margaret Gordon, West Oakland Environmental Indicators Project at a California Air Resources Board meeting; Ms. Eady introduced Vernice Miller-Travis, Executive Vice President for Environment and Sustainability Metropolitan Group and Co-Founder of West Harlem Environmental Action Coalition (WEACT); Ms. Eady interviewed Ms. Miller-Travis regarding the 30th Anniversary of the first People of Color Summit in which activists gathered in Washington D.C. to discuss environmental injustices across the country; Secretary Bauters asked Ms. Miller-Travis how can the Board further their education in environmental justice topics; Ms. Miller-Travis recommended conducting site visits and trips to physically see what communities are enduring to better understand how to assist them; Due to timing constraints, Board Chair Chavez requested that the remainder of the slides be summarized and staff can begin the next training module with the remaining content; Tim Williams, Diversity, Equity & Inclusion Manager, and Anna Lee, Community Engagement Manager, provided brief overviews revolving around

partnering with communities to advance environmental justice and the Air District's work with a shared racial equity framework.

Public Comments

No requests received.

Board Comments

Chair Chavez thanked staff for the thoughtful training and for the guest speaker, Ms. Miller-Travs's participation.

Board Action

None; receive and file.

PUBLIC COMMENT ON NON-AGENDA MATTERS

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

No requests received.

BOARD MEMBERS' COMMENTS

20. Board Members' Comments

None.

OTHER BUSINESS

21. Report of the Executive Officer/APCO

Jack P. Broadbent, Executive Officer/APCO waved the Executive Officer report.

22. Chairperson's Report

Chair Chavez thanked the Board again for participating in this important training.

16. Time and Place of Next Meeting

Wednesday, December 15, 2021, at 8:30 a.m., via webcast, pursuant to procedures in accordance with Assembly Bill 361.

17. **Adjournment**

The meeting adjourned at 10:15 a.m.

Justine Buenaflor
Acting Clerk of the Boards

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Cindy Chavez and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: December 6, 2021

Re: Board Communications Received from December 1, 2021, through December 14, 2021

RECOMMENDED ACTION

None; receive and file.

DISCUSSION

Copies of communications directed to the Board of Directors received by the Air District from December 1, 2021, through December 14, 2021, if any, will be distributed to the Board Members by way of email.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Vanessa Johnson

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Cindy Chavez and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: December 6, 2021

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 November 2021. 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 November 2021:

COP 26 Conference, Glasgow, Scotland, UK., November 3 - 13, 2021 attendees:

- Abby Young, Manager
- John Bauters, Board of Director

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Stephanie Osaze
Reviewed by: Jeff McKay

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Cindy Chavez and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: December 6, 2021

Re: Consider Adopting Proposed Amendments to the Air District's Administrative Code, Division II: Fiscal Policies & Procedures, Section 5 Allowable Expenses, 5.1 Director Travel Expenses

RECOMMENDED ACTION

The Board of Directors will consider adopting an amendment to the Air District's Administrative Code, Division II: Fiscal Policies & Procedures, Section 5 Allowable Expenses, 5.1 Director Travel Expenses.

BACKGROUND

Members of the Board of Directors are occasionally asked to attend conferences and events outside of the Bay Area on behalf of the Air District. On November 17, 2021, the Administration Committee was presented with a staff recommendation to create a travel policy to provide clear guidance to Board Members when traveling on behalf of the Air District. Direction was provided to staff to bring the formal policy, as an amendment to the Air District's Administrative Code to the Board of Directors for consideration of adoption.

DISCUSSION

The Air District does not have an explicit travel policy for Board Members. The Air District Administrative Code provides direction for reimbursable expenses for Board Members as it relates to the business of the Air District, but is limited as to how travel is authorized and cost reimbursement. The proposed Policy would establish a formal policy, enhance transparency of board operations, and provide guidance to Board Members when traveling.

This item is notice of the proposed amendments. Adoption of these proposed amendments will be considered at a subsequent meeting of the Board of Directors.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Rex Sanders
Reviewed by: Jack P. Broadbent

Attachment 8A: Air District's Administrative Code, Division II: Fiscal Policies & Procedures, Section 5 Allowable Expenses, 5.1 Director Travel Expenses, Redlined Version
Attachment 8B: Air District's Administrative Code, Division II: Fiscal Policies & Procedures, Section 5 Allowable Expenses, 5.1 Director Travel Expenses, Final Draft Version

SECTION 5 ALLOWABLE EXPENSES

5.1 Director Travel Expenses. (Rev. Date)

~~The Board of Directors shall be reimbursed for actual and necessary expenses, including meals, incurred by them in the performance of their duties, and for travel incurred by them in the performance of their duties, and for travel expenses outside of the District when authorized by the Board of Directors or the Chairperson of the Board in cases where short notice prevented authorization by the full Board. Directors shall be reimbursed for mileage at the rate per mile allowed by the Internal Revenue Service each year. Mileage shall be allowed to Directors for meetings of the Board of Directors and for committee meetings from their homes to the office of the District or to such other place as the meeting of the Directors or the committee, or other official business, may be held. Necessary incidental expenses shall include all reasonable charges for bridge tolls and for parking.~~

Board Members are entitled to receive reimbursement for actual and necessary expenditures incurred in connection with the performance of their official duties for the Bay Area Air Quality Management District (BAAQMD). The guiding principle of this policy is that travel and expenditures incurred on behalf of BAAQMD must be in the public interest. This document establishes guidelines for expenditures authorized as business expenditures and business travel expenditures incurred by BAAQMD Board Members.

a) General Procedures and Responsibilities

All travel for BAAQMD Board Members must be justified business travel (Section j) and must be preapproved in accordance with the Administrative Code to be eligible for reimbursement. For all in-state travel, the Chair may authorize Board Member travel on behalf of BAAQMD. For all out-of-state travel, including international travel, the Administration Committee must authorize Board Member travel on behalf of BAAQMD prior to travel. In the case of an unexpected or urgent need to travel on BAAQMD business, a Board Member may obtain the approval of the Chair, in writing, before the expenditures are incurred. Such approval must be reported to and ratified by the Administration Committee at the committee's next meeting.

Board Members will be reimbursed for all reasonable and necessary expenditures while traveling on authorized agency business. Expenditures should be paid with a personal credit card or cash. Advances are not allowed. A list of non-reimbursable expenditures is included in Section j. Actual receipts are almost always required except where otherwise stated in this Policy.

When a Board Member combines business and personal travel on a business trip, the Board Member will be responsible for the additional charges related to the personal travel. Only Board Member's direct travel expenditures are eligible for reimbursement. BAAQMD is unable to provide reimbursement for travel expenditures incurred by a spouse or any another individual traveling with the Board Member.

Requests for reimbursement of expenditures must be submitted on the authorized BAAQMD Expense Reimbursement Form within 30 calendar days after the conclusion of the trip. Receipts must be provided for all expenditures (other than incidentals that typically do not result in a receipt such as tips). Any reimbursement or payment issued by BAAQMD which is subsequently refunded to the traveler by a third party must be repaid to BAAQMD within 30 calendar days of receipt.

Only the Executive Director can override and approve specific cost items that would otherwise be ineligible for reimbursement under this Travel and Expenditure Policy, and only when it is in the best interests of BAAQMD to do so. Any Board Member reimbursement that requires the waiver of this policy by the Executive Director for approval will be brought back to the Administration Committee for informational purposes.

Expenditure reimbursement documents will be audited from time to time and are considered public records subject to disclosure under the California Public Records Act.

Any Board Member authorized to travel on behalf of BAAQMD pursuant to this section shall provide a brief, written report on their travel on the Board Member Travel Report Back Form. The Chair may also request that Board Members who represent BAAQMD at meetings, conferences, or other events provide an oral report on their participation and experience to the Board.

b) Board Member Selection for Attendance

The Chair shall nominate for approval by the Administration Committee, Board Members for out-of-state and international travel to attend conferences, conventions, legislative advocacy trips and other forms of reimbursable travel covered by this policy. In making such nominations, the Chair shall solicit the interest of Board Members and consult with the Executive Director and any other relevant BAAQMD staff to ensure compliance with this policy.

The Chair, Vice Chair or Secretary shall have priority to represent BAAQMD at any event where attendance is limited or capped due to cost or capacity. In considering which other Board Members may be selected for travel, or who shall represent BAAQMD in the stead of the Executive Officers, the Chair shall consider, at a minimum, all the following:

- The history of attendance and participation by Board Members at regular BAAQMD Board and Committee Meetings
- The length of service on the Board by a Board Member
- The prior opportunities to travel and represent BAAQMD by Board Members
- The relevance or appropriateness of Board Members' committee assignments to the nature and purpose for the travel
- Opportunities for the professional growth or development of new Board Members
- The relevance and purpose of a meeting or agenda to the home jurisdiction of Board Members
- Equitable considerations that would elevate or include the voices of marginalized members of the Bay Area.

Additionally, the Chair shall have the authority to recommend non-Board Members for inclusion in BAAQMD-related travel. In making such a recommendation, the Chair shall demonstrate how and why the recommendation fulfills the mission of BAAQMD and is consistent with the goals of the Board and agency.

c) Conferences/Conventions

Registration fees for conferences and conventions are reimbursable for Board Members if the conference or convention is directly related to the mission of BAAQMD, the Board Member

is attending as a representative of BAAQMD and the Board Member received preapproval from the Administration Committee.

d) Air Travel

Board Members flying on business should make reservations as early as possible to minimize costs.

For domestic air travel with a flight duration of four hours or less, airfare should be purchased for coach/economy seats only, at the lowest cost possible which provides a practical flight itinerary and meets the requirements of the trip. First and business class airfare is not a reimbursable expenditure, nor are upgrades from the lowest coach/economy fare to "economy plus" seats (or equivalent), or to first or business class. If a Board Member purchases a first or business class ticket, he/she will be reimbursed for the lowest available coach/economy fare only.

For domestic air travel with a flight duration of more than four hours, as well as for international travel, airfare may be purchased at the "economy plus" fare/seats. First and business class airfare is not a reimbursable expenditure, nor are upgrades to first or business class. If a Board Member purchases a first or business class ticket, he/she will be reimbursed for the lowest available "economy plus" fare only.

Board Members will be reimbursed for regular baggage fees charged pursuant to applicable airline policy. Excess baggage charges will be reimbursed only when the Board Member is traveling with heavy or bulky materials or equipment necessary for BAAQMD business.

e) Hotel Accommodations

When making hotel reservations, Board Members must use the approved Per Diem Rates for lodging located on the General Services Administration (GSA) website, www.gsa.gov for the location of the stay plus 25%, to determine the maximum hotel accommodation expenditure that BAAQMD will reimburse per night, plus any applicable taxes.

Board Members should use hotels where government rates are available. Hotels that subscribe to a "green" standard must be utilized where available.

If the hotel stay is in connection with a conference or training activity, the cost should not exceed the maximum group rate published by the conference or activity sponsor. Inquiries should always be made about any special rates or discounts available to BAAQMD by the hotel, such as governmental rates, to get the best rate possible.

If accommodations are shared with individuals who are not traveling on BAAQMD business, the Board Member is responsible for the payment of any rate difference between the single occupancy room rate and actual rate incurred.

Resort or facility use fees imposed by the hotel, such as fitness center fees and internet connection fees and business center charges incurred for performing BAAQMD work, are allowable as reimbursable business-related expenditures.

Hotel self-parking fees are also allowable as reimbursable business-related expenditures, however, the cost of parking at the hotel should be considered when deciding whether to rent a vehicle or use public transportation (see Transportation discussion below). Valet parking fees will not be reimbursed.

f) Rental Vehicles

Reimbursement for rental of cars or other vehicles while traveling on BAAQMD business is limited to those circumstances where the need for a vehicle for business purposes is expected to be extensive, or the use of taxi services or public transportation would not be economical or practical. Board Members who operate vehicles on BAAQMD business must have a valid driver's license and proof of insurance in their possession and must also have a good driving record.

In the event a rental vehicle is required, BAAQMD will reimburse for a "Standard Class" size vehicle or alternative fuel vehicle, except when there are justifiable circumstances, such as group requirements, which make a larger vehicle necessary. The use of alternative fuel vehicles should, when available, should be used, even if the cost triggers a surcharge or exceeds the cost of a non-alternative fuel vehicle.

BAAQMD holds liability insurance to cover third parties in case a Board Member injures someone or causes property damage to another vehicle while renting a car or driving his/her own personal vehicle while engaging in BAAQMD business. Accordingly, rental car insurance is not an allowable reimbursable expenditure.

Rental cars should be returned with a full tank of gas to avoid refueling fees. The cost of gas for rental cars is an allowable expenditure under this policy.

g) Meals While Traveling

One-Day Travel – meals are NOT an allowable reimbursable expenditure for one-day travel unless such travel is more than 25 miles one way from either the Bay Area Metro Center or the Board Member's personal residence.

Multiple-Day Travel – meals will be reimbursed at the lesser of:

i) Actual reasonable cost (including applicable taxes and reasonable tip), or
ii) The Per Diem Rates for meals located on the GSA website, www.gsa.gov for the location of the stay plus 25%. Note that separate rates are provided for Breakfast, Lunch and Dinner. For travel days where a Board Member has traveled more than 12 hours but less than 24 hours, the Per Diem Rate shall be 75% of the GSA rate for the destination.

If the actual cost method is used, an original itemized receipt must be submitted with the expense report form. If meals are provided by an event or conference the cost for which is paid by BAAQMD, then no separate reimbursement is allowed for that meal. A Board Member who pays the bill for a meal attended by more than one Board Member or BAAQMD employee may submit the expenditure with receipt for the combined meal cost, but all attendees' names must be included on the expense report form. Only costs related to Board Members and BAAQMD employees' meals are eligible for reimbursement. Costs incurred for any other person at such a meal (including applicable taxes and appropriate allocation of any tip) must be deducted from the amount of the requested reimbursement.

Board Members who claim the allowable Per Diem Rate from the GSA website should print the page for the location of the meeting or conference from the website to attach to their expense report form. In addition, they should retain their actual receipts to substantiate out-of-pocket expenses in the event of an audit by the State or IRS.

Alcoholic beverages are not a reimbursable expenditure. Alcoholic beverages may appear on the itemized receipt for a meal, but the charge (including applicable taxes and appropriate allocation of any tip) must be deducted from the amount of the requested reimbursement.

Entertainment expenditures are not considered reimbursable expenditures. This includes, but is not limited to, meals unrelated to BAAQMD business, movies, shows, etc...

h) Other Meals

Expenditures for business meals other than meals during travel, such as meals with other elected officials where BAAQMD business is discussed, must be preapproved by the Executive Director. To obtain reimbursement for such expenditures, the following documentation is required and must be recorded on the expense report form or backup documentation:

i) Names of individuals present along with their titles and affiliation,
ii) Name and location of where the meal took place,
iii) Exact amount and date of the expenditure, and
iv) Specific BAAQMD-related topics discussed.

i) Miscellaneous Travel Expenditures

Ordinary, reasonable, and necessary miscellaneous expenditures are reimbursable at actual cost when accompanied by itemized receipts and justification for the expenditures including WiFi, phone, fax, and similar expenses.

In-flight phones and WiFi services should be used only in emergency situations.

Tipping – reasonable and customary tipping rates are reimbursable. In the US 15-20% gratuity on meals, up to a $3 baggage handling gratuity and up to $5 per day housekeeping gratuity are considered reasonable and are allowable. (Receipts for baggage and housekeeping gratuities are not required for reimbursement.)

Transportation – Fares and expenditures for taxis, shuttles, buses, BART, or other public transportation (including Uber, Lyft or similar services) are reimbursable when incurred for BAAQMD business. Receipts should be obtained whenever possible, but expenditures are still eligible for reimbursement when a receipt is unavailable. If a receipt is not available, a printout from the transportation agency showing the fare must be submitted for reimbursement. For example: a printout from the BART website showing the total fare for the trip taken. Board Members should apply prudent business judgment in determining the means of transportation to use.

Personal/Private Vehicle Usage – Board Member's use of a personal/private vehicle is reimbursable at the mileage rate established by the IRS which can be found at www.irs.gov. Details on the date of travel, starting and ending destinations, purpose of travel, miles driven, tolls and parking costs (receipt required when possible) incurred must be provided on the expense report form. A printout from a map website such as Google Maps should be used to determine the total miles driven and must be submitted with the expense report form. Board Members who operate vehicles on BAAQMD business must have a valid driver's license and proof of insurance in their possession, and a good driving record.

j) Justified BAAQMD Travel

Justified BAAQMD travel trips include but are not limited to:

- Attending meetings with local representatives in Sacramento or Washington DC or Sacramento with BAAQMD Staff for legislative advocacy purposes.
- Attending the AWMA Conference as a BAAQMD representative
- Attending other air quality-related conferences as a BAAQMD representative

- Attending the annual COP Climate Conference as a BAAQMD representative

NOTE: Justified travel is not limited to the list provided above. This list is provided for reference purposes only and includes the most common examples of justified travel. All trips must be preapproved, regardless of whether they are included on this list.

k) Non-Reimbursable Expenditures

Non-reimbursable expenditures include but are not limited to:

Airfare upgrades or rental car upgrades

Air phone charges (except in emergencies)

Alcoholic beverages

Business class airfare

Entertainment expenditures

Expenditures incurred by/for spouses or other travel companions Expenditures related to personal days while on business trip First class airfare

Interest incurred on credit cards

Loss due to theft of cash or personal property

Lost baggage or briefcase

Meeting room rentals (when not for BAAQMD business) “No show” charges for hotel or car service

Optional travel or baggage insurance

Parking or traffic tickets or fines

Personal items

Reading material such as magazines, books and newspapers Rental car insurance

Valet parking fees

NOTE: Non-reimbursable expenditures are not limited to the list provided above. This list is provided for reference purposes only.

l) Forms

The Travel and Expense Reimbursement Forms and Board Member Travel Report Back Form are kept by the Clerk of the Board.

SECTION 5 ALLOWABLE EXPENSES

5.1 Director Travel Expenses. (Rev. Date)

Board Members are entitled to receive reimbursement for actual and necessary expenditures incurred in connection with the performance of their official duties for the Bay Area Air Quality Management District (BAAQMD). The guiding principle of this policy is that travel and expenditures incurred on behalf of BAAQMD must be in the public interest. This document establishes guidelines for expenditures authorized as business expenditures and business travel expenditures incurred by BAAQMD Board Members.

a) General Procedures and Responsibilities

All travel for BAAQMD Board Members must be justified business travel (Section j) and must be preapproved in accordance with the Administrative Code to be eligible for reimbursement. For all in-state travel, the Chair may authorize Board Member travel on behalf of BAAQMD. For all out-of-state travel, including international travel, the Administration Committee must authorize Board Member travel on behalf of BAAQMD prior to travel. In the case of an unexpected or urgent need to travel on BAAQMD business, a Board Member may obtain the approval of the Chair, in writing, before the expenditures are incurred. Such approval must be reported to and ratified by the Administration Committee at the committee's next meeting.

Board Members will be reimbursed for all reasonable and necessary expenditures while traveling on authorized agency business. Expenditures should be paid with a personal credit card or cash. Advances are not allowed. A list of non-reimbursable expenditures is included in Section j. Actual receipts are almost always required except where otherwise stated in this Policy.

When a Board Member combines business and personal travel on a business trip, the Board Member will be responsible for the additional charges related to the personal travel. Only Board Member's direct travel expenditures are eligible for reimbursement. BAAQMD is unable to provide reimbursement for travel expenditures incurred by a spouse or any another individual traveling with the Board Member.

Requests for reimbursement of expenditures must be submitted on the authorized BAAQMD Expense Reimbursement Form within 30 calendar days after the conclusion of the trip. Receipts must be provided for all expenditures (other than incidentals that typically do not result in a receipt such as tips). Any reimbursement or payment issued by BAAQMD which is subsequently refunded to the traveler by a third party must be repaid to BAAQMD within 30 calendar days of receipt.

Only the Executive Director can override and approve specific cost items that would otherwise be ineligible for reimbursement under this Travel and Expenditure Policy, and only when it is in the best interests of BAAQMD to do so. Any Board Member reimbursement that requires the waiver of this policy by the Executive Director for approval will be brought back to the Administration Committee for informational purposes.

Expenditure reimbursement documents will be audited from time to time and are considered public records subject to disclosure under the California Public Records Act.

Any Board Member authorized to travel on behalf of BAAQMD pursuant to this section shall provide a brief, written report on their travel on the Board Member Travel Report Back Form.

The Chair may also request that Board Members who represent BAAQMD at meetings, conferences, or other events provide an oral report on their participation and experience to the Board.

b) Board Member Selection for Attendance

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The Chair, Vice Chair or Secretary shall have priority to represent BAAQMD at any event where attendance is limited or capped due to cost or capacity. In considering which other Board Members may be selected for travel, or who shall represent BAAQMD in the stead of the Executive Officers, the Chair shall consider, at a minimum, all the following:

- The history of attendance and participation by Board Members at regular BAAQMD Board and Committee Meetings
- The length of service on the Board by a Board Member
- The prior opportunities to travel and represent BAAQMD by Board Members
- The relevance or appropriateness of Board Members' committee assignments to the nature and purpose for the travel
- Opportunities for the professional growth or development of new Board Members
- The relevance and purpose of a meeting or agenda to the home jurisdiction of Board Members
- Equitable considerations that would elevate or include the voices of marginalized members of the Bay Area.

Additionally, the Chair shall have the authority to recommend non-Board Members for inclusion in BAAQMD-related travel. In making such a recommendation, the Chair shall demonstrate how and why the recommendation fulfills the mission of BAAQMD and is consistent with the goals of the Board and agency.

c) Conferences/Conventions

Registration fees for conferences and conventions are reimbursable for Board Members if the conference or convention is directly related to the mission of BAAQMD, the Board Member is attending as a representative of BAAQMD and the Board Member received preapproval from the Administration Committee.

d) Air Travel

Board Members flying on business should make reservations as early as possible to minimize costs.

For domestic air travel with a flight duration of four hours or less, airfare should be purchased for coach/economy seats only, at the lowest cost possible which provides a practical flight itinerary and meets the requirements of the trip. First and business class airfare is not a reimbursable expenditure, nor are upgrades from the lowest coach/economy fare to "economy

plus" seats (or equivalent), or to first or business class. If a Board Member purchases a first or business class ticket, he/she will be reimbursed for the lowest available coach/economy fare only.

For domestic air travel with a flight duration of more than four hours, as well as for international travel, airfare may be purchased at the "economy plus" fare/seats. First and business class airfare is not a reimbursable expenditure, nor are upgrades to first or business class. If a Board Member purchases a first or business class ticket, he/she will be reimbursed for the lowest available "economy plus" fare only.

Board Members will be reimbursed for regular baggage fees charged pursuant to applicable airline policy. Excess baggage charges will be reimbursed only when the Board Member is traveling with heavy or bulky materials or equipment necessary for BAAQMD business.

e) Hotel Accommodations

When making hotel reservations, Board Members must use the approved Per Diem Rates for lodging located on the General Services Administration (GSA) website, www.gsa.gov for the location of the stay plus 25%, to determine the maximum hotel accommodation expenditure that BAAQMD will reimburse per night, plus any applicable taxes.

Board Members should use hotels where government rates are available. Hotels that subscribe to a "green" standard must be utilized where available.

If the hotel stay is in connection with a conference or training activity, the cost should not exceed the maximum group rate published by the conference or activity sponsor. Inquiries should always be made about any special rates or discounts available to BAAQMD by the hotel, such as governmental rates, to get the best rate possible.

If accommodations are shared with individuals who are not traveling on BAAQMD business, the Board Member is responsible for the payment of any rate difference between the single occupancy room rate and actual rate incurred.

Resort or facility use fees imposed by the hotel, such as fitness center fees and internet connection fees and business center charges incurred for performing BAAQMD work, are allowable as reimbursable business-related expenditures.

Hotel self-parking fees are also allowable as reimbursable business-related expenditures, however, the cost of parking at the hotel should be considered when deciding whether to rent a vehicle or use public transportation (see Transportation discussion below). Valet parking fees will not be reimbursed.

f) Rental Vehicles

Reimbursement for rental of cars or other vehicles while traveling on BAAQMD business is limited to those circumstances where the need for a vehicle for business purposes is expected to be extensive, or the use of taxi services or public transportation would not be economical or practical. Board Members who operate vehicles on BAAQMD business must have a valid driver's license and proof of insurance in their possession and must also have a good driving record.

In the event a rental vehicle is required, BAAQMD will reimburse for a "Standard Class" size vehicle or alternative fuel vehicle, except when there are justifiable circumstances, such as group requirements, which make a larger vehicle necessary. The use of alternative fuel vehicles should, when available, should be used, even if the cost triggers a surcharge or exceeds the cost of a non-alternative fuel vehicle.

BAAQMD holds liability insurance to cover third parties in case a Board Member injures someone or causes property damage to another vehicle while renting a car or driving his/her own personal vehicle while engaging in BAAQMD business. Accordingly, rental car insurance is not an allowable reimbursable expenditure.

Rental cars should be returned with a full tank of gas to avoid refueling fees. The cost of gas for rental cars is an allowable expenditure under this policy.

g) Meals While Traveling

One-Day Travel – meals are NOT an allowable reimbursable expenditure for one-day travel unless such travel is more than 25 miles one way from either the Bay Area Metro Center or the Board Member's personal residence.

Multiple-Day Travel – meals will be reimbursed at the lesser of:

i) Actual reasonable cost (including applicable taxes and reasonable tip), or
ii) The Per Diem Rates for meals located on the GSA website, www.gsa.gov for the location of the stay plus 25%. Note that separate rates are provided for Breakfast, Lunch and Dinner. For travel days where a Board Member has traveled more than 12 hours but less than 24 hours, the Per Diem Rate shall be 75% of the GSA rate for the destination.

If the actual cost method is used, an original itemized receipt must be submitted with the expense report form. If meals are provided by an event or conference the cost for which is paid by BAAQMD, then no separate reimbursement is allowed for that meal. A Board Member who pays the bill for a meal attended by more than one Board Member or BAAQMD employee may submit the expenditure with receipt for the combined meal cost, but all attendees' names must be included on the expense report form. Only costs related to Board Members and BAAQMD employees' meals are eligible for reimbursement. Costs incurred for any other person at such a meal (including applicable taxes and appropriate allocation of any tip) must be deducted from the amount of the requested reimbursement.

Board Members who claim the allowable Per Diem Rate from the GSA website should print the page for the location of the meeting or conference from the website to attach to their expense report form. In addition, they should retain their actual receipts to substantiate out-of-pocket expenses in the event of an audit by the State or IRS.

Alcoholic beverages are not a reimbursable expenditure. Alcoholic beverages may appear on the itemized receipt for a meal, but the charge (including applicable taxes and appropriate allocation of any tip) must be deducted from the amount of the requested reimbursement.

Entertainment expenditures are not considered reimbursable expenditures. This includes, but is not limited to, meals unrelated to BAAQMD business, movies, shows, etc...

h) Other Meals

Expenditures for business meals other than meals during travel, such as meals with other elected officials where BAAQMD business is discussed, must be preapproved by the Executive Director. To obtain reimbursement for such expenditures, the following documentation is required and must be recorded on the expense report form or backup documentation:

i) Names of individuals present along with their titles and affiliation,
ii) Name and location of where the meal took place,
iii) Exact amount and date of the expenditure, and

iv) Specific BAAQMD-related topics discussed.

i)_Miscellaneous Travel Expenditures

Ordinary, reasonable, and necessary miscellaneous expenditures are reimbursable at actual cost when accompanied by itemized receipts and justification for the expenditures including WiFi, phone, fax, and similar expenses.

In-flight phones and WiFi services should be used only in emergency situations.

Tipping – reasonable and customary tipping rates are reimbursable. In the US 15-20% gratuity on meals, up to a $3 baggage handling gratuity and up to $5 per day housekeeping gratuity are considered reasonable and are allowable. (Receipts for baggage and housekeeping gratuities are not required for reimbursement.)

Transportation – Fares and expenditures for taxis, shuttles, buses, BART, or other public transportation (including Uber, Lyft or similar services) are reimbursable when incurred for BAAQMD business. Receipts should be obtained whenever possible, but expenditures are still eligible for reimbursement when a receipt is unavailable. If a receipt is not available, a printout from the transportation agency showing the fare must be submitted for reimbursement. For example: a printout from the BART website showing the total fare for the trip taken. Board Members should apply prudent business judgment in determining the means of transportation to use.

Personal/Private Vehicle Usage – Board Member's use of a personal/private vehicle is reimbursable at the mileage rate established by the IRS which can be found at www.irs.gov. Details on the date of travel, starting and ending destinations, purpose of travel, miles driven, tolls and parking costs (receipt required when possible) incurred must be provided on the expense report form. A printout from a map website such as Google Maps should be used to determine the total miles driven and must be submitted with the expense report form. Board Members who operate vehicles on BAAQMD business must have a valid driver's license and proof of insurance in their possession, and a good driving record.

j) Justified BAAQMD Travel

Justified BAAQMD travel trips include but are not limited to:

- Attending meetings with local representatives in Sacramento or Washington DC or Sacramento with BAAQMD Staff for legislative advocacy purposes.
- Attending the AWMA Conference as a BAAQMD representative
- Attending other air quality-related conferences as a BAAQMD representative
- Attending the annual COP Climate Conference as a BAAQMD representative

NOTE: Justified travel is not limited to the list provided above. This list is provided for reference purposes only and includes the most common examples of justified travel. All trips must be preapproved, regardless of whether they are included on this list.

k) Non-Reimbursable Expenditures

Non-reimbursable expenditures include but are not limited to:

Airfare upgrades or rental car upgrades

Air phone charges (except in emergencies)

Alcoholic beverages

Business class airfare

Entertainment expenditures

Expenditures incurred by/for spouses or other travel companions Expenditures related to personal days while on business trip First class airfare

Interest incurred on credit cards

Loss due to theft of cash or personal property

Lost baggage or briefcase

Meeting room rentals (when not for BAAQMD business) “No show” charges for hotel or car service

Optional travel or baggage insurance

Parking or traffic tickets or fines

Personal items

Reading material such as magazines, books and newspapers Rental car insurance

Valet parking fees

NOTE: Non-reimbursable expenditures are not limited to the list provided above. This list is provided for reference purposes only.

l) Forms

The Travel and Expense Reimbursement Forms and Board Member Travel Report Back Form are kept by the Clerk of the Board.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Cindy Chavez and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: December 6, 2021

Re: Consider Amending the Air District's Classification Plan to Combine the Air Quality Inspector and Air Quality Instrument Specialist Classification Series with the Air Quality Specialist Classification Series and Approve a New Assistant Air Quality Specialist I/II Classification

RECOMMENDATION

Recommend the Board of Directors consider amending the Air District's Classification Plan to combine the Air Quality Inspector and Air Quality Instrument Specialist Classification Series with the Air Quality Specialist Classification Series and approve a new Assistant Air Quality Specialist I/II Classification

BACKGROUND

In 2019 the Air District Human Resources Office conducted an internal pay equity analysis that included the following classifications series:

- Air Quality Inspector
- Air Quality Instrument Specialist
- Air Quality Specialist

DISCUSSION

The Human Resources Office partnered with an independent consultant to perform an internal equity and pay analysis. After an extensive study, the consultant's recommendation was to create a new classification of Assistant Air Quality Specialist I/II and reclassify all the existing Air Quality Inspector) and Air Quality Instrument Specialist classification series to the Air Quality Specialist classification series. The salary range for the new classification of Assistant Air Quality Specialist I/II is 122/126. Combining and updating the job descriptions to the Air Quality Specialist classification series will better describe the required qualifications, better reflect the duties that are being performed, increase efficiency between divisions and addresses pay equity.

The Board of Directors have already approved to consolidate the Air Quality Inspector and Air Quality Instrument Specialist Classification Series into the Air Quality Specialist Job Classification Series at its meeting on June 16, 2021. The Employees' Association and District Management have negotiated and agreed to implement the changes and have worked jointly to amend the job classifications which are attached.

BUDGET CONSIDERATION/FINANCIAL IMPACT

Under the Air District's proposal, there will not be any immediate cost because employees are placed at a salary step that is equivalent to their current pay. There will be cost thereafter when the Assistant Air Quality Specialist I/II and Air Quality Specialist I/II are due for merit increases. We have 32 Air Quality Inspector I/II and 18 Air Quality Instrument Specialist I/II, which will increase personnel salaries $500,000 over the next three years.

Respectfully Submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Terri Levels
Reviewed by: Rex Sanders

Attachment 9A: Assistant Air Quality Specialist I/II
Attachment 9B: Air Quality Specialist I/II
Attachment 9C: Senior Air Quality Specialist
Attachment 9D: Principal Air Quality Specialist
Attachment 9E: Supervising Air Quality Specialist

Tentative Agreement

Bay Area Air Quality Management District

BAAQMD Employee Association

Subject: Implementation of a Revised AQS Classification Plan

Pursuant to the 2021-23 MOU, the parties have met and conferred in good faith in an effort to reach agreement on descriptions for a revised Air Quality Specialist (AQS) classification plan. The parties have reached agreement. Copies of the new classification are attached, including

1. Assistant Air Quality Specialist I/II
2. Air Quality Specialist I/II
3. Senior Air Quality Specialist
4. Principal Air Quality Specialist
5. Supervising Air Quality Specialist

Table of Plan Implementation and Reclassification

Current Classification	Current Salary Range	Proposed Classification	Proposed Salary Range
Air Quality Inspector I	**124**	**Assistant Air Quality Specialist II**	**126**
Air Quality Inspector II	**128**	**Air Quality Specialist I**	**130**
Senior Air Quality Inspector	**132**	**Air Quality Specialist II**	**134**
Supervising Air Quality Inspector (no incumbents)	**136**	**Senior Air Quality Specialist**	**138**
Air Quality Instrument Specialist I	**124**	**Assistant Air Quality Specialist II**	**126**
Air Quality Instrument Specialist II	**128**	**Air Quality Specialist I**	**130**
Senior Air Quality Instrument Specialist	**132**	**Air Quality Specialist II**	**134**
Principal Air Quality Instrument Specialist	**136**	**Principal Air Quality Specialist**	**142**
Supervising Air Quality Instrument Specialist	**136**	**Supervising Air Quality Specialist**	**142**

The parties agree to amend the Side Letter - Equity Adjustments and Reclassification, which is appended to the current MOU as follows:

Employees shall be paid and receive service credit retroactive from the first full pay period after July 1, 2021 through the first full pay period following the adoption of the revised classifications by the Board of Directors, but not exceeding ~~nine (9)~~ **eleven (11)** pay periods.

Both the EA bargaining team, and the Air District bargaining team agree to recommend the revised classification to their principals for approval as required.

For the Air District/Date

DocuSigned by:
B447A99E2C334D2...
'10/2021

For the Employees Association/Date

DocuSigned by:
E54988EEA7044AB...
12/10/2021

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

ASSISTANT AIR QUALITY SPECIALIST I / II

An Equal Opportunity Employer

DEFINITION:

Under general supervision, performs a variety of assignments in one or more of areas of inspection, investigation, air monitoring instrument and equipment operation, air quality planning, rule development, enforcement and compliance operations, and other air quality program areas; performs other related work as assigned.

DISTINGUISIHING CHARACTERISTICS

The Assistant Air Quality Specialist I is the entry-level class in the Air Quality Specialist series that allows the incumbent to develop professional competence towards a journey-level specialist. Initially, under immediate supervision, incumbents learn and perform the more routine and less complex assignments within an established procedural framework, where there are minimal consequences of error, including inspection procedures, industrial processes, enforcement regulations, air monitoring, quality assessment, source testing, or meteorological data collection, and other air quality program assignments. This classification may advance to the higher level after gaining relevant and applicable experience, and demonstrating a level of proficiency that meets the qualifications of the higher-level class based on established criteria. Positions at this level usually perform most of the duties required of the positions at the II level, but are not expected to function at the same skill level and usually exercise less independent discretion and judgment in matters related to work procedures and methods.

The Assistant Air Quality Specialist II is the advanced entry-level class in the Air Quality Specialist series, in which incumbents are expected to perform duties with increased proficiency of assigned duties within established guidelines. Positions at this level are distinguished from the Assistant Air Quality Specialist I level by the

performance of the range of duties as assigned, and working with more independence. Positions at this level receive only occasional instruction or assistance as new or unusual situations arise and are fully aware of the operating procedures and policies of the work unit. This class is distinguished from the next higher classification of Air Quality Specialist I/II in that the latter is the journey-level class in the series and performs more complex functions in assigned programs at a professional level.

EXAMPLES OF DUTIES *(Illustrative only)***:**

General Duties

Assists in developing plans and documentation for the measurement, quality control and quality assurance, and preliminary analysis of emissions and air quality data.

Assists in the preliminary analysis of emissions, greenhouse gases, air quality, and meteorological data; prepares graphs, charts, statistical summaries, and reports from data; may assist in special studies.

Assists in reviewing and developing recommendations concerning air quality and greenhouse reports, programs, plans, legislation and regulations and prepares related reports and correspondence.

Maintains detailed records to comply with applicable local, state, and federal regulatory guidelines.

Assists in organizing and participating in workshops and meetings, and provides consultation and advice to businesses, industry, and the public in matters related to area of expertise.

Drafts a variety of written communications, including detailed technical reports, memoranda and case summaries, and forms.

Assists in preparing and making presentations air quality-related programs and projects.

Interacts with internal staff and external stakeholders to enhance internal coordination and community engagement on air quality programs.

Performs other related duties as assigned.

Representative Duties (by program area)

Some positions in this classification may be assigned to one or several program

areas; an exhaustive list of program-area specific duties is not provided.

In addition to the duties listed above, the following duties (illustrative only) may be performed for positions in the select program areas:

Compliance and Enforcement

Conducts compliance inspections on facilities designated as sources of air pollution within an assigned geographical area within established guidelines and time frames; makes determinations of compliance with applicable regulations; verifies permit status.

Conducts on-site inspections of manufacturing, industrial, commercial and agricultural operations and their compliance to ensure adherence to air quality standards and regulations; may call for source tests of site emissions.

Uses monitoring equipment and instrumentation to measure and evaluate various emissions and particulates; maintain these devices for integrity and consistency of performance.

Responds and investigates complaints by citizens of air pollution problems; determines nature and extent of problem; takes representative samples of various materials for laboratory analysis; prepares documentation of findings; consults with citizens on status of complaint.

Conducts grid surveillance to detect permit and emissions violations; ensures that all potential air pollution sources are identified for future monitoring and abatement.

Conducts chemical and plume evaluation tests and record findings; takes photographs for documentation at inspection sites.

Issues notices of violation to sources found in violation of compliance; prepares necessary documentation for violation notice reports.

Interfaces with technical personnel at facilities regarding plant source emissions, solvent usage, permit status, and compliance status with Air District rules and regulations; explains compliance options to industry when a violation occurs.

Provides information and assistance to businesses and the public regarding Air District regulations and authority, permit policies and procedures.

Participates with other governmental agencies regarding the investigation of complex community air pollution exposures, such as highly toxic spills.

Interacts with laboratory staff regarding the analysis of samples taken in the field.

Represents the Air District before the Hearing Board or courts regarding violations of Air District and state air quality control regulations; represents the Air District with technical personnel, other governmental agencies and the public.

Meteorology and Measurement

Learns and assists with installing, operating, maintaining, calibrating, and repairing air monitoring, meteorological, and source test equipment and instrumentation.

Evaluates instrument performance, troubleshoots malfunctioning equipment and replaces or repairs parts.

Operates field computers, computer hardware/software, databases, telecommunications, and data devices in standalone and networked data acquisition systems and troubleshoots these systems when errors or malfunctions occur.

Reviews, evaluates, summarizes and records data collected electronically or manually from scientific/analytical instrumentation, and ensures accuracy, completeness, validity, and compliance with Air District, state, and federal standards.

Prepares, collects, and processes data, samples, reagents and filters

Maintains detailed technical records, standard operating procedures, and logbooks. Assists with development of procedures and associated documentation.

Conducts mobile, portable or stationary source-oriented monitoring. Prepares and collects various samples of ambient air pollutants at air monitoring and stationary sites.

Conducts quality control functions on air monitoring and source test equipment and ensures accurate calibration in conformance with Air District, state, and federal standards.

Provides fabrication support for development and construction of monitoring platforms.
Transports consumables, materials, samples, standards, and supplies between field sites, offices, and the lab.

Organizes inventory and orders supplies.

Provides general logistics assistance and coordination to procure services and organize logistical matters.

MINIMUM QUALIFICATIONS

Education & Experience

A typical way to obtain the knowledge and skills is:

Education:

Assistant Air Quality Specialist I:
Equivalent to an Associate's degree (60 semester credits/ 90 quarter units) from an accredited technical or trade school, college, or university with major coursework in chemistry, computer science, electronics, engineering, environmental science, mathematics, meteorology, physical sciences, physics, or a closely related field.

Experience:

Assistant Air Quality Specialist II:
In addition to the required education listed above, two (2) years of experience performing the general duties equivalent to the Air District's Assistant Air Quality Specialist I for air quality programs.

Any combination of relevant training and work experience in the listed or related fields may substitute for the education criteria on a year for year basis.

SUPPLEMENTAL INFORMATION:

QUALIFICATIONS

Knowledge of:

Theories, principles and practices of air quality inspection and enforcement.

Principles, practices and techniques of operation, maintaining and calibrating chemical testing equipment and instrumentation.

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

Impact of industrial and commercial concerns on air quality.

Common biological, chemical and physical processes that cause air pollution and their long and short term impacts and effects.

Techniques of modifying production processes and equipment that can reduce emissions into the air.

General principles of data quality and control.

Record-keeping and reporting principles and practices.

Skill in:

Planning and conducting a variety of air quality programs.

Analyzing technical air pollution problems, evaluating alternative solutions and developing effective recommendations.

Planning and conducting air pollution field inspections, including the proper calibration and use of monitoring equipment.

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

Communicating technical and non-technical information orally and in writing to various audiences.

Exercising sound independent judgment and initiative within general policy guidelines.

Detecting and locating air pollution sources.

Delivering credible testimony before hearing boards and court settings.

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

OTHER REQUIREMENTS

Some positions may require a valid California driver's license.

Some positions may require a California Air Resources Board Visible Emissions Evaluation Certification obtained within 6 months of employment.

Some positions may require the physical ability to work near and in the presence of hazardous and toxic materials, climb high structures to evaluate processes in operation, lift heavy safety and test equipment, and to use self-contained breathing apparatus.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

AIR QUALITY SPECIALIST I / II

An Equal Opportunity Employer

DEFINITION:

Under direction, performs a variety of professional level technical and administrative duties in the areas of inspection, investigation, air monitoring instrument and equipment operation, air quality planning, rule development, enforcement and compliance operations, and other air quality program areas; performs related work as assigned.

DISTINGUISIHING CHARACTERISTICS

Air Quality Specialist I is the journey-level class in the Air Quality Specialist series. Incumbents are fully proficient to perform the full range of activities, with assignments of moderate difficulty. This class is alternately staffed with Air Quality Specialist II and incumbents may advance to the higher-level classification after gaining experience and demonstrating proficiency which meet the qualifications of the higher-level class.

Air Quality Specialist II is the advanced journey-level class of this series. Incumbents are expected to exercise more independent judgment, initiative and decision making, and are responsible for assignments requiring a higher degree of working knowledge, ability and initiative with minimal day-to-day supervision. Incumbents may provide training and technical guidance to staff.

This class is distinguished from Senior Air Quality Specialist in that the latter provides lead direction and is responsible for more complex work.

EXAMPLES OF DUTIES *(Illustrative only)*:

General duties:

Develops new and revises existing various air quality programs, rules, regulations, policies, and procedures to achieve air pollutant and greenhouse gas emissions reductions, and reduce the public exposure to air pollutants; researches technical feasibility and new control proposals for new or revised rules.

Develops plans and documentation for the measurement, quality control and quality assurance, and analysis of emissions and air quality data.

Extracts, analyzes and ensures the quality of data including but not limited to devices/operations that emit air pollution, emissions, greenhouse gas, facilities, and meteorological data; prepares graphs, charts, statistical summaries, and reports from data; and may assist in more complex studies.

Reviews and develops recommendations concerning air quality and greenhouse gas reports, programs, plans, legislation and regulations and prepares related reports and correspondence.

Administers air quality programs including reviewing plans and recommending resolution of problem situations.

May calculate emissions reductions and assess emissions inventories, conduct economic impacts analyses, and perform other technical work.

Confers with industry representatives, Air District staff, the public and other agencies to obtain and disseminate technical and operational information.

Drafts, reviews and analyzes air quality and greenhouse gas reports and other documents; conducts inquiries, compiles and researches information.

Reviews and summarizes data, prepares special and periodic reports and monitors effectiveness of Air District programs.

Researches and studies air quality and climate issues.

Drafts, implements, recommends and revises forms, webpages, and other program tools.

Maintains data and data systems supporting Air District programs.

Responds to oral and written requests for technical, operational and administrative information about air quality programs; explains and interprets technical policies, rules and regulations.

Prepares and coordinates technical and safety program training for Air District staff; develops and coordinates training aids and materials; may conduct staff training; monitors training needs for staff.

Interacts and represents the Air District with industry, attorneys, the public and other agencies.

Organizes and participates in workshops and meetings, and provide consultation and advice to individuals and businesses in matters related to area of expertise.

Prepares technical reports and policy documents and gives presentations on Air District projects, including Air District staff, executives, board members, and community groups and other external stakeholders; briefs executives and board members.

Maintains detailed technical records, standard operating procedures, and logbooks to comply with regulatory guidelines.

Administers the records management program.

Performs other related duties as assigned.

Representative Duties (by program area)

Some positions in this classification may be assigned to one or several program areas; an exhaustive list of program-area specific duties is not provided.

In addition to the duties listed above, the following duties (illustrative only) may be performed for positions in the select program areas:

Compliance and Enforcement

Conducts commercial and industrial inspections and investigations such as, but not limited to, petroleum refineries, power plants, semiconductor manufacturing facilities, toxic and hazardous materials operations and complicated industrial operations.

Conducts compliance inspections on facilities designated as sources of air pollution within an assigned geographical area within established guidelines and time frames; makes determinations of compliance with applicable regulations; verifies permit status.

Conducts on-site inspections of manufacturing, industrial, commercial and agricultural operations and their compliance to ensure adherence to air quality standards and regulations; may call for laboratory tests of site emissions.

Reviews and coordinates inspections to determine and ensure the consistent technical application and interpretation of new and revised rules and

regulations; participates in developing and testing new inspection and complaint investigation methods and techniques.

Monitors inspection generated enforcement data for accuracy and validity and coordinates emission data audits.

Uses a variety of monitoring equipment and instrumentation to measure and evaluate various emissions and particulates; maintains and calibrates these devices for integrity and consistency of inspection.

Responds and investigates complaints by citizens of air pollution problems; determines nature and extent of problem; takes representative samples of various materials for laboratory analysis; prepares documentation of findings; consults with citizens on status of complaint.

Conducts grid surveillance to detect permit and emissions violations; ensures that all potential air pollution sources are identified for future monitoring and abatement.

Conducts chemical and plume evaluation tests and record findings; takes photographs for documentation at inspection sites.

Issues notices of violation to sources found in violation of compliance; prepares necessary documentation for violation notice reports.

Interfaces with technical personnel at facilities regarding plant source emissions, solvent usage, permit status, and compliance status with Air District rules and regulations; explains compliance options to industry when a violation occurs.

Provides information and assistance to businesses and the public regarding Air District regulations and authority, permit policies and procedures.

Coordinates with other governmental agencies regarding the investigation of complex community air pollution exposures, such as highly toxic spills.

Prepares a variety of written communications, including detailed technical reports, compliance guidance memoranda and case summaries used for office conferences and hearing board sessions; completes inspections forms on all inspections completed.

Interacts with laboratory staff regarding the analysis of samples taken in the field.

Represents the Air District before the Hearing Board or courts regarding violations of applicable regulations; represents the Air District with technical personnel, other governmental agencies and the public.

Rule Development

Reviews and develops draft regulatory language.

Develops and implements cost effectiveness and incremental cost effectiveness calculations for a wide variety of sources in industries with a variety of control options.

Coordinates and works closely with internal and external professional and technical staff and perform complex scientific research and engineering evaluation for developing regulations to control air pollutants (including those contributing to climate change and contributing to localized air quality impacts in overburdened communities).

Works closely with internal and external professional and technical staff to perform and review economic analyses and environmental analyses.

Analyzes and develops emissions inventories to determine baseline emissions and reduction estimates for rules under development.

Engages and interacts with external stakeholders such as affected industry representatives, community advocates and residents, other governmental staff members, and technical experts.

Works closely with other Air District divisions to enhance engagement and strengthen partnerships with key community stakeholders.

Meteorology & Measurement

Evaluates instrument performance, troubleshoots malfunctioning equipment and replaces or repairs parts, components and assemblies.

Conducts quality assessment (quality assurance and/or quality control) functions on ambient air monitoring, ground level monitoring, and source-testing equipment and ensures accurate calibration in conformance with Air District, state and federal standards.

Conducts instrument performance evaluations.

Installs, operates, maintains, calibrates, and repairs ambient air monitoring, meteorological, or source test equipment and instrumentation. Evaluates instrument performance, troubleshoots malfunctioning equipment and replaces or repairs parts.

Operates field computers, computer hardware/software, databases, telecommunications, and data devices in stand-alone and networked data acquisition systems and troubleshoots these systems when errors or malfunctions occur.

Reviews, evaluates, summarizes and records data collected electronically or manually from scientific/analytical instrumentation, and ensures accuracy, completeness, validity, and compliance with Air District, state, and federal standards.

Prepares, collects, and processes data, samples, reagents and filters.

Conducts mobile, portable or stationary source-oriented monitoring. Prepares and collects various samples of ambient and source air pollutants at air monitoring and stationary sites.

Provides fabrication support for development and construction of monitoring platforms.

Ensures that data systems meet the needs of the Air District in compliance with local, state, and federal regulations for the storage, processing, and transmittal of regulatory data.

Engineering

Develops, implements, and administers permitting, registration, and emissions banking programs including evaluating certain permit applications and data used to calculate emissions and fees; maintains permit data including permit conditions; performs tasks necessary to renew permits and registrations.

Processes, maintains, and ensures data quality used for issuing permit documents, maintaining the emissions bank, and developing the emissions inventory.

Evaluates, recommends, and tests permit system improvements.

Performs job duties for Rule Development projects.

MINIMUM QUALIFICATIONS

Education & Experience

A typical way to obtain the knowledge and skills is:

Education:

Equivalent to a Bachelor's degree from a four-year college or university with major coursework in chemistry, computer science, electronics, engineering, environmental science, mathematics, meteorology, physical sciences, physics, or a closely related field.

AND

Experience:

Air Quality Specialist I: Two (2) years of experience performing duties equivalent to the Air District's Assistant Air Quality Specialist II, including performing air quality inspections; installing, operating and maintaining air monitoring and quality assessment instruments and equipment; or developing and administering air quality programs.

Air Quality Specialist II: Four (4) years of experience performing air quality inspections; installing, operating and maintaining air monitoring and quality assessment instruments and equipment, or developing and administering air quality programs, of which at least two (2) years included performing work equivalent to the Air District's Air Quality Specialist I.

Substitution: Any combination of relevant training and work experience in the listed or related fields may substitute for the education criteria on a year for year basis.

SUPPLEMENTAL INFORMATION:

QUALIFICATIONS

NOTE: The level and scope of the knowledge and skills listed below are related to job duties as defined under Distinguishing Characteristics.

Knowledge of:

- Theories, principles and practices of air quality measurements or inspection and enforcement, including environmental research and analysis.
- Applicable Air District, state and federal laws, rules and regulations.
- Basic legal principles as they relate to environmental compliance and enforcement.

Basic principles of engineering, chemistry, physics, and biology as they relate to air quality programs.

Industrial processes and equipment used in air pollution control.

Common biological, chemical and physical processes that cause air pollution and their long and short-term impacts and effects.

General principles of data quality and control.

Industrial practices and techniques to modify production processes and equipment to reduce emissions.

Record-keeping and reporting principles and practices.

General principles of records management.

Skill in:

Developing and administering effective air quality programs.

Analyzing technical air pollution problems, evaluating alternative solutions and developing effective recommendations.

Analyzing and interpreting technical and legal rules, policies and procedures.

Reading and understanding technical and engineering diagrams and processes.

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

Communicating technical and non-technical information orally and in writing to various audiences.

Exercising sound independent judgment within established guidelines.

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

OTHER REQUIREMENTS

Some positions may require a valid California driver's license.

Some positions may require a California Air Resources Board Visible Emissions Evaluation Certification obtained within 6 months of employment.

Some positions may require the physical ability to work near and in the presence of hazardous and toxic materials, climb high structures to evaluate processes in operation, lift heavy safety and test equipment, and to use self-contained breathing apparatus.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

SENIOR AIR QUALITY SPECIALIST

An Equal Opportunity Employer

DEFINITION:

Under direction, provides lead direction and performs the more complex assignments in the areas of inspection, investigation, air monitoring instrument and equipment operation, air quality planning, rule development, enforcement and compliance operations, and other air quality program areas; performs related work as assigned.

DISTINGUISIHING CHARACTERISTICS

This is the advanced lead level in the Air Quality Specialist series. Incumbents provide lead direction and are assigned the more complex air quality program assignments that require considerable technical knowledge and use of independent judgement. Incumbents develop and provide in-depth training and technical guidance to employees. This class is distinguished from the Supervising Air Quality Specialist in that the latter assigns, supervises, reviews and evaluates the work of assigned staff. This class is also distinguished from the Principal Air Quality Specialist in that the latter has more responsibilities for developing new programs and handling the most difficult, sensitive, novel, or critical projects.

EXAMPLES OF DUTIES *(Illustrative only)*:

General Duties:

Provides lead direction, training and work review to technical and support staff; prioritizes and follows up on work assignments to ensure timely completion.

Provides lead oversight on complex regulatory audits, field investigations and studies.

Provides input into hiring selection decisions and performance evaluations.

Provides technical development and training.

Coordinates and participates in the development of new programs and revision of existing programs; conducts technical research feasibility and new control proposals.

Coordinates and participates in the development, review and approval processes for new and revised rules and regulations, policies and procedures for various programs.

Reviews and analyzes complex cases, reports and rules for compliance with applicable guidelines; conducts inquiries, researches and compiles files and other pertinent information, and prepares reports and recommendations relative to Air District programs.

Drafts, implements, recommends and revises forms, webpages, and other program tools.

Maintains data and data systems supporting Air District programs.

Reviews and develops recommendations concerning air quality and climate protection reports, programs, plans, legislation and regulations and prepares related reports and correspondence.

Organizes and participates in workshops and meetings, and provide consultation and advice to individuals and businesses in matters related to area of expertise.

Prepares and makes presentations on air quality and climate protection related programs and projects.

Interacts and represents the Air District with industry, attorneys, the public and other agencies; provides technical expertise to Air District staff and counsel and to industry, the public and other agencies.

Conducts meetings and workshops with a variety of legal, public and private agency officials to explain and interpret technical policies, rules and regulations regarding Air District programs.

Participates in meetings, conferences, hearing boards and workshops with public and private agencies; serves on special committees and task forces.

Responds to oral and written requests for technical, operational and administrative information about Air District programs.

Leads technical and safety program training for Air District staff; develops and coordinates training aids and materials; leads staff training; monitors training needs for staff.

Briefs Air District executives and present at public workshops and board meetings.

Works closely with other Air District divisions to strengthen partnerships with key community stakeholders.

Maintains detailed technical records, standard operating procedures, and logbooks to comply with regulatory guidelines.

Administers the records management program.

Performs other related duties as assigned.

Representative Duties (by program area)

Some positions in this classification may be assigned to one or several program areas; an exhaustive list of program-area specific duties is not provided.

In addition to the duties listed above, the following duties (illustrative only) may be performed for positions in the select program areas:

Compliance and Enforcement

Conducts the more difficult and complex commercial and industrial inspections and investigations such as, but not limited to, petroleum refineries, power plants, semiconductor manufacturing facilities, toxic and hazardous materials operations and complicated industrial operations.

Coordinates and reviews the work of inspections staff involved in special projects and audits, sensitive complaint investigations and other surveillance activities.

Reviews and coordinates difficult and problematic inspections to determine and ensure the consistent technical application and interpretation of new and revised rules and regulations; develops and tests new inspection and complaint investigation methods and techniques.

Develops enforcement criteria and related inspection policies; contributes to the development and revision of rules, policies and regulations involving inspections.

Coordinates with program/project leaders in other Air District divisions, drafts new policies and procedures for various enforcement programs relating to new and updated rules and regulations.

Develops new and revises existing programs to achieve and maintain enforcement compliance.

Leads and organizes technical training for enforcement staff; develops and coordinates training aids and materials; conducts some aspects of new inspector training; monitors enforcement training needs for the enforcement staff.

Rule Development

Leads the review and development of regulatory language.

Develops and implements cost effectiveness and incremental cost effectiveness calculations for a wide variety of sources in industries with a variety of control options.

Leads and coordinates with professional and technical staff to perform complex scientific research and engineering work for developing regulations to control air pollutants (including those contributing to climate change and contributing to localized air quality impacts in overburdened communities).

Works closely with professional and technical staff to perform and review economic analyses and environmental analyses.

Works closely with staff from other air districts and the California Air Resources Board to develop air quality regulations and toxic control measures.

Analyzes emissions inventories to determine baseline emissions and reduction estimates for rules under development.

Reviews and develops testing, verification, and compliance determination procedures.

Meteorology and Measurement

Evaluates performance of analytical instrumentation to ensure compliance with District, state and federal standards.

Installs, operates, maintains, calibrates, and repairs air monitoring, and meteorological or source test equipment and instrumentation. Evaluates

instrument performance, troubleshoots malfunctioning equipment and replaces or repairs parts.

Operates field computers, computer hardware/software, databases, telecommunications, and data devices in stand-alone and networked data acquisition systems and troubleshoots these systems when errors or malfunctions occur.

Oversees data evaluation, enters data into computerized database, and responds to technical data requests, either orally or in writing.

Maintains detailed technical records, standard operating procedures, and logbooks.

Develops and implements operational, analytical, and technical methods and procedures. Analyzes technical work processes and writes Standard Operating Procedures.

Performs acceptance testing of new and repaired scientific/analytical instrumentation.

Performs quality control functions on air monitoring or source test equipment and calibrations in conformance with District, state, and federal standards. Coordinates and tracks the certifications of reference standards used in the section.

Develops and recommends improved sampling techniques and modifications to equipment and tests modifications to equipment. Provides fabrication support for development and construction of monitoring platforms.

Coordinates and oversees in-section safety programs.

Coordinates the purchasing, replenishment, and inventory tracking of all spare components, supplies and consumables.

Works with the data management team to ensure that data systems meet the needs of the Air District in compliance with local, state and federal regulations for the storage, processing, and transmittal of regulatory data.

Conducts mobile, or portable or stationary, source-oriented monitoring. Prepares and collects various samples of ambient air or source test pollutants at air monitoring and stationary sites.

MINIMUM QUALIFICATIONS

Education & Experience

A typical way to obtain the knowledge and skills is:

Education:

Equivalent to a Bachelor's degree from a four-year college or university with major coursework in chemistry, computer science, electronics, engineering, environmental science, mathematics, meteorology, physical sciences, physics, or a closely related field.

AND

Experience:

Four (4) years of experience performing air quality inspections; installing, operating and maintaining air monitoring and quality assessment instruments and equipment; or developing and administering air quality programs, of which at least two (2) years included performing work equivalent to the Air District's Air Quality Specialist II.

Substitution: Any combination of relevant training and work experience in the listed or related fields may substitute for the education criteria on a year for year basis.

SUPPLEMENTAL INFORMATION:

QUALIFICATIONS

Knowledge of:

- Theories, principles and practices of air quality measurements or inspection and enforcement, including environmental research and analysis.
- Applicable Air District, state and federal laws, rules and regulations.
- Basic legal principles of civil prosecution, particularly as they relate to environmental enforcement.
- Basic principles of engineering, chemistry, physics and biology as they relate to air quality programs.
- Industrial processes and equipment used in air pollution control.
- Common biological, chemical and physical processes that cause air pollution and their long and short-term impacts and effects.

General principles of data quality and control.

Industrial practices and techniques to modify production processes and equipment to reduce emissions.

Record-keeping and reporting principles and practices.

General principles of records management.

Skill in:

Planning, assigning, directing and reviewing the work of others.

Training others in work procedures.

Directing, developing and administering effective air quality programs.

Analyzing technical air pollution problems, evaluating alternative solutions and developing effective recommendations.

Analyzing and interpreting technical and legal rules, policies and procedures.

Reading and understanding technical engineering diagrams and processes.

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

Negotiating settlements tactfully and effectively.

Communicating technical and non-technical information orally and in writing to various audiences.

Exercising sound independent judgement within established guidelines.

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

OTHER REQUIREMENTS

Some positions may require a valid California driver's license.

Some positions may require a California Air Resources Board Visible Emissions Evaluation Certification obtained within 6 months of employment.

Some positions may require the physical ability to work near and in the presence of hazardous and toxic materials, climb high structures to evaluate processes in operation, lift heavy safety and test equipment, and to use self-contained breathing apparatus.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

PRINCIPAL AIR QUALITY SPECIALIST

An Equal Opportunity Employer

DEFINITION:

Under direction, performs the most complex and highly specialized level of program assignments in the areas of inspection, investigation, air monitoring instrument and equipment operation, air quality planning, rule development, enforcement and compliance operations, and other air quality program areas; may provide project supervision or team leadership on a project specific basis; performs related work as assigned.

DISTINGUISIHING CHARACTERISTICS

This class provides the most complex and specialized program assignments in support of the Air District's goals and objectives. Incumbents are responsible for providing project leadership for coordinating and developing programs that require considerable technical knowledge and use of independent judgment. This class is distinguished from Supervising Air Quality Specialist, in that the latter assigns, supervises, reviews and evaluates the work of assigned staff on a continuing basis and conducts performance appraisals. This class is also distinguished from manager levels in that the latter performs management duties with responsibilities for a program or defined functional area.

EXAMPLES OF DUTIES *(Illustrative only)*:

General Duties:

Coordinates and carries out the most complex assignments relating to the development, review and approval processes for the Air District's new or revised rules and regulations; equipment operation and maintenance; data collection and

analysis; technical review; the development of technological justifications; and/or other special projects as assigned.

Develops, recommends and implements Air District policies and programs to enforce statutory and regulatory requirements for enforcement; develops and recommends the Air District's position on various enforcement matters such as hearing board actions and settlement conferences.

Provides input into hiring selection decisions and performance evaluations.

Provides technical development and training.

Develops and implements policies, procedures, and manuals.

Develops, implements, recommends and revises forms, webpages, and other program tools.

Advises staff on technical, regulatory and programmatic issues.

Reviews and summarizes data, prepares special and periodic reports, and ensures program effectiveness.

Conducts and participates in meeting and workshops with a variety of legal, public and private agency officials to explain and interpret technical policies, data rules and regulations regarding programs.

Participates in meeting, conferences, hearing boards and workshops with public and private agencies; serves on special committees and task forces relating to air quality program activities.

Interacts and represents the Air District with industry, attorneys, the public and other agencies; provides technical expertise to Air District staff, to counsel, to industry, the public and other agencies.

Provides lead direction, training and work review to technical and support staff, prioritizes and follows up on work assignments to ensure timely completion.

May provide technical training and participate in program and staff development.

Maintains data and data systems supporting Air District programs.

May provide input to air quality program budgetary needs.

Maintains detailed technical records, standard operating procedures, and logbooks to comply with regulatory guidelines.

Performs other related duties as assigned.

Representative Duties (by program area)

Some positions in this classification may be assigned to one or several program areas; an exhaustive list of program-area specific duties is not provided.

In addition to the duties listed above, the following duties (illustrative only) may be performed for positions in the select program areas:

Compliance and Enforcement

Reviews and examines complex settlement cases and advises staff on technical regulatory issues; approves penalty reductions up to authorized limit and recommends additional reduction, enforcement or other legal action to executive staff.

Conducts the most difficult and complex commercial and industrial inspections and investigations such as, but not limited to, petroleum refineries, power plants, semiconductor manufacturing facilities, toxic and hazardous materials operations and complicated industrial operations.

Reviews and coordinates the most difficult and problematic inspections to determine and ensure the consistent technical application and interpretation of new and revised rules and regulations; develops and tests new inspection and complaint investigation methods and techniques.

Develops enforcement criteria and related inspection policies; contributes to the development and revision of rules, policies and regulations involving inspections.

Coordinates and reviews the work of inspections staff involved in special projects and audits, sensitive complaint investigations and other surveillance activities.

Coordinates contact with particular businesses, industries and other groups to explain rules, policies and inspection procedures; explains the reason for violation notices to concerned parties.

Coordinates and directs difficult and complex field investigations.

Participates in various quality assurance activities for inspection activities.

Leads the preparation of enforcement case summaries and makes presentations of same; conducts office conferences with industry violators and their attorneys.

May provide technical testimony on behalf of the Air District.

Coordinates field enforcement activities with other District staff and with other public agencies.

Meteorology and Measurement

Researches and analyzes new technology, procedures, and regulations relevant to air monitoring and source testing, and makes recommendations to management regarding the implementation process.

Leads the procurement, testing, and implementation of new technology and develops operating procedures for new and existing technology.

Leads the development of special study designs by providing input on technical implementation details. Develops study specific procedures for field staff and provides training as needed.

Advises on testing, diagnosis, and repair of non-routine equipment problems. Works with instrument manufacturers to solve instrument problems caused by design, supply, or implementation issues.

Evaluates data to ensure that quality control standards are met, and quality control systems are functioning appropriately to ensure robust data is being produced. Suggests changes to the quality system necessary to correct or prevent data quality issues.

Performs complex duties involving installation, operation, maintenance, calibration and repair of air monitoring, meteorological, and source test equipment and instrumentation.

Evaluates and makes recommendations to ensure that all programs are following applicable regulations in support of Air District goals and objectives.

Works with outside contractors to provide specialized air quality and source test measurements.

Works with the data management team to ensure that data systems meet the needs of the Air District in compliance with local, state, and federal regulations for the storage, processing, and transmittal of regulatory data.

Advises on the development, implementation, and evaluation of new air monitoring and source test programs and makes recommendations to ensure that existing programs continue to comply with federal requirements.

Conducts mobile, portable, or stationary source-oriented monitoring. Prepares and collects various samples of ambient air and source test pollutants at air monitoring sites and stationary sources.

Maintains detailed technical records and logbooks.

MINIMUM QUALIFICATIONS

Education & Experience

A typical way to obtain the knowledge and skills is:

Education:

Equivalent to a Bachelor's degree from a four-year college or university with major coursework in chemistry, computer science, electronics, engineering, environmental science, mathematics, meteorology, physical sciences, physics, or a closely related field.

AND

Experience:

Five (5) years of experience performing air quality inspections; installing, operating and maintaining air monitoring and quality assessment instruments and equipment; or developing and administering air quality programs, of which at least two (2) years included performing lead or supervisory responsibilities equivalent to the Air District's Senior Air Quality Specialist.

Substitution: Any combination of relevant training and work experience in the listed or related fields may substitute for the education criteria on a year for year basis.

SUPPLEMENTAL INFORMATION:

QUALIFICATIONS

Knowledge of:

Theories, principles and practices of air quality measurements or inspection and enforcement, including environmental research and analysis.

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

Basic principles of engineering, chemistry, physics, and biology as they relate to air quality programs.

Industrial processes and equipment used in air pollution control.

Common biological, chemical and physical processes that cause air pollution and their long- and short-term impacts and effects.

Industrial practices and techniques to modify production processes and equipment to reduce emissions.

General principles of data quality and control.

Basic principles and practices of public administration.

Record-keeping and reporting principles and practices.

General principles of records management.

Skill in:

Developing, administering, and supervising effective air quality programs.

Analyzing technical air pollution problems, evaluating alternative solutions and developing effective recommendations.

Analyzing and interpreting technical and legal rules, policies and procedures.

Reading and understanding technical diagrams and processes.

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

Communicating technical and non-technical information orally and in writing to various audiences.

Exercising sound independent judgment within established guidelines.

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

OTHER REQUIREMENTS

Some positions may require a valid California driver's license.

Some positions may require a California Air Resources Board Visible Emissions Evaluation Certification obtained within 6 months of employment.

Some positions may require the physical ability to work near and in the presence of hazardous and toxic materials, climb high structures to evaluate processes in operation, lift heavy safety and test equipment, and to use self-contained breathing apparatus.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

SUPERVISING AIR QUALITY SPECIALIST

An Equal Opportunity Employer

DEFINITION:

Under direction, supervises the staff and activities for assigned programs in the areas of inspection, investigation, air monitoring instrument and equipment operation, air quality planning, rule development, enforcement and compliance operations, and other air quality program areas; performs related work as assigned.

DISTINGUISIHING CHARACTERISTICS

This is the first full supervisory level in the Air Quality Specialist series. This class provides both supervision and highly specialized services in support of the Air District's goals and objectives. Successful performance of the work requires the use of independent judgement initiative within established guidelines. Incumbents are responsible for accomplishing program goals and objectives within policy guidelines. This class is distinguished from the Principal Air Quality Specialist, in that the latter does not supervise or evaluate staff on a continuing basis. This class is also distinguished from manager levels in that the latter performs management duties with responsibilities for a program or defined functional area.

EXAMPLES OF DUTIES *(Illustrative only)*:

General Duties:

Organizes, assigns, supervises, leads, reviews and evaluates the staff and work of assigned programs; ensures program effectiveness.

Participates in and recommends the selection of assigned staff; provides for their training and development.

Develops, recommends and implements Air District policies and programs to enforce statutory and regulatory requirements for enforcement; develops and recommends the Air District's position on various enforcement matters such as hearing board actions and settlement conferences.

Supervises the development of policies, procedures, manuals, forms, webpages, and other tools.

Advises staff on technical and regulatory issues.

Reviews and summarizes data, prepares special and periodic reports and ensures program effectiveness.

Interprets rules and policies to Air District staff, industry, the public and other agencies.

Conducts and participates in meetings and workshops with a variety of legal, public and private agency officials to explain and interpret technical policies, data, rules and regulations regarding programs.

Reviews and summarizes data, prepares special and periodic reports

Interacts and represents the Air District with industry, attorneys, the public and other agencies; provides technical expertise to Air District staff and counsel and to industry, the public and other agencies.

May provide input to air quality program budgetary needs.

Performs other related duties as assigned.

Representative Duties (by program area)

Some positions in this classification may be assigned to one or several program areas; an exhaustive list of program-area specific duties is not provided.

In addition to the duties listed above, the following duties (illustrative only) may be performed for positions in the select program areas:

Compliance and Enforcement

> Supervises the violation settlement process; reviews and examines complex settlement cases and advises staff on technical regulatory issues; approves penalty reductions up to authorized limit and recommends additional reduction, enforcement or other legal action to executive staff.

Supervises the development, review and approval processes for the Air District's new or revised rules and regulations; coordinates the development of technological justifications, oversees the public and industry review process; trains staff in the intent and interpretation of rules.

Develops enforcement criteria and related inspection policies; contributes to the development and revision of rules, policies and regulations involving inspections.

Coordinates contact with particular businesses, industries and other groups to explain rules, policies and inspection procedures; explains the reason for violation notices to concerned parties.

Coordinates and directs difficult and complex field investigations.

Participates in various quality assurance activities for inspection activities.

Supervises the preparation of enforcement case summaries and makes presentations of same; conducts office conferences with industry violators and their attorneys.

Coordinates field enforcement activities with other District staff and with other public agencies.

May provide technical testimony on behalf of the Air District.

Meteorology and Measurement

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

Coordinates staff and manages resources for routine and special monitoring projects.

Coordinates air monitoring, and source test, and instrument performance evaluation projects, and activities with other Air District staff.

Reviews operational records, data and reports to ensure data validation, quality assurance and instrument performance and to ensure compliance with regulatory standards; detects, identifies, and resolves irregularities.

Participates in developing and implementing data systems and operational, analytical and technical procedures and methods.

Coordinates specific programs, systems and activities such as the quality assurance/quality control program, repair and maintenance of equipment, monitoring site development, and other special projects.

Develops and recommends improved sampling techniques and equipment modifications.

Participates in inter-agency audits and studies; ensures compliance with all applicable regulations.

Maintains records and prepares special and periodic reports.

Assists with and conducts training on performance evaluations of the air monitoring network as needed.

Engineering

Supervises the development, implementation, and administration of permitting, registration, No Net Increase and emissions banking programs (performed by technical staff) including evaluating certain permit applications and data used to calculate emissions and fees; maintains permit data including permit conditions; performs tasks necessary to renew permits and registrations.

Supervises emission calculations including emissions reductions and the assessment of emissions inventories; and performs technical work.

Supervises the review of permit applications for ministerial sources.

Processes, maintains, and ensures data quality used for issuing permit documents, maintaining the emissions bank, and developing the emissions inventory.

Evaluates, recommends, and tests permit system improvements.

Evaluates program quality and effectiveness; makes improvement recommendations.

Performs job duties for Rule Development projects.

MINIMUM QUALIFICATIONS

Education & Experience

A typical way to obtain the knowledge and skills is:

Education:

Equivalent to a Bachelor's degree from a four year college or university with major coursework in chemistry, computer science, electronics, engineering, environmental science, mathematics, meteorology, physical sciences, physics, or a closely related field.

AND

Experience:

Five (5) years of experience performing air quality inspections; installing, operating and maintaining air monitoring and quality assessment instruments and equipment; or developing and administering air quality programs, of which at least two (2) years included performing lead or supervisory responsibilities equivalent to the Air District's Senior Air Quality Specialist.

Substitution: Any combination of relevant training and work experience in the listed or related fields may substitute for the education criteria on a year for year basis.

SUPPLEMENTAL INFORMATION:

QUALIFICATIONS

Knowledge of:

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

Theories, principles and practices of air quality measurements, or inspection and enforcement, including environmental research and analysis.

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

Basic legal principles of civil prosecution, particularly as they relate to environmental enforcement.

Basic principles of engineering, chemistry and biology as they relate to air quality enforcement programs.

Industrial processes and equipment used in air pollution control.

Common biological, chemical and physical processes that cause air pollution and their long- and short-term impacts and effects.

General principles of data quality and control.

Record-keeping and reporting principles and practices.

General principles of records management.

Industrial practices and techniques to modify production processes and equipment to reduce emissions.

Basic principles and practices of public administration.

Skill in:

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

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

Developing and supervising effective programs.

Analyzing technical air pollution problems, evaluating alternative solutions and developing effective recommendations.

Analyzing and interpreting technical and legal rules, policies and procedures.

Reading and understanding engineering diagrams and processes.

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

Communicating technical and non-technical information orally and in writing to various audiences.

Negotiating settlements tactfully and effectively.

Exercising sound independent judgement within established guidelines.

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

OTHER REQUIREMENTS

Some positions may require a valid California driver's license.

Some positions may require a California Air Resources Board Visible Emissions Evaluation Certification obtained within 6 months of employment.

Some positions may require the physical ability to work near and in the presence of hazardous and toxic materials, climb high structures to evaluate processes in operation, lift heavy safety and test equipment, and to use self-contained breathing apparatus.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Cindy Chavez and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: December 6, 2021

Re: Consider Approval of Hiring Recommendation at Step E of Salary Range 128 for the Air Quality Inspector II Positions

RECOMMENDED ACTION

Recommend the Board of Directors approve hiring recommendation at Step E of Salary Range 128 for the Air Quality Inspector Positions.

BACKGROUND

The recruitment and selection process for the Air Quality Inspector positions has been completed. Division III, Section 6.4 of the Bay Area Air Quality Management District's (Air District) Administrative Code states that recommendation by the Executive Officer/APCO and approval of the Board of Directors is required for hiring employees at Step E.

DISCUSSION

The Air District recently conducted a recruitment for Air Quality Inspector positions. The process included a review of minimum qualifications, application screening, and hiring interviews. Two candidates who were recommended for the position have extensive years of experience in air quality and as Air Quality Inspector II performing compliance & enforcement duties at other Air Quality District's within California. In addition, one of the candidates has laboratory and stationary source testing experience and is bilingual. The other candidate has years of experience managing and performing source testing and has EPA national accreditation.

In order to offer a salary more commensurate with the candidate's experience, staff is recommending approval to hire the Air Quality Inspector II at Step E of salary range 128.

BUDGET CONSIDERATION/FINANCIAL IMPACT

The salary for the Air Quality Inspector II position at Step E is $105,503 per year and is included in the Fiscal Year Ending 2022 budget.

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 Cindy Chavez and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: December 6, 2021

Re: Authorization to Amend Air Monitoring Operations Budget with Schedule X Fees

RECOMMENDED ACTION

Recommend the Board of Directors consider authorizing the Executive Officer/APCO to amend and increase the Fiscal Year Ending (FYE) 2022 budget for Air Monitoring Operations by $450,000, funds for this increase have been already collected via fees included in Schedule X.

BACKGROUND

In 2016, the Air District amended Regulation 3 (Fees) to establish a new fee schedule to recover the costs associated with a Fenceline Community Air Monitoring Program. The goal of the program is to establish monitoring stations in areas where major stationary sources may contribute to air quality impacts that are not captured by the Air District's existing monitoring network. The Air District staff has hosted community workshops to gather information about air quality concerns and suggested monitoring locations and assessed available meteorology, monitoring, modeling, and Environmental Justice screening data to identify general areas near each refinery where monitors could be placed.

DISCUSSION

Based on the community, technical, and logistical work that has been done, the Air District is preparing to install monitoring equipment. The selection of monitoring equipment is based on source-based pollutants of concern in refinery communities and the evaluation of analytical and ancillary monitoring equipment. All analytical equipment is evaluated and selected based on project need and manufacturer specifications while all support equipment is based on the selected analytical monitoring equipment. In addition, analytical equipment specifications are based on pollutants of concern, spatial and temporal resolution, and documented performance results to provide qualitative and quantitative measurements within a Fenceline Community. A Request for Proposals (RFP) or Request for Quotes (RFQ) shall be utilized following Air District procedures to solicit additional technical specifications, cost, and analytical performance measures or to solicit quotes for analytical equipment that demonstrates technical and analytical rigor for a specific measurement or use. For the initial installation, equipment procurement includes automatic gas chromatography for air toxics including BTEX, particulates for $PM_{2.5}$ and black carbon, meteorology, as well as refinery-based sulfur dioxide and hydrogen sulfide measurements.

If the budget amendment is approved, analytical and support equipment would be purchased using fees that have been collected from Schedule X. To date, about $5.1 million in Schedule X fees have been collected and about $3.6 million is available. Future expenses for installation, operation, and maintenance will be proposed to the Board through the budget process, starting in the FYE 2023 budget cycle.

Prior to the permit fee hearings in the first quarter of 2022, Air District staff will present a more detailed update about the Fenceline Community Air Monitoring Program to the Stationary Source and Climate Impacts Committee, including the steps taken to identify candidate sites, community engagement, challenges in finalizing sites, and the next steps for development of monitoring stations in refinery communities.

BUDGET CONSIDERATION/FINANCIAL IMPACT

Staff is recommending amending and increasing the FYE 2022 General Fund Budget for Program 802, Air Monitoring Operations by $450,000. These monies will go to purchase air monitoring equipment using funds that have already been collected by the Air District as part of fees charged annually for Regulation 3, Schedule X.

Respectfully submitted,

Jack Broadbent
Executive Officer/APCO

Prepared by: Ila Perkins
Reviewed by: Ranyee Chiang, Stephanie Osaze

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairpersons Cindy Chavez and Carole Groom and Members of the Administration Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: December 10, 2021

Re: Management Audit Vendor Qualification Recommendation

RECOMMENDED ACTION

Recommend the Board of Directors authorize the Executive Officer/APCO to execute a contract for management audit services with Sjoberg Evashenk, Inc., in an amount not to exceed $250,000.

BACKGROUND

On June 16, 2021, the Board of Directors approved a workplan to initiate a management audit and the scope of work to procure services for a management audit, acknowledging the following priorities: evaluate the Air District's current hiring process, analyze Air District divisions that are asking for the greatest numbers of new staffing positions, include a performance audit and risk evaluation. The vendor selection team for the auditor would include Board Members Carole Groom and Margaret Abe-Koga, as well as one community member appointed by the Community Equity, Health, and Justice Committee, another appointed by the Stationary Source and Impacts Committee, and a subject matter expert in management audits.

DISCUSSION

On June 30, 2021, the District issued a Request for Qualifications for Management Audit Services which closed on July 21, 2021. During the open period, the Air District received six proposals from various vendors.

The members of the Vendor Selection Panel independently scored each proposal and interviewed the two vendors with highest scoring proposals. Panel members independently scored each of the two finalists based on their interviews. The scoring summary is shown in Table 1.

TABLE 1

Vendor	Written Proposal	Interview Score	Total Score
Sjoberg Evashenk Consulting, Inc	35.0	27.6	62.6
TAP International	33.3	27.4	60.7
Eide Bailly	29.9	N/A	N/A
Matrix Consulting Group	28.1	N/A	N/A
MGT of America Consulting, LLC	26.9	N/A	N/A
Macias Gini & O'Connell LLP	25.1	N/A	N/A

Table 1 shows that Sjoberg Evashenk Consulting, Inc. received the highest proposal and interview score, and staff recommend that the Air District execute a contract with Sjoberg Evashenk, for a management audit services in an amount not to exceed $250,000.

The contract will be structured as a master services contract. The initial task order under the contract calls for a first deliverable in March 2022 to inform staffing level decisions, and a second deliverable in May which will provide information regarding Air District-wide risk, fee recovery and performance, and rank the Air District's divisions for further audit priority. Subsequent task orders are anticipated under this contract in 2022 to execute more detailed audits in high priority Divisions. The draft contract is included with this memorandum as Attachment 12A.

BUDGET CONSIDERATION/FINANCIAL IMPACT

$250,000 will be transferred out of Air District reserves and into the Fiscal Year Ending 2022 budget to fund the cost of these services.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: John Chiladakis
Reviewed by: Jack P. Broadbent

Attachment 12A: Draft Master Services Agreement – Contract No. 2021.228

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
MASTER SERVICES CONTRACT
SJOBERG EVASHENK CONSULTING, INC.
CONTRACT NO. 2021.228
Task Order No. 1

Work Plan:
CONTRACTOR will conduct an independent DISTRICT-wide Risk Assessment that will, at a minimum, consider the following:

a. Internal controls established to ensure compliance with applicable standards;
b. The accuracy of the DISTRICT's cost recovery process and fee setting; and
c. Potential improvements to the effectiveness and efficiency of DISTRICT operations, including staffing levels to address workload demands.

The Risk Assessment will include a Phase 1 report that will provide a progress update for the project and preliminary conclusions, as well as final conclusions regarding proposed staffing increases reflected in the DISTRICT's budget. Phase 2 of the project will culminate in a final report that will rank DISTRICT divisions for audit priority.

General Audit Plan:
To meet these objectives, CONTRACTOR will follow the general audit plan outlined below:

1. Review documents and information related to the DISTRICT's governance, including governing laws, decisions of the Board, executive reports, rules and regulations, budgetary documents and financial reports, prior audit reports and internal studies, key policies and procedures, organizational charts, strategic goals and objectives, performance indicators, DISTRICT-related customer or stakeholder surveys (if any), conflict of interest code and Code of Ethics, and miscellaneous background information identified through research.

2. Meet with DISTRICT officials and management to obtain insights into DISTRICT operations and programs, as well as strengths, weaknesses, opportunities and challenges, and to identify an audit universe of each departments' significant programs and activities. Discuss various risk factors that impact or threaten to impact their operations and those that should be included in the risk assessment. Obtain an understanding of each of the departments' programs and activities, and elicit input.

3. Identify (a) all DISTRICT departments and key organizational units, (b) their purpose/service, and (c) the resources/expenditures associated with each. Use this information to begin to develop the audit universe and the relative magnitude and scope of each organizational unit in terms of overall funding and spending and in terms of whether they provide services to the public or are internal service functions.

4. Analyze available quantitative data and qualitative information from financial reports, budgets, dashboards, performance measures, and other statistics that provide insights into the trends experienced by and the performance of DISTRICT departments and programs.

5. Review prior audit reports and risk assessments, consultant reports and analyses, and other external/independent studies performed relating to the DISTRICT's operations. Identify findings/problems identified in any prior reviews, and other fiscal, program or departmental audits and studies—and take note of prior findings or concerns and the corrective actions taken. This information will also assist in determining the areas or programs that have recently been reviewed and thus impact their priority or ranking.

6. Identify key information systems and their functionality in facilitating core operations of the DISTRICT. In doing so, identify data that could be useful for data extraction and data analytics. This will include determining how data analytics can be used to identify potentially high-risk audit areas.

7. Identify functions of the DISTRICT that are outsourced to third-party service providers, and understand the DISTRICT's approach to managing and overseeing such functions.

8. Obtain information from management regarding workload trends, the allocation of staffing resources to manage existing or anticipated workloads, and impacts of perceived staffing shortages on operational outcomes. Identify requests for additional staffing resources, as well as the potential for enhancing operational efficiencies where the need for additional staffing resources has been identified.

9. Consider systems of internal control designed to mitigate inherent risks identified through the Risk Assessment.
    a. Obtain and review of the DISTRICT's internal control policies and procedures, and conduct a high-level review to determine the extent to which they are up-to-date and contemporary, consistent with best practices, comprehensive, and are likely to address key risks.
    b. Discuss key DISTRICT processes to obtain a broad understanding of how policies and procedures are implemented, the extent to which processes are automated or manual, the extent to which information is available for management and audit purposes.
    c. Obtain an understanding of how departments and activities assure that important internal controls, management oversight, and policies and procedures are followed at the departmental working levels.

d. Consider evidence that provides insight regarding the extent to which management has taken steps to (a) identify inherent risks relevant to the operations for which they are responsible, (b) designed and implemented internal controls to mitigate those risks, (c) ensure staff are aware of required procedures, and (d) devised methods to monitor staff adherence to designed controls.

10. Identify methods employed by the DISTRICT to set and maintain rates and fee schedules in a manner consistent with best practices. This will include evaluating rate-setting cycles, methods for monitoring actual cost recovery, and routine audits or evaluations of established rates.

11. In consultation with the DISTRICT, consider the development of risk assessment surveys/questionnaires to solicit input from a wide range of DISTRICT management and other personnel and, potentially, members of the public.

12. Develop and populate a risk matrix that will reflect DISTRICT departments, programs and activities, thereby achieving an entity-wide risk assessment model that focuses on comparisons between units and activities and accounts for a variety of risk factors. This will include rating and ranking departments, programs and activities based on identified risk criteria.

13. Create a risk profile for each department identifying key auditable units; a high-level summary of core functions, responsibilities, magnitude, inherent risks, and associated factors; potential audit topics related to identified risks; and a heat map that illustrates the relative priority of each potential auditable unit. This will serve to provide an overall risk ranking that assists the DISTRICT in prioritizing potential audit topics while also providing a clear rationale for the professional judgments made in deriving at the risk rankings score, and a sound basis for deliberations, audit planning, and audit resource allocation.

14. Utilizing the risk profiles, and in collaboration with DISTRICT management and the Board, propose a ranking of potential audit topics for consideration in an audit plan, and determine the priority areas viewed as the most important use of available audit resources.

Deliverables and Milestones:

Deliverable	Due Date
1. Phase 1 Report – Preliminary Results and Status Update	March 14, 2022
2. Phase 2 Draft Report(s)*	April 9, 2022
3. Phase 2 Final Report	May 30, 2022

- The Draft report(s) will include all conclusions and recommendations that are to be proposed in the final report.

Task Order Schedule: The period of performance for this Task Order shall be from December 15, 2021 through June 30, 2022.

Task Order Contact:
CONTRACTOR's contact person under this Task Order shall be George Skiles at george@secteam.com. DISTRICT's contact person under this Task Order shall be John Chiladakis at jchiladakis@baaqmd.gov.

Task Order Cost:
DISTRICT will pay CONTRACTOR a fixed cost of $75,000 for all labor and expenses to complete all work outlined in this Task Order. Payments will be made in three installments following delivery of and invoicing for the documents shown in the table below. Payments will be made within thirty (30) calendar days after receipt and approval of CONTRACTOR's invoice.

Description	Payment
Delivery of Phase 1 Report	$26,250
Delivery of Phase 2 Draft Report	$26,250
Delivery of Phase 2 Final Report	$22,500

Total Task Order Cost not to exceed: $75,000.

IN WITNESS WHEREOF, the parties to this Task Order have caused this Task Order to be duly executed on their behalf by their authorized representatives.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

By: _____
Jack P. Broadbent
Executive Officer/APCO

Date: _____

SJOBERG EVASHENK CONSULTING, INC.

By: _____
George Skiles
Partner

Date: _____

Approved as to form:
District Counsel

By: _____
Adan Schwartz
Acting District Counsel

COMMITTEE CHAIR SUMMARY REPORT OF THE ADMINISTRATION COMMITTEE

(Co-Chairs: Cindy Chavez and Carole Groom)

The Administration Committee met on Wednesday, December 1, 2021, approved the minutes of November 17, 2021, and accepted the Hearing Board Quarterly Report for July – September 2021. This meeting was conducted under procedures authorized by Assembly Bill 361. Members of the Committee participated by teleconference.

The Committee then received and discussed Board member Lori Wilson and Board Chair Chavez's presentation *Formation of an Executive Support Standing Committee.* The Committee will present to the Board the following as informational:

1) The current Ad Hoc Executive Support Committee is tasked with developing the final composition of the future oversight standing Committee that includes minimally the Board Chair, Vice Chair and past or recent past Chair.
2) Set at a minimum quarterly meetings with the Committee and the Executive Officer to review current and planned actions and activities and discuss how they connect to the Board's goals.
3) Set at a minimum quarterly meetings with the Committee and the District Counsel to review current and upcoming legal actions and any other relevant information.
4) Perform an employee 360* or other innovative evaluation of the Executive Officer every 3 years to gain clarity about how District employees perceive the direction of the agency under the leadership of the Executive Officer. Evaluation reports should be written with an emphasis on confidentiality.

5) Perform an employee 360* or other innovative evaluation of the District Counsel every 3 years to gain clarity about District employees' opinion of the current legal direction of the agency. Evaluation reports should be written with an emphasis on confidentiality.
6) Retain outside counsel to assess the current annual evaluation process.
7) Work with outside counsel to create a standardized annual evaluation process, including performance measures and a standardized set of evaluation questions.
8) Create an annual practice of providing each board member with a list of the annual evaluation questions, past years' materials, and previous evaluations at the beginning of the year to help inform their future assessment.

The Committee then received and discussed the guest speaker presentation *The True Cost of Wildfires in California* by Patrick Kallerman, Vice President of Research of the Bay Area Council Economic Institute.

The Committee then received and discussed the staff presentation *Fourth Quarter Financial Report Fiscal Year Ending (FYE) 2021.*

Finally, the Committee received and discussed the staff presentation *First Quarter Financial Report Fiscal Year Ending (FYE) 2022.*

The next meeting of the Administration Committee will be at the Call of the Chair, via webcast, pursuant to procedures in accordance with Assembly Bill 361. This concludes the Chair Report of the Administration Committee.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Cindy Chavez and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: December 6, 2021

Re: Report of the Administration Committee Meeting of December 1, 2021

RECOMMENDED ACTIONS

The Administration Committee (Committee) will present the following to the Board of Directors (Board):

A) Hearing Board Quarterly Report: July 2021 – September 2021;

1) None; receive and file.

B) Formation of an Executive Support Standing Committee;

1) The current Ad Hoc Executive Support Committee is tasked with developing the final composition of the future oversight standing Committee that includes minimally the Board Chair, Vice Chair and past or recent past Chair.

2) Set at a minimum quarterly meetings with the Committee and the Executive Officer to review current and planned actions and activities and discuss how they connect to the Board's goals.

3) Set at a minimum quarterly meetings with the Committee and the District Counsel to review current and upcoming legal actions and any other relevant information.

4) Perform an employee 360* or other innovative evaluation of the Executive Officer every 3 years to gain clarity about how District employees perceive the direction of the agency under the leadership of the Executive Officer. Evaluation reports should be written with an emphasis on confidentiality.

5) Perform an employee 360* or other innovative evaluation of the District Counsel every 3 years to gain clarity about District employees' opinion of the current legal direction of the agency. Evaluation reports should be written with an emphasis on confidentiality.

6) Retain outside counsel to assess the current annual evaluation process.

7) Work with outside counsel to create a standardized annual evaluation process, including performance measures and a standardized set of evaluation questions.

8) Create an annual practice of providing each board member with a list of the annual evaluation questions, past years' materials, and previous evaluations at the beginning of the year to help inform their future assessment.

C) Report on Understanding the Health and Economic Costs of Wildfires in the San Francisco Bay Area

1) None; receive and file.

D) Fourth Quarter Financial Report – Fiscal Year Ending (FYE) 2021; and

1) None; receive and file.

E) First Quarter Financial Report – Fiscal Year Ending (FYE) 2022

1) None; receive and file.

BACKGROUND

The Committee met on Wednesday, December 1, 2021, and received the following reports:

A) Hearing Board Quarterly Report: July 2021 – September 2021;

B) Formation of an Executive Support Standing Committee;

C) Report on Understanding the Health and Economic Costs of Wildfires in the San Francisco Bay Area

D) Fourth Quarter Financial Report – Fiscal Year Ending (FYE) 2021; and

E) First Quarter Financial Report – Fiscal Year Ending (FYE) 2022.

BUDGET CONSIDERATION/FINANCIAL IMPACT

A) None;

B) None;

C) None;

D) None; and

E) None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Vanessa Johnson
Reviewed by: Justine Buenaflor

Attachment 13.2A: 12/01/2021 – Administration Committee Meeting Agenda #3
Attachment 13.2B: 12/01/2021 – Administration Committee Meeting Agenda #4
Attachment 13.2C: 12/01/2021 – Administration Committee Meeting Agenda #5
Attachment 13.2D: 12/01/2021 – Administration Committee Meeting Agenda #6
Attachment 13.2E: 12/01/2021 – Administration Committee Meeting Agenda #7

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairpersons Cindy Chavez and Carole Groom and Members of the Administration Committee

From: Chairperson Valerie J. Armento, Esq., and Members of the Hearing Board

Date: November 24, 2021

Re: Hearing Board Quarterly Report: July 2021 – September 2021

RECOMMENDED ACTION

None; receive and file.

DISCUSSION

This report covers the third calendar quarter (July - September) of 2021.

During this time, the Hearing Board:

- Held zero hearings;
- Processed zero orders; and
- Collected a total of $0 in Hearing Board filing fees and/or excess emissions fees.

Respectfully submitted,

/S/ Valerie J. Armento

Valerie J. Armento, Esq.
Chair, Hearing Board

Prepared by: Marcy Hiratzka
Reviewed by: Vanessa Johnson

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Members of the Administration Committee

From: Members of the Ad-Hoc Executive Support Committee:
Board Chair Cindy Chavez
Director John Bauters
Director David Haubert
Director Davina Hurt
Director Karen Mitchoff
Director Lori Wilson

Date: November 24, 2021

Re: Formation of an Executive Support Standing Committee

RECOMMENDED ACTIONS

Recommend that the Board of Directors of the Bay Area Air Quality Management District create an oversight structure for the ongoing evaluation and support of the Executive Director and the District Counsel.

To facilitate this effort, the following actions are recommended:

1. Creation of an oversight standing Committee that includes minimally the Board Chair, Vice Chair and past or recent past Chair.

2. Set quarterly meetings with the Committee and the Executive Officer to review current and planned actions and activities and discuss how they connect to the Board's goals.

3. Set quarterly meetings with the Committee and the District Counsel to review current and upcoming legal actions and any other relevant information.

4. Perform an employee 360* or other innovative evaluation of the Executive Officer every 3 years to gain clarity about how District employees perceive the direction of the agency under the leadership of the Executive Officer. Evaluation reports should be written with an emphasis on confidentiality.

5. Perform an employee 360* or other innovative evaluation of the District Counsel every 3 years to gain clarity about District employees' opinion of the current legal direction of the agency. Evaluation reports should be written with an emphasis on confidentiality.

6. Retain outside counsel to assess the current annual evaluation process.

7. Work with outside counsel to create a standardized annual evaluation process, including performance measures and a standardized set of evaluation questions.

8. Create an annual practice of providing each board member with a list of the annual evaluation questions, past years' materials, and previous evaluations at the beginning of the year to help inform their future assessment.

BACKGROUND

The Air District's Executive Officer and Air District Counsel report directly to the Board of Directors. Currently, and at the direction of the Chair, the Board conducts evaluations of the Executive Officer and District Counsel approximately each year.

DISCUSSION

In March of 2021, an Ad-Hoc Executive Support Committee (Committee) was formed for the purpose of conducting the annual evaluations, and the committee determined that the current evaluation process may not provide sufficient feedback or guidance from the Board to the District's Executive Officer and District Counsel. The Committee discussed creating a standing Committee of the Board that would meet quarterly to provide direction to its direct reports and engaging outside legal counsel to improve the current process used by the Board to evaluate its direct reports. The Committee emphasized that the process should include steps that would assess the perception of the leadership by staff, and that appropriate confidentiality must be incorporated into the process.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Cindy Chavez
Board Chairperson

Prepared by: Hope Cahan

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairpersons Cindy Chavez and Carole Groom and Members of the Administration Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: November 24, 2021

Re: Report on Understanding the Health and Economic Costs of Wildfires in the San Francisco Bay Area

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

Wildfires have been a natural threat to the Bay Area and State of California for centuries, but longer wildfire seasons and more destructive fires have now pushed much of California into a heightened state of alert for wildfires and the smoke-filled skies they produce. The acreage burned per wildfire has been increasing drastically in recent years, resulting in more destructive wildfire events and larger economic losses.

The record-breaking fires over the last five years have illustrated an urgent need for policy action to reduce economic losses and adverse health effects experienced across the state. This report explores the health and economic costs of wildfires in California, with a particular focus on the Bay Area, and outlines a set of immediate and long-term strategies for intervention and resilience.

DISCUSSION

Patrick Kallerman, Vice President of Research at the Bay Area Council Economic Institute, the author of the report, which was co-sponsored by the Air District, will present the main findings and conclusions. As wildfire seasons increase in length and intensity, the resulting economic, environmental, and health impacts worsen.

The total economic impacts of a wildfire go well beyond the cost of damages, as they include health costs and indirect losses due to power shut-offs, business closures, travel cancellations, supply chain disruptions, among other costs. This report explores recent wildfire case studies—the North Bay fires of 2017 and the Camp Fire of 2018—to further illuminate the economic and health costs associated with wildfires in California and the Bay Area.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Leonid Bak
Reviewed by: Jeff McKay

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairpersons Cindy Chavez and Carole Groom and Members of the Administration Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: November 24, 2021

Re: Fourth Quarter Financial Report – Fiscal Year Ending (FYE) 2021

RECOMMENDED ACTION

None; receive and file.

DISCUSSION

Finance staff will present an update on the Air District's financial results for the Fourth quarter of the 2020-2021 fiscal year. The following information summarizes those results.

GENERAL FUND: STATEMENT OF REVENUES – Comparison of Prior Year Quarter Actual and Current Year Budget to Actual

REVENUE TYPE	4th QTR FY 2020	4th QTR FY 2021	FY 2021 - % of BUDGETED REVENUE
County Receipts	$37,558,118	$39,778,798	103%
Permit Fee Receipts	$39,725,516	$40,368,495	120%
Title V Permit Fees	$5,771,882	$6,210,781	122%
Asbestos Fees	$3,601,111	$3,587,447	221%
Toxic Inventory Fees	$1,236,573	$1,995,672	318%
Community Health Impact	$0	$750,623	75%
Penalties and Settlements	$1,047,451	$4,264,158	284%
Interest Income	$712,829	$827,785	99%
Total Revenue	**$89,653,479**	**$97,783,760**	**118%**

GENERAL FUND: STATEMENT OF EXPENDITURES - Comparison of Prior Year Quarter Actual and Current Year Budget to Actual

EXPENDITURE TYPE	4th QTR FY 2020	4th QTR FY 2021	FY 2021 - % of BUDGETED EXPENDITURES
Personnel - Salaries*	$47,266,818	$51,515,900	99%
Personnel - Benefits*	$20,996,053	$26,992,260	92%
Operational Services / Supplies	$31,700,489	$24,565,654	90%
Capital Outlay	$6,645,716	$4,039,697	95%
Total Expenditures	**$106,609,075**	**$107,113,512**	**95%**

* Consolidated (includes Special Funds)

CASH INVESTMENTS IN COUNTY TREASURY – Account Balances as of Fourth Quarter

CASH/INVESTMENTS	4th QTR FY 2020	4th QTR FY 2021
General Fund	$81,745,113	$84,042,994
TFCA	$117,735,644	$119,332,833
MSIF	$51,366,177	$48,518,058
Carl Moyer	$87,118,737	$74,573,104
CA Goods Movement	$20,979,038	$21,186,646
AQ Projects	$2,821,017	$1,609,109
Vehicles Mitigation	$2,457,095	$7,615,319
Total	**$364,222,821**	**$356,878,064**

FUND BALANCES	6/30/2019 Audited	6/30/2020 Projected	6/30/2021 Projected
DESIGNATED: *			
Economic Contingency	$19,084,769	$$20,082,966	$21,294,922
Napa/Sonoma Fireplace Replacement Grant	$1,000,000	0	0
Pension & Post Employment Liability	$2,000,000	$3,000,000	$3,000,000
Technology Implementation Office	0	$3,350,000	$3,350,000
Woodsmoke Grant	$1,000,000	$1,000,000	$1,000,000
Total Designated Reserves	**$23,084,769**	**$27,432,966**	**$28,644,922**
Undesignated Fund Balance	$22,332,894	$26,401,581	$20,029,943
TOTAL DESIGNATED & UNDESIGNATED	**$45,417,663**	**$53,834,547**	**$48,674,865**
Building Proceeds	$209,489	0	0
TOTAL FUND BALANCE	**$45,627,152**	**$53,834,547**	**$48,674,865**
* Designated Fund Balances are subject to change at Board's discretion.			
OUTSTANDING LIABILITIES			
CalPERS Pension Retirement			$86,309,901
Other Post- Employment Benefits			$18,368,386
Certificate of Participation Notes			21,556,670
TOTAL OUTSTANDING LIABILITIES			**$126,234,957**

VENDOR PAYMENTS

In accordance with provisions of the Administrative Code, Division II Fiscal Policies and Procedures - Section 4 Purchasing Procedures: 4.3 Contract Limitations, staff is required to present recurring payments for routine business needs such as utilities, licenses, office supplies and the like, more than, or accumulating to more than $100,000 for the fiscal year. In addition, this report includes all of the vendors receiving payments in excess of $100,000 under contracts that have not been previously reviewed by the Board. In addition, staff will report on vendors that undertook work for the Air District on several projects that individually were less than $100,000, but cumulatively exceed $100,000.

Below is a list of vendors with cumulative payments made through the Fourth quarter of 2020-2021 fiscal year that exceeded $100,000 and meets the reporting criteria noted above. All expenditures have been appropriately budgeted as a part of the overall Air District budget for Fiscal Year 2020-2021.

	VENDOR NAME	AMOUNT PAID (July 2020 - June 2021)	Explanation
1	Accountemps	$188,771	Temporary Staffing Services
2	Acterra	$154,030	Public Outreach & Other Services
3	Alliant Insurance Services	$663,482	Various Business Insurance Policies
4	Bay Area Headquarters Authority	$2,387,009	Shared Services & Common Areas
5	Benefits Coordinators Corp.	$1,132,089	Life Insurance Plan & LTD Insurance
6	CA Public Employee Retirement System	$8,433,518	Health Insurance Plan
7	CA Public Employee Retirement System	$14,132,183	Retirement Benefits & 457 Supplemental Plan
8	CA Vision Service Plan	$107,192	Vision Insurance Plan
9	CAPCOA	$653,718	Pass through EPA grants
10	CDW Government	$207,936	Computer equipment
11	Ceridian	$161,872	Payroll Processing Services
12	Comcast Cable Communications	$181,404	Ethernet Services
13	Cubic Transportation Systems	$490,970	Clipper Transit Subsidy
14	Denovo Ventures LLC.	$182,084	Financial system hosting & support services
15	Enterprise Fleet Services	$654,451	Fleet Leasing and Maintenance services
16	EPlus Technology	$270,751	Cisco computer network equipment warranty
17	Farella Bruan + Martell LLP	$416,464	Legal consulting services
18	Flir Systems, Inc.	$111,751	Optical gas imaging camera for inspections/investigations
19	Hartford Life Ins Co.	$613,038	457 Supplemental Insurance
20	Metropolitan Transportation Authority	$326,266	Bay Area Regional Collaborative Staffing Support
21	P&A Administrative Services	$268,760	Flexible Spending & Cobra Benefit Services
22	Preferred Benefit Insurance	$807,763	Dental Insurance Plan
23	Pacific Gas & Electric	$203,698	Utility services
24	Sedwick Claims Management Services	$124,964	Worker's Compensation Insurance Services
25	Sloan Sakai Yeung & Wong LLP	$184,298	Human Resources Consulting Services
26	Wang Brothers Investment LLC	$558,441	Richmond Site Lease
27	Verizon Wireless	$245,963	Cell phone services
28	Wright Express Universal	$114,603	Fuel for fleet

BUDGET CONSIDERATION/FINANCIAL IMPACT

None; receive and file.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Stephanie Osaze
Reviewed by: Jeff McKay

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairpersons Cindy Chavez and Carole Groom and Members of the Administration Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: November 24, 2021

Re: First Quarter Financial Report – Fiscal Year Ending (FYE) 2022

RECOMMENDED ACTION

None; receive and file.

DISCUSSION

Finance staff will present an update on the Air District's financial results for the First quarter of the 2021-2022 fiscal year. The following information summarizes those results.

GENERAL FUND: STATEMENT OF REVENUES – Comparison of Prior Year Quarter Actual and Current Year Budget to Actual

REVENUE TYPE	1st QTR FY 2021	1st QTR FY 2022	FY 2022 - % of BUDGETED REVENUE
County Receipts	$951,725	$285,283	1%
Permit Fee Receipts	$12,242,317	$11,524,272	29%
Title V Permit Fees	$1,288,868	$1,252,982	20%
Asbestos Fees	$1,193,413	$1,040,021	26%
Toxic Inventory Fees	$204,382	$190,575	26%
Community Health Impact	$0	$166,909	18%
Criteria Pollutant Toxic	$0	$270,293	27%
Penalties and Settlements	$311,091	$353,855	27%
Interest Income	$308,512	$192,877	12%
Total Revenue	**$16,500,307**	**$15,277,067**	**16%**

GENERAL FUND: STATEMENT OF EXPENDITURES - Comparison of Prior Year Quarter Actual and Current Year Budget to Actual

EXPENDITURE TYPE	1st QTR FY 2021	1st QTR FY 2022	FY 2021 - % of BUDGETED EXPENDITURES
Personnel - Salaries*	$10,094,070	$10,811,701	19%
Personnel - Benefits*	$10,468,386	$11,531,583	41%
Operational Services / Supplies	$3,730,698	$3,763,973	12%
Capital Outlay	$956,204	$650,851	13%
Total Expenditures	**$25,249,357**	**$26,758,108**	**22%**

* Consolidated (includes Special Funds)

CASH INVESTMENTS IN COUNTY TREASURY – Account Balances as of First Quarter

CASH/INVESTMENTS	1st QTR FY 2021	1st QTR FY 2022
General Fund	$68,593,776	$77,533,047
TFCA	$120,534,841	$123,064,145
MSIF	$52,907,649	$51,202,639
Carl Moyer	$86,881,175	$69,711,310
CA Goods Movement	$21,061,702	$21,238,479
AQ Projects	$1,590,518	$1,613,118
Vehicles Mitigation	$2,468,705	$6,670,879
Total	**$354,038,365**	**$351,033,617**

FUND BALANCES	6/30/2020 Audited	6/30/2021 Projected	6/30/2022 Projected
DESIGNATED: *			
Community Benefits			$3,000,000
Economic Contingency	$20,082,966	$21,294,922	$23,303,025
Pension Liability	$3,000,000	$3,000,000	$3,000,000
Technology Implementation Office	$3,350,000	$3,350,000	$3,350,000
Wildfire Mitigation	$1,000,000	$1,000,000	$2,000,000
AB617 Staffing Contingency			$6,000,000
Pandemic Contingency			$7,000,000
Total Designated Reserves	**$27,432,966**	**$28,644,922**	**$47,653,025**
Undesignated Fund Balance	$26,401,581	$20,029,943	$521,840
TOTAL DESIGNATED & UNDESIGNATED	**$53,834,547**	**$48,674,865**	**$48,174,865**
TOTAL FUND BALANCE	**$53,834,547**	**$48,674,865**	**$48,174,865**

* Designated Fund Balances are subject to change at Board's discretion.

OUTSTANDING LIABILITIES	
CalPERS Pension Retirement	$86,309,901
Other Post- Employment Benefits	$18,368,386
Certificate of Participation Notes	21,556,670
TOTAL OUTSTANDING LIABILITIES	**$126,234,957**

VENDOR PAYMENTS

In accordance with provisions of the Administrative Code, Division II Fiscal Policies and Procedures - Section 4 Purchasing Procedures: 4.3 Contract Limitations, staff is required to present recurring payments for routine business needs such as utilities, licenses, office supplies and the like, more than, or accumulating to more than $100,000 for the fiscal year. In addition, this report includes all of the vendors receiving payments in excess of $100,000 under contracts that have not been previously reviewed by the Board. In addition, staff will report on vendors that undertook work for the Air District on several projects that individually were less than $100,000, but cumulatively exceed $100,000.

Below is a list of vendors with cumulative payments made through the first quarter of 2021-2022 fiscal year that exceeded $100,000 and meets the reporting criteria noted above. All expenditures have been appropriately budgeted as a part of the overall Air District budget for Fiscal Year 2021-2022.

	VENDOR NAME	AMOUNT PAID (July 2021 - Sept 2021)	Explanation
1	Alliant Insurance Services	$129,152	Various Business Insurance Policies
2	Benefits Coordinators Corp.	$278,310	Life Insurance Plan & LTD Insurance
3	CA Public Employee Retirement System	$2,873,281	Health Insurance Plan
4	CA Public Employee Retirement System	$1,644,916	Retirement Benefits & 457 Supplemental Plan
5	Cubic Transportation Systems	$120,515	Clipper Transit Subsidy
6	Enterprise Fleet Services	$158,481	Fleet Leasing and Maintenance services
7	Preferred Benefit Insurance AD	$129,241	Dental Insurance Plan
8	Wang Brothers Investment LLC	$128,218	Richmond Site Lease

BUDGET CONSIDERATION/FINANCIAL IMPACT

None; receive and file.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Stephanie Osaze
Reviewed by: Jeff McKay

COMMITTEE CHAIR SUMMARY REPORT OF THE COMMUNITY EQUITY, HEALTH & JUSTICE COMMITTEE

(Co-Chairs: Davina Hurt and Tyrone Jue)

The Community Equity, Health & Justice Committee met on Thursday, December 2, 2021, and approved the minutes of November 4, 2021. This meeting was conducted under procedures in accordance with Assembly Bill 361. Members of the Committee participated by teleconference.

The Committee then received a presentation from Kevin Jefferson, lifelong resident of San Francisco, Navy veteran, environmental justice advocate, youth educator and a stalwart organizer within the urban forestry community. Mr. Jefferson will discuss how the i-Tree software has been utilized to assess urban forestry benefits in highly impacted CalEnviroScreen communities.

The Committee then received and discussed the staff presentation *Discussion on Process for Filling Vacant Seats for Path to Clean Air Community Emissions Reduction Plan (CERP) Community Steering Committee.* The Committee recommends the Board:

1) Approve the recommended slate of four candidates to fill the current vacancies in the Path to Clean Air Steering Committee with the following applicants: Simren Sandhu, Marisol Cantú, Daniella Zacky, and Michelle Gomez Garcia. In addition, request staff to develop and propose a new procedure for filling future vacancies and reserves list that the Committee may review and provide input to then be implemented to fill a future reserves list.

[OVER]

Finally, the Committee then received and discussed the staff presentation *Update on Office of Diversity, Equity, and Inclusion.*

The next meeting of the Community Equity, Health & Justice Committee will be held at the Call of the Chair, via webcast, pursuant to procedures in accordance with Assembly Bill 361. I move that the Board approves the Committee's recommendation. This concludes the Chair Report of the Community Equity, Health & Justice Committee.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Cindy Chavez and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: December 6, 2021

Re: Report of the Community Equity, Health and Justice Committee Meeting of December 2, 2021

RECOMMENDED ACTIONS

The Community Equity, Health and Justice Committee (Committee) recommends Board of Directors (Board) approval of the following:

BACKGROUND

The Committee met on Thursday, December 2, 2021, and received the following reports:

A) Community Perspectives;

1) None; receive and file.

B) Discussion on Process for Filling Vacant Seats for Path to Clean Air Community Emissions Reduction Plan (CERP) Community Steering Committee; and

1) The Community Equity, Health and Justice Committee (Committee) will develop a slate of four recommended candidates to replace existing vacancies for the Richmond-North Richmond-San Pablo (Path to Clean Air) Community Emissions Reduction Plan (CERP) Community Steering Committee (CSC) to bring to the Board of Directors (Board) for review and decision. The Committee will also select up to five additional recommended candidates to be selected as reserve Steering Committee members, who can be selected to fill future vacancies.

C) Update on the Office of Diversity, Equity & Inclusion and Efforts to Advance Equity.

1) None; receive and file.

BACKGROUND

The Committee met on Thursday, December 2, 2021, and received the following reports:

A) Community Perspectives;

B) Discussion on Process for Filling Vacant Seats for Path to Clean Air Community Emissions Reduction Plan (CERP) Community Steering Committee; and

C) Update on the Office of Diversity, Equity & Inclusion and Efforts to Advance Equity

BUDGET CONSIDERATION/FINANCIAL IMPACT

A) None;

B) None; and

C) None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Justine Buenaflor
Reviewed by: Vanessa Johnson

Attachment 14.2A: 12/02/2021 – Community Equity, Health and Committee Meeting Agenda #3
Attachment 14.2B: 12/02/2021 – Community Equity, Health and Committee Meeting Agenda #4
Attachment 14.2C: 12/02/2021 – Community Equity, Health and Committee Meeting Agenda #5

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairpersons Davina Hurt and Tyrone Jue, and Members of the Community Equity, Health and Justice Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: November 23, 2021

Re: Community Perspectives

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

The Community Equity, Health and Justice Committee provides local and regional community environmental justice advocates and local leaders a platform to present and share their expertise and/or lived experiences. Specific subjects/topics will vary based upon each community perspective member's unique experience.

Kevin Jefferson is a lifelong resident of San Francisco, Navy veteran, environmental justice advocate, youth educator and a stalwart organizer within the urban forestry community. As the former Director of Research at Urban Releaf, Kevin has participated in numerous prominent Bay Area projects, such as the 31st Green Street Research & Demonstration, the Ettie Street Watershed Restoration Research and the Million Tree Initiative. In 2010, Kevin served as Contract Compliance Officer for the Economic Opportunity Council, a Federal Poverty Reduction Program. Kevin's background and expertise has led him to participate on several committees, which include CalFire's Urban Forestry Advisory Committee, Oakland Urban Forestry Forum, Environmental Justice Advisory Committee of California Air Resource Board and the Alameda County Health Collaborative.

DISCUSSION

Kevin Jefferson will discuss how the i-Tree software has been utilized to assess urban forestry benefits in highly impacted CalEnviroScreen communities. This work focuses on planting trees in Northern California to reduce greenhouse gas (GHG) emissions. Kevin will also discuss his urban canopy work that is being conducted in the Hunters Point neighborhood of San Francisco in addition to West Oakland. Selected to participate on the Air District's Community Advisory Council, Kevin will also share advice on how the CAC can be most effective as well as his ideas on how to address environmental justice issues in the Air District's rules, policies, and programs.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Jhamere Howard
Reviewed by: Veronica Eady

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairpersons Davina Hurt and Tyrone Jue, and Members of the Community Equity, Health and Justice Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: November 23, 2021

Re: Discussion on Process for Filling Vacant Seats for Path to Clean Air Community Emissions Reduction Plan (CERP) Community Steering Committee

RECOMMENDED ACTION

The Community Equity, Health and Justice Committee (Committee) will develop a slate of four recommended candidates to replace existing vacancies for the Richmond-North Richmond-San Pablo (Path to Clean Air) Community Emissions Reduction Plan (CERP) Community Steering Committee (CSC) to bring to the Board of Directors (Board) for review and decision. The Committee will also select up to five additional recommended candidates to be selected as reserve Steering Committee members, who can be selected to fill future vacancies.

BACKGROUND

On February 4, 2021, the Committee recommended to the Board that a CSC be established for the CERP for the Richmond, North Richmond, and San Pablo study area, which has been branded as the Path to Clean Air study area. The Board resolution that established the Path to Clean Air CSC stipulated, "the CSC shall be compromised of an odd number of members between 27 and 31, with a minimum of 70% of members residing within the initial study area, and with two non-voting members representing local businesses and industrial companies (not business associations)." On February 19, 2021, the Committee recommended a slate of 31 members be seated as the Path to Clean Air CSC, which the Board approved on March 3, 2021. On October 7, 2021, the Committee decided to select up to five reserve candidates to be available to replace future vacancies on the CSC.

DISCUSSION

Currently there are four vacancies on the Path to Clean Air CSC, which puts the membership at the minimum number as stipulated by the Board resolution. The Committee shall determine a slate of four new recommended candidates for the CERP CSC and five reserve candidates. Air District staff conducted an application process that closed on November 19, 2021 and convened a review panel consisting of four CSC members and one CSC Co-Chair. Air District staff recommend the Committee reviews the summary of applicants, application materials. and recommendations from the CSC review panel to develop a slate of recommended candidates to fill the four CSC vacancies and select up to five reserve CSC members to bring to the Board for decision.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Kevin Olp
Reviewed by: Veronica Eady

Attachment 4A: BAAQMD Resolution #2021-02 Establishing AB 617 Richmond-North Richmond-San Pablo Path to Clean Air Community Emissions Reduction Plan Community Steering Committee and Appointment of Initial Slate of Candidates
Attachment 4B: Path to Clean Air: Steering Committee Applications for Review

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

RESOLUTION NO. 2021-02

A Resolution of the Board of Directors of the Bay Area Air Quality Management District Establishing a Community Steering Committee for the AB 617 Richmond-North Richmond-San Pablo (Path to Clean Air) Area Community Emissions Reduction Plan, Establishing Criteria for Membership on the Community Steering Committee, and Appointing Initial Slate of Members

WHEREAS, Assembly Bill 617 (C. Garcia 2017) (AB 617) requires CARB to work with air districts, community groups, industry, environmental organizations, and others to select locations around the state where communities and their air district will work together to reduce local air pollution;

WHEREAS, in February 2021, CARB approved the Air District's recommendation to develop and implement a Community Emissions Reduction Plan (CERP) for the Richmond-North Richmond-San Pablo Area;

WHEREAS, pursuant to AB 617, the Air District, in conjunction with a Community Steering Committee (CSC), will develop a CERP for the Richmond-North Richmond-San Pablo Area;

WHEREAS, the Air District, in partnership with community, will convene a Community Steering Committee of local stakeholders, including Richmond-North Richmond-San Pablo residents, community leaders, public agency staff, business representatives, and community-serving organizations;

WHEREAS, A team of ten (10) Community Design Team (CDT) members from the Richmond-North Richmond-San Pablo Area met with Air District staff since March 2020 to guide development of a Community Steering Committee (CSC) for the CERP development process using the guidance provided in the CARB Blueprint. At its November 11, 2020 meeting, the CDT voted to recommend the Air District Board of Directors appoint a CSC. At its December 16, 2020 meeting, the Air District Board approved the CDT's recommendation.

WHEREAS, as a body appointed by the Air District Board of Directors, the CSC will be subject to the California Brown Act (California Government Code sections 54950, et seq.);

WHEREAS, the Community Health, Equity, and Justice Committee decided on February 4, 2021 to recommend to the Board of Directors that the CSC be comprised of an odd number of members between 27 and 31, with a minimum of 70% of the members residing within the initial study area, and with two non-voting members representing local businesses and industrial companies (not business associations);

WHEREAS, the Air District and local community partners solicited applications for the initial slate of CSC members over a one-month period and received seventy-two applications;

WHEREAS, the Community Design Team has reviewed the seventy-two applications, and provided their feedback and recommendations;

WHEREAS, the Community Equity, Health, and Justice Committee has considered the Community Design Team's recommendations;

AND, WHEREAS, in selecting candidates to recommend to the Board of Directors for appointment to the CSC, the Community Equity, Health, and Justice Committee also considered, among other things, the following characteristics: people suffering from health conditions impacted by air quality; respiratory health care providers; representative of the community; representation by people of color; members of low-income households; representatives of neighborhood councils; seniors; youth; representatives of the planning departments of all of the jurisdictions in the initial study area and the Health Department of Contra Costa County.

NOW, THEREFORE, BE IT RESOLVED that, consistent with the requirements of California Health & Safety Code Section 44391.2(c) regarding development of a CERP, a Community Steering Committee is hereby established for the AB 617 Richmond-North Richmond-San Pablo (Path to Clean Air) Area Community Emissions Reduction Plan (CSC), the role of which, subject to the direction of the Board of Directors of the Bay Area Air Quality Management District, is to identify the scope of issues to be considered; inform technical analyses to understand these issues; co-develop with the Bay Area Air Quality Management District strategies to solve the issues identified; and, ensure continued accountability for CERP implementation.

BE IT FURTHER RESOLVED that the CSC shall be comprised of an odd number of between 27 and 31 members to be appointed by the Board of Directors, a minimum of 70% (seventy percent) of whom shall be residents of the initial study area, and two of whom shall be non-voting members representing local business and industrial companies subject to regulation (not business or industrial associations).

BE IT FURTHER RESOLVED that the Board of Directors of the Bay Area Air Quality Management District hereby approves the recommended initial slate of CSC members submitted by the Community Health, Equity, and Justice Committee attached to this Resolution as Exhibit A and hereby appoints those individuals to the CSC.

BE IT FURTHER RESOLVED that the voting members of the CSC shall select two Co-chairs from among the CSC members.

BE IT FURTHER RESOLVED that the voting members of the CSC shall select a Board Liaison from among the CSC members who shall provide informational reports to the Board of Directors.

BE IT FURTHER RESOLVED that in conducting its meetings and deliberations, the CSC shall follow Robert's Rules of Order as nearly as possible.

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 HUDSON, seconded by DIRECTOR CUTTER, on the 3rd day of March, 2021 by the following vote of the Board:

AYES: MARGARET ABE-KOGA, TERESA BARRETT, JOHN BAUTERS, DAVID CANEPA, CINDY CHAVEZ, RICH CONSTANTINE, PAULINE RUSSO CUTTER, JOHN GIOIA, CAROLE GROOM, DAVID HAUBERT, LYNDA HOPKINS, DAVID HUDSON, DAVINA HURT, TYRONE JUE, MYRNA MELGAR, NATE MILEY, KAREN MITCHOFF, ROB RENNIE, KATIE RICE, MARK ROSS, BRAD WAGENKNECHT, SHAMANN WALTON,

NOES: NONE.

ABSTAIN: NONE.

ABSENT: ERIN HANNIGAN, LORI WILSON.

Cindy Chavez

Chairperson of the Board of Directors

John Bauters

Secretary of the Board of Directors

Resolution 2021-02 - Exhibit A
INITIAL MEMBERS

RICHMOND-NORTH RICHMOND-SAN PABLO (PATH TO CLEAN AIR) COMMUNITY EMISSIONS REDUCTION PLAN (CERP) COMMUNITY STEERING COMMITTEE

Alfredo Rafael Angulo-Castro
Amanda Booth
Arto Rintella
Bret Andrews
Darlena David
Darlene Rios Drapkin
Dave Severy
Erika Ramirez
Fabiola Reyes
Francisco Avila
Gloria Ruiz
Hakim Johnson
Heidi V Swillinger
Henry Clark
Jeffrey L Kilbreth
Jessica Range
Jim Holland
Kevin Ruano Hernandez
Lizbeth Ibarra
Lizette Bernal
Lucia Castillo
Micaela Zaragoza-Soto
Nancy Aguirre
Omoniyi Omotoso
Patricia A. Daniels
Phillip Mitchell
Roberta Feliciano
Suzanne Coffee
Vernon Whitmore
YAnad Burrell

PATH TO CLEAN AIR: STEERING COMMITTEE APPLICATIONS FOR REVIEW

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

11-20-2021

List of Applicants

Click on a candidate to view their application

Candidate A – Adam W Oliver

Candidate B – Floy Andrews

Candidate C - James Becker

Candidate D - Joann Pavlinec

Candidate E - Troy Almeida

Candidate F - Bethany Lourie

Candidate G - Julia Walsh

Candidate H - Matt Renner

Candidate I - Brian Gillis

Candidate J - Oscar Garcia

Candidate K - Simren Sandhu

Candidate L - Rae Jones

Candidate M - Susan Nishizaka

Candidate N - Maria Hernandez

Candidate O - Lea Murray

Candidate P - Daniella Zacky

Candidate Q - Marisol (Noell) Cantú

Candidate R - Andres Soto

Candidate S - Whitney Richardson

Candidate T - Allan Moskowitz

Candidate U - David Tucker

Candidate V - Antoinette Bailey-Nesbitt

Candidate W - Michelle Gomez Garcia

Candidate X - Manuel Gomez

1. **Please share your name and contact information.**

   Name: Adam W Oliver

   City/Town: Richmond

   ZIP/Postal Code: 94804

2. **Were you a member of the Path to Clean Air Steering Committee?**

   I'm not sure

3. **Do you live in the Path to Clean Air Study Area?**

   Yes

4. **If you live in the Path to Clean Air Study Area, what is the name of the neighborhood or community you reside in?**

   Marina Bay Neighborhood Council (Richmond)

5. **Do you work in the Path to Clean Air Study Area?**

   No

6. **If you work in the Path to Clean Air Study Area, please share the name and address of your place ofwork.**

7. **Do you own a business in the Path to Clean Air Study Area?**

   No

8. **If you own a business in the Path to Clean Air Study Area, please share the name and address of your business.**

9. **If you are a part of the Path to Clean Air Study Area in any other way, please specify (for example: volunteer, committee membership, clubs etc.).**

   I used to work for a company (Chevron) that operates within the Path to Clean Air Study Area. I no longer work for the company, but I still live in Richmond and am still interested in air quality.

10. **We all wear many hats, please select the sector you would represent on the Steering Committee:**

    People who live in the Richmond-San Pablo Area

11. **If you selected Government as your response to Question 10, what area of government best represents your primary focus?**

12. **If applicable, please select the secondary sector you would represent on the Steering Committee:**

13. **If you selected Government as your response to Question 12, what area of government best represents your primary focus?**

14. **Do you have decision making power for your organization, agency, group, or company?**

    I don't know

15. **What are your community interests and your experiences with air quality in the Path to Clean Air Study Area? How do you see these interests and experiences contributing to the Steering Committee?**

    I live in Richmond, volunteer in Richmond, and want to contribute well being in Richmond.

16. **Why do you want to join the Path to Clean Air Steering Committee?**

    I am knowledgeable on air pollution control equipment and industrial processes within the area of interest.

17. **A Community Emissions and Exposure Reduction Program may include many strategies. Choose the TOP THREE (3) areas that you are most excited to work in.**

    Parks Openspace

    Utilities

    Energy

OPTIONAL QUESTIONS

18. **What is your gender?**

    Male

19. **What is your ethnicity?**

    Black/African

    Caucasian/White

20. **Do you, or someone in your household, experience health conditions that can be impacted by poor air quality?**

    I don't know

Candidate A

COMMUNITY PATH TO CLEAN AIR

Conflict of Interest Disclosure Form for the
Path to Clean Air in the Richmond-North Richmond-San Pablo Area

[redacted]

Job Title: Retired **Employer:** None

Do you live in the Richmond-North Richmond-San Pablo Area? [ ] No [X] Yes

Transparency related to members' financial, material, and vested interests is essential to ensuring public trust and building strong programs. Those seeking to serve on the Committee must disclose any actual, potential, or perceived conflicts of interest in their applications. Committee members must disclose such conflicts on an ongoing basis and failure to do so may result in dismissal from the Steering Committee.

"Interest" as used in this Conflict of Interest Disclosure Forum means a substantial financial, material, or vested interest in a business or organization that may be impacted by the work of this Committee. To avoid an actual, potential or perceived conflict of interest, a person who serves on the Richmond CERP Steering Committee that works for, is employed by, receives compensation from or serves on the Board of Directors or as an officer of an organization that receives funding, in-kind services or volunteers from an entity that is required to report emissions to or regulated by BAAQMD or CARB, must disclose said conflict.

A conflict of interest occurs when an individual's personal or professional interests and affiliations – family, friendships, financial, or social factors – could compromise his or her judgment, decisions, or actions as a member of the Steering Committee. Conflicts of interest can be differentiated between actual, potential, and perceived conflicts of interest. An **actual conflict** exists if an action taken by a member **will** result in a financial or personal gain or loss to the member or to the member's relative or any business/organization in which they have a material interest. A **potential conflict** exists if an action taken by a member **may** result in a financial or personal gain or loss to the member or to the member's Relative or any business/organization in which they have a material interest. A **perceived conflict** exists when the public or a third party could form the view that a member's private or professional interests could improperly influence their decisions or actions, now or in the future.

List all names under which you or members of your household do any business which may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions. Include the business address and a brief description of the business. (If you need more space, please use a Word document to submit additional information.)

Name	Business Name & Address	Description
None	N/A	I do no business

COMMUNITY PATH TO CLEAN AIR

If you, a member of your household, or the business/organization you own or work for has engaged or intends to engage in any financial transactions with businesses or organizations that may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions, please describe the nature of the transactions and the amount of money involved. A business or organization is "impacted" if it is subject to additional emission reduction requirements, or if it is otherwise affected in a substantial way. For example, include professional or service contracts, grants awarded, and provisions of materials or supplies. (If you need more space, please use a Word document to submit additional information.)

Name of Business	Type of Transaction	Amount of Transaction
Chevron	Former Employment	Regular annual salary

Do you, or a member of your household have, or think you may have, any **actual conflicts of interest** relative to your role on the committee? [ ] NO [ ] YES

If YES, please describe:

Do you or a member of your household have, or think you may have, any **potential conflicts of interest** relative to your role on the committee? [X] NO [ ] YES

If YES, please describe:

Are you aware of any situations that **might give the appearance of a conflict of interest** – even if it may not be a potential or actual conflict of interest – relative to your role on the committee? [ ] NO [X] YES

If YES, please describe:

I was formerly employed by the largest industrial facility within the study area.

My signature on this document affirms that all information I have supplied for this form is true and complete to the best of my knowledge and that I will update this information on an ongoing basis should any relevant situation(s) arise. I understand that failure to disclose conflicts may result in dismissal from the Committee.

Signature: [redacted] **Date:** 10/30/2021

(Digital or wet signatures are accepted)

Approved by Richmond/San Pablo CERP Community Design Team on 10/27/20

1. **Please share your name and contact information.**

   Name: Floy Andrews

   City/Town: Richmond

   ZIP/Postal Code: 94801

2. **Were you a member of the Path to Clean Air Steering Committee?**

   No

3. **Do you live in the Path to Clean Air Study Area?**

   Yes

4. **If you live in the Path to Clean Air Study Area, what is the name of the neighborhood or community you reside in?**

   Point Richmond Neighborhood Council (Richmond)

5. **Do you work in the Path to Clean Air Study Area?**

   Yes

6. **If you work in the Path to Clean Air Study Area, please share the name and address of your place ofwork.**

   617 Golden Gate Avenue, Richmond, CA 94801

7. **Do you own a business in the Path to Clean Air Study Area?**

   Yes

8. **If you own a business in the Path to Clean Air Study Area, please share the name and address of your business.**

   My husband owns Page Art, Inc., an art business, which he operates from our home at 617 Golden Gate Avenue, Richmond, CA 94801

9. **If you are a part of the Path to Clean Air Study Area in any other way, please specify (for example: volunteer, committee membership, clubs etc.).**

   I am Secretary to the Richmond Progressive Alliance and a member of its Steering Committee, as well as Treasurer for the Richmond Mayoral Campaign for Councilmember Eduardo Martinez. I am also a Board Member for the Contra Costa County Assessment Appeals Board and participate in the Refinery Transitions Work Group that focuses on the County's refineries.

10. **We all wear many hats, please select the sector you would represent on the Steering Committee:**

    People who live in the Richmond-San Pablo Area

11. **If you selected Government as your response to Question 10, what area of government best represents your primary focus?**

12. **If applicable, please select the secondary sector you would represent on the Steering Committee:**

    Community-serving organization

13. **If you selected Government as your response to Question 12, what area of government best represents your primary focus?**

14. **Do you have decision making power for your organization, agency, group, or company?**

    Yes

15. **What are your community interests and your experiences with air quality in the Path to Clean Air Study Area? How do you see these interests and experiences contributing to the Steering Committee?**

    I live very near the Chevron refinery and experience firsthand the air and noise impacts from its operations. Further, I understand that many people experience significant health impacts from the refinery's operations. I am an environmental attorney interested in contributing to a safer, cleaner environment for everyone. I believe my professional expertise will serve the Steering Committee well.

16. **Why do you want to join the Path to Clean Air Steering Committee?**

    I have worked with air boards in the past as an attorney. The work the air board does directly impacts the quality of life of our local communities. I am inspired to contribute my time and expertise for the betterment of Richmond and the surrounding areas. I am fair-minded, collegial, caring and dedicated.

17. **A Community Emissions and Exposure Reduction Program may include many strategies. Choose the TOP THREE (3) areas that you are most excited to work in.**

    Public Health

    Utilities

    Climate

OPTIONAL QUESTIONS

18. **What is your gender?**

    Female

19. **What is your ethnicity?**

    Caucasian/White

20. **Do you, or someone in your household, experience health conditions that can be impacted by poor air quality?**

    No

Candidate B

COMMUNITY PATH TO CLEAN AIR

Conflict of Interest Disclosure Form for the Path to Clean Air in the Richmond-North Richmond-San Pablo Area

[redacted]

Phone: [redacted]

Job Title: Attorney, Activist, Assessment Appeals Board Member **Employer:** Self-employed and employed part-time by Contra Costa County

Do you live in the Richmond-North Richmond-San Pablo Area? ☐ No ☑ Yes

Transparency related to members' financial, material, and vested interests is essential to ensuring public trust and building strong programs. Those seeking to serve on the Committee must disclose any actual, potential, or perceived conflicts of interest in their applications. Committee members must disclose such conflicts on an ongoing basis and failure to do so may result in dismissal from the Steering Committee.

"Interest" as used in this Conflict of Interest Disclosure Forum means a substantial financial, material, or vested interest in a business or organization that may be impacted by the work of this Committee. To avoid an actual, potential or perceived conflict of interest, a person who serves on the Richmond CERP Steering Committee that works for, is employed by, receives compensation from or serves on the Board of Directors or as an officer of an organization that receives funding, in-kind services or volunteers from an entity that is required to report emissions to or regulated by BAAQMD or CARB, must disclose said conflict.

A conflict of interest occurs when an individual's personal or professional interests and affiliations – family, friendships, financial, or social factors – could compromise his or her judgment, decisions, or actions as a member of the Steering Committee. Conflicts of interest can be differentiated between actual, potential, and perceived conflicts of interest. An **actual conflict** exists if an action taken by a member **will** result in a financial or personal gain or loss to the member or to the member's relative or any business/organization in which they have a material interest. A **potential conflict** exists if an action taken by a member **may** result in a financial or personal gain or loss to the member or to the member's Relative or any business/organization in which they have a material interest. A **perceived conflict** exists when the public or a third party could form the view that a member's private or professional interests could improperly influence their decisions or actions, now or in the future.

List all names under which you or members of your household do any business which may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions. Include the business address and a brief description of the business. (If you need more space, please use a Word document to submit additional information.)

Name	Business Name & Address	Description
Page Art, Inc.	617 Golden Gate Avenue, Richmond, CA 94801	My husband operates this art business from our home in Point Richmond, which property is within .5 mile of the Chevron refinery.
Floy Andrews	617 Golden Gate Avenue, Richmond, CA 94801	I work from our home in Point Richmond, which property is within .5 mile of the Chevron refinery.

COMMUNITY PATH TO CLEAN AIR

If you, a member of your household, or the business/organization you own or work for has engaged or intends to engage in any financial transactions with businesses or organizations that may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions, please describe the nature of the transactions and the amount of money involved. A business or organization is "impacted" if it is subject to additional emission reduction requirements, or if it is otherwise affected in a substantial way. For example, include professional or service contracts, grants awarded, and provisions of materials or supplies. (If you need more space, please use a Word document to submit additional information.)

Name of Business	Type of Transaction	Amount of Transaction
None		

Do you, or a member of your household have, or think you may have, any **actual conflicts of interest** relative to your role on the committee? [✓] NO [ ] YES

If YES, please describe:

Do you or a member of your household have, or think you may have, any **potential conflicts of interest** relative to your role on the committee? [✓] NO [ ] YES

If YES, please describe:

Are you aware of any situations that **might give the appearance of a conflict of interest** – even if it may not be a potential or actual conflict of interest – relative to your role on the committee? [X] NO [ ] YES

If YES, please describe:

My signature on this document affirms that all information I have supplied for this form is true and complete to the best of my knowledge and that I will update this information on an ongoing basis should any relevant situation(s) arise. I understand that failure to disclose conflicts may result in dismissal from the Commi

Signature: [redacted] **Date:** November 8, 2021

(Digital or wet signatures are accepted)

Approved by Richmond/San Pablo CERP Community Design Team on 10/27/20

1. **Please share your name and contact information.**

   Name: James Becker

   City/Town: RICHMOND

   ZIP/Postal Code: 94806-1960

2. **Were you a member of the Path to Clean Air Steering Committee?**

   No

3. **Do you live in the Path to Clean Air Study Area?**

   No

4. **If you live in the Path to Clean Air Study Area, what is the name of the neighborhood or community you reside in?**

5. **Do you work in the Path to Clean Air Study Area?**

   Yes

6. **If you work in the Path to Clean Air Study Area, please share the name and address of your place ofwork.**

   Richmond Community Foundation 6230 Blume Drive, Suite 110, Richmond, CA 94806

7. **Do you own a business in the Path to Clean Air Study Area?**

   No

8. **If you own a business in the Path to Clean Air Study Area, please share the name and address of your business.**

9. **If you are a part of the Path to Clean Air Study Area in any other way, please specify (for example: volunteer, committee membership, clubs etc.).**

   President of the Richmond Kiwanis Club, member of the Galileo Club, member of the Santa Fe Neighborhood Council

10. **We all wear many hats, please select the sector you would represent on the Steering Committee:**

    Community-serving organization

11. **If you selected Government as your response to Question 10, what area of government best represents your primary focus?**

12. If applicable, please select the secondary sector you would represent on the Steering Committee:

Other (please specify): Foundation/Philanthrophy

13. If you selected Government as your response to Question 12, what area of government best represents your primary focus?

14. Do you have decision making power for your organization, agency, group, or company?

Yes

15. What are your community interests and your experiences with air quality in the Path to Clean Air Study Area? How do you see these interests and experiences contributing to the Steering Committee?

In our housing renovation program, our foundation designs our homes to a carbon neutral, zero net energy standard. Our foundation has also led the community engagement work for a car share mobility program in Richmond. We are leading a Cal Start voucher program to install an electric vehicle hub with 14 cars in lower income neighborhoods.

16. Why do you want to join the Path to Clean Air Steering Committee?

While I do not live in Richmond, I have worked in Richmond for more than 20 years. I have strong relationships across many parts of the community (nonprofits, local government, philanthropy, business) bring a passion for this issue and have the ability to analyze data and provide thoughtful insights on this issue.

17. A Community Emissions and Exposure Reduction Program may include many strategies. Choose the TOP THREE (3) areas that you are most excited to work in.

Land use

Public Transportation/Transit

Energy

OPTIONAL QUESTIONS

18. What is your gender?

Male

19. What is your ethnicity?

Caucasian/White

20. Do you, or someone in your household, experience health conditions that can be impacted by poor air quality?

Yes

Candidate C

Conflict of Interest Disclosure Form for the
Path to Clean Air in the Richmond-North Richmond-San Pablo Area

[redacted]

Job Title: President and CEO **Employer:** Richmond Community Foundation

Do you live in the Richmond-North Richmond-San Pablo Area? [X] No [ ] Yes

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A conflict of interest occurs when an individual's personal or professional interests and affiliations – family, friendships, financial, or social factors – could compromise his or her judgment, decisions, or actions as a member of the Steering Committee. Conflicts of interest can be differentiated between actual, potential, and perceived conflicts of interest. An **actual conflict** exists if an action taken by a member **will** result in a financial or personal gain or loss to the member or to the member's relative or any business/organization in which they have a material interest. A **potential conflict** exists if an action taken by a member **may** result in a financial or personal gain or loss to the member or to the member's Relative or any business/organization in which they have a material interest. A **perceived conflict** exists when the public or a third party could form the view that a member's private or professional interests could improperly influence their decisions or actions, now or in the future.

List all names under which you or members of your household do any business which may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions. Include the business address and a brief description of the business. (If you need more space, please use a Word document to submit additional information.)

Name	Business Name & Address	Description
None		

Approved by Richmond/San Pablo CERP Community Design Team on 10/27/20

COMMUNITY PATH TO CLEAN AIR

If you, a member of your household, or the business/organization you own or work for has engaged or intends to engage in any financial transactions with businesses or organizations that may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions, please describe the nature of the transactions and the amount of money involved. A business or organization is "impacted" if it is subject to additional emission reduction requirements, or if it is otherwise affected in a substantial way. For example, include professional or service contracts, grants awarded, and provisions of materials or supplies. (If you need more space, please use a Word document to submit additional information.)

Name of Business	Type of Transaction	Amount of Transaction
None		

Do you, or a member of your household have, or think you may have, any **actual conflicts of interest** relative to your role on the committee? [X] NO [ ] YES

If YES, please describe:

Do you or a member of your household have, or think you may have, any **potential conflicts of interest** relative to your role on the committee? [X] NO [ ] YES

If YES, please describe:

Are you aware of any situations that **might give the appearance of a conflict of interest** – even if it may not be a potential or actual conflict of interest – relative to your role on the committee? [X] NO [ ] YES

If YES, please describe:

My signature on this document affirms that all information I have supplied for this form is true and complete to the best of my knowledge and that I will update this information on an ongoing basis should any relevant situation(s) arise. I understand that failure to disclose conflicts may result in dismissal from the Committee.

Signature: _____ [redacted] _____ **Date:** October 21,2021

(Digital or wet signature

Approved by Richmond/San Pablo CERP Community Design Team on 10/27/20

Candidate D

1. **Please share your name and contact information.**

   Name: Joann Pavlinec

   City/Town: Richmond

   ZIP/Postal Code: 94805

2. **Were you a member of the Path to Clean Air Steering Committee?**

   No

3. **Do you live in the Path to Clean Air Study Area?**

   Yes

4. **If you live in the Path to Clean Air Study Area, what is the name of the neighborhood or community you reside in?**

   Other (please specify)East Richmond Heights

5. **Do you work in the Path to Clean Air Study Area?**

   No

6. **If you work in the Path to Clean Air Study Area, please share the name and address of your place ofwork.**

7. **Do you own a business in the Path to Clean Air Study Area?**

   No

8. **If you own a business in the Path to Clean Air Study Area, please share the name and address of your business.**

9. **If you are a part of the Path to Clean Air Study Area in any other way, please specify (for example: volunteer, committee membership, clubs etc.).**

   East Richmond Heights Municipal Advisory Committee (ERHMAC)

   Richmond Historic Preservation Commission (HPC)

10. **We all wear many hats, please select the sector you would represent on the Steering Committee:**

    Neighborhood Group

11. **If you selected Government as your response to Question 10, what area of government best represents your primary focus?**

12. If applicable, please select the secondary sector you would represent on the Steering Committee:

Government

13. If you selected Government as your response to Question 12, what area of government best represents your primary focus?

Land Use

14. Do you have decision making power for your organization, agency, group, or company?

Other (please explain): HPC - Yes; ERHMAC - Advisory

15. What are your community interests and your experiences with air quality in the Path to Clean Air Study Area? How do you see these interests and experiences contributing to the Steering Committee?

As a retired City Planner, with an architectural education background, I have approached aspects of local planning with a sustainability and design hat throughout my career. I have sought continuing education in energy and environmental design along my career to gain authenticity in working with developers, architects and other professionals on projects I've managed. I am LEED AP and a Build It Green Rater. My 18 year career in Local Government has also allowed me to use this knowledge, contributing to green building design standards and green building policy development in Berkeley and Oakland. While working in Historic Preservation I educated myself on greening historic and existing building stock to effectively tie sustainability and green building strategies to the rehabilitation of mechanically outdated buildings while maintaining the embodied energy of materials and cultural significance of historic building fabric. I have made presentations on Historic Preservation and Green Building at several professional conferences. Working with others on developing Oakland's first Green Building Ordinance, Oakland became one of very few municipalities to include, not exempt, historic buildings from their green building ordinance. Personally I also practice a green building approach to all maintenance and repair projects of my home.

Currently I am involved as a volunteer in my community, using my career experience in Richmond's Historic Preservation Commission and East Richmond Heights Municipal Advisory Board. This steering committee would allow me to contribute to my community using my environmental green building background.

16. Why do you want to join the Path to Clean Air Steering Committee?

My interest and demonstrated commitment to sustainability and green building, both in my career and personally, and my commitment to continually be involved in my local community blend beautifully in this opportunity. After having encouraged others to apply, I realized that these interests and commitments were actually calling me to apply for this steering committee. My experience in environmental policy development, the workings of local government, and working with differing opinions in a professional and collaborative approach to reach compromised but effective solutions will contribute to this committee.

17. **A Community Emissions and Exposure Reduction Program may include many strategies. Choose the TOP THREE (3) areas that you are most excited to work in.**

    Land use

    Environmental Conservation

    Climate

OPTIONAL QUESTIONS

18. **What is your gender?**

    Female

19. **What is your ethnicity?**

    Caucasian/White

20. **Do you, or someone in your household, experience health conditions that can be impacted by poor air quality?**

    No

Candidate D

COMMUNITY PATH TO CLEAN AIR

Conflict of Interest Disclosure Form for the Path to Clean Air in the Richmond-North Richmond-San Pablo Area

[redacted]

Job Title: Retired **Employer:** Retired

Do you live in the Richmond-North Richmond-San Pablo Area? ☐ No ☑ Yes

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A conflict of interest occurs when an individual's personal or professional interests and affiliations – family, friendships, financial, or social factors – could compromise his or her judgment, decisions, or actions as a member of the Steering Committee. Conflicts of interest can be differentiated between actual, potential, and perceived conflicts of interest. An actual conflict exists if an action taken by a member will result in a financial or personal gain or loss to the member or to the member's relative or any business/organization in which they have a material interest. A potential conflict exists if an action taken by a member may result in a financial or personal gain or loss to the member or to the member's Relative or any business/organization in which they have a material interest. A perceived conflict exists when the public or a third party could form the view that a member's private or professional interests could improperly influence their decisions or actions, now or in the future.

List all names under which you or members of your household do any business which may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions. Include the business address and a brief description of the business. (If you need more space, please use a Word document to submit additional information.)

Name	Business Name & Address	Description
None		

Approved by Richmond/San Pablo CERP Community Design Team on 10/27/20

If you, a member of your household, or the business/organization you own or work for has engaged or intends to engage in any financial transactions with businesses or organizations that may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions, please describe the nature of the transactions and the amount of money involved. A business or organization is "impacted" if it is subject to additional emission reduction requirements, or if it is otherwise affected in a substantial way. For example, include professional or service contracts, grants awarded, and provisions of materials or supplies. (If you need more space, please use a Word document to submit additional information.)

Name of Business	Type of Transaction	Amount of Transaction
None		

Do you, or a member of your household have, or think you may have, any **actual conflicts of interest** relative to your role on the committee? ☑ NO ☐ YES

If YES, please describe:

Do you or a member of your household have, or think you may have, any **potential conflicts of interest** relative to your role on the committee? ☑ NO ☐ YES

If YES, please describe:

Are you aware of any situations that **might give the appearance of a conflict of interest** – even if it may not be a potential or actual conflict of interest – relative to your role on the committee? ☑ NO ☐ YES

If YES, please describe:

My signature on this document affirms that all information I have supplied for this form is true and complete to the best of my knowledge and that I will update this information on an ongoing basis should any relevant situation(s) arise. I understand that failure to disclose conflicts may result in dismissal from the Committee.

Signature: [redacted] **Date:** 12/29/2020 - 10/21/2021

(Digital or wet signatures are accepted)

Approved by Richmond/San Pablo CERP Community Design Team on 10/27/20

1. **Please share your name and contact information.**

   Name: Troy Almeida

   City/Town: El Sobrante

   ZIP/Postal Code: 94803

2. **Were you a member of the Path to Clean Air Steering Committee?**

   No

3. **Do you live in the Path to Clean Air Study Area?**

   Yes

4. **If you live in the Path to Clean Air Study Area, what is the name of the neighborhood or community you reside in?**

   Other (please specify): El Sobrante

5. **Do you work in the Path to Clean Air Study Area?**

   No

6. **If you work in the Path to Clean Air Study Area, please share the name and address of your place ofwork.**

7. **Do you own a business in the Path to Clean Air Study Area?**

   No

8. **If you own a business in the Path to Clean Air Study Area, please share the name and address of your business.**

9. **If you are a part of the Path to Clean Air Study Area in any other way, please specify (for example: volunteer, committee membership, clubs etc.).**

10. **We all wear many hats, please select the sector you would represent on the Steering Committee:**

    Health care provider

11. **If you selected Government as your response to Question 10, what area of government best represents your primary focus?**

12. **If applicable, please select the secondary sector you would represent on the Steering Committee:**

13. **If you selected Government as your response to Question 12, what area of government best represents your primary focus?**

14. **Do you have decision making power for your organization, agency, group, or company?**

    No

15. **What are your community interests and your experiences with air quality in the Path to Clean Air Study Area? How do you see these interests and experiences contributing to the Steering Committee?**

    Healthcare professional who witnesses results of poor air quality

16. **Why do you want to join the Path to Clean Air Steering Committee?**

    Interesting

17. **A Community Emissions and Exposure Reduction Program may include many strategies. Choose the TOP THREE (3) areas that you are most excited to work in.**

    Public Transportation/Transit

    Parks Openspace

    Health Protection

OPTIONAL QUESTIONS

18. **What is your gender?**

    Male

19. **What is your ethnicity?**

    Black/African

20. **Do you, or someone in your household, experience health conditions that can be impacted by poor air quality?**

    No

COMMUNITY PATH TO CLEAN AIR

Conflict of Interest Disclosure Form for the
Path to Clean Air in the Richmond-North Richmond-San Pablo Area

[redacted]

Job Title: NURSE **Employer:** SFGH

Do you live in the Richmond-North Richmond-San Pablo Area? ☐ No ☒ Yes

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A conflict of interest occurs when an individual's personal or professional interests and affiliations – family, friendships, financial, or social factors – could compromise his or her judgment, decisions, or actions as a member of the Steering Committee. Conflicts of interest can be differentiated between actual, potential, and perceived conflicts of interest. An **actual conflict** exists if an action taken by a member **will** result in a financial or personal gain or loss to the member or to the member's relative or any business/organization in which they have a material interest. A **potential conflict** exists if an action taken by a member **may** result in a financial or personal gain or loss to the member or to the member's Relative or any business/organization in which they have a material interest. A **perceived conflict** exists when the public or a third party could form the view that a member's private or professional interests could improperly influence their decisions or actions, now or in the future.

List all names under which you or members of your household do any business which may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions. Include the business address and a brief description of the business. (If you need more space, please use a Word document to submit additional information.)

Name	Business Name & Address	Description

COMMUNITY PATH TO CLEAN AIR

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Name of Business	Type of Transaction	Amount of Transaction

Do you, or a member of your household have, or think you may have, any **actual conflicts of interest** relative to your role on the committee? [X] NO [ ] YES

If YES, please describe:

Do you or a member of your household have, or think you may have, any **potential conflicts of interest** relative to your role on the committee? [X] NO [ ] YES

If YES, please describe:

Are you aware of any situations that **might give the appearance of a conflict of interest** – even if it may not be a potential or actual conflict of interest – relative to your role on the committee? [X] NO [ ] YES

If YES, please describe:

My signature on this document affirms that all information I have supplied for this form is true and complete to the best of my knowledge and that I will update this information on an ongoing basis should any relevant situation(s) arise. I understand that failure to disclose conflicts may result in dismissal from the Committee.

Signature: [redacted] **Date:** 10/28/21

(Digital or wet signatures are accepted)

Approved by Richmond/San Pablo CERP Community Design Team on 10/27/20

1. **Please share your name and contact information.**

   Name: Bethany Lourie

   City/Town: Richmond

   ZIP/Postal Code: CA

2. **Were you a member of the Path to Clean Air Steering Committee?**

   No

3. **Do you live in the Path to Clean Air Study Area?**

   Yes

4. **If you live in the Path to Clean Air Study Area, what is the name of the neighborhood or community you reside in?**

   North & East Neighborhood Council

5. **Do you work in the Path to Clean Air Study Area?**

   No

6. **If you work in the Path to Clean Air Study Area, please share the name and address of your place ofwork.**

7. **Do you own a business in the Path to Clean Air Study Area?**

   No

8. **If you own a business in the Path to Clean Air Study Area, please share the name and address of your business.**

9. **If you are a part of the Path to Clean Air Study Area in any other way, please specify (for example: volunteer, committee membership, clubs etc.).**

10. **We all wear many hats, please select the sector you would represent on the Steering Committee:**

    People who live in the Richmond-San Pablo Area

11. **If you selected Government as your response to Question 10, what area of government best represents your primary focus?**

12. **If applicable, please select the secondary sector you would represent on the Steering Committee:**

    Other (please specify): Education Provider

13. **If you selected Government as your response to Question 12, what area of government best represents your primary focus?**

14. **Do you have decision making power for your organization, agency, group, or company?**

    No

15. **What are your community interests and your experiences with air quality in the Path to Clean Air Study Area? How do you see these interests and experiences contributing to the Steering Committee?**

    I have just moved to Richmond. I am a public school teacher who works in Berkeley currently, but I started my career in Richmond and many of my students actually live in Richmond.

16. **Why do you want to join the Path to Clean Air Steering Committee?**

    I want to make a difference to the air quality and get involved in local issues.

17. **A Community Emissions and Exposure Reduction Program may include many strategies. Choose the TOP THREE (3) areas that you are most excited to work in.**

    Public Health

    Active Transportation/Bike/Walk

    Environmental Conservation

OPTIONAL QUESTIONS

18. **What is your gender?**

    Female

19. **What is your ethnicity?**

    Caucasian/White

20. **Do you, or someone in your household, experience health conditions that can be impacted by poor air quality?**

    I don't know

Candidate F

COMMUNITY PATH TO CLEAN AIR

Conflict of Interest Disclosure Form for the Path to Clean Air in the Richmond-North Richmond-San Pablo Area

[redacted]

Job Title: Teacher **Employer:** Berkeley Unified School District

Do you live in the Richmond-North Richmond-San Pablo Area? ☐ No ☑ Yes

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List all names under which you or members of your household do any business which may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions. Include the business address and a brief description of the business. (If you need more space, please use a Word document to submit additional information.)

Name	Business Name & Address	Description

If you, a member of your household, or the business/organization you own or work for has engaged or intends to engage in any financial transactions with businesses or organizations that may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions, please describe the nature of the transactions and the amount of money involved. A business or organization is "impacted" if it is subject to additional emission reduction requirements, or if it is otherwise affected in a substantial way. For example, include professional or service contracts, grants awarded, and provisions of materials or supplies. (If you need more space, please use a Word document to submit additional information.)

Name of Business	Type of Transaction	Amount of Transaction

Do you, or a member of your household have, or think you may have, any **actual conflicts of interest** relative to your role on the committee? ☑ NO ☐ YES

If YES, please describe:

Do you or a member of your household have, or think you may have, any **potential conflicts of interest** relative to your role on the committee? ☐ NO ☐ YES

If YES, please describe:

Are you aware of any situations that **might give the appearance of a conflict of interest** – even if it may not be a potential or actual conflict of interest – relative to your role on the committee? ☐ NO ☐ YES

If YES, please describe:

My signature on this document affirms that all information I have supplied for this form is true and complete to the best of my knowledge and that I will update this information on an ongoing basis should any relevant situation(s) arise. I understand that failure to disclose conflicts may result in dismissal from the Committee.

Signature: [redacted] **Date:** 12/30/20

(Digital or wet signatures are accepted)

Approved by Richmond/San Pablo CERP Community Design Team on 10/27/20

1. **Please share your name and contact information.**

   Name: Julia Walsh

   City/Town: Piedmont

   ZIP/Postal Code: 94611

2. **Were you a member of the Path to Clean Air Steering Committee?**

   Yes

3. **Do you live in the Path to Clean Air Study Area?**

   No

4. **If you live in the Path to Clean Air Study Area, what is the name of the neighborhood or community you reside in?**

5. **Do you work in the Path to Clean Air Study Area?**

   No

6. **If you work in the Path to Clean Air Study Area, please share the name and address of your place ofwork.**

7. **Do you own a business in the Path to Clean Air Study Area?**

   No

8. **If you own a business in the Path to Clean Air Study Area, please share the name and address of your business.**

9. **If you are a part of the Path to Clean Air Study Area in any other way, please specify (for example: volunteer, committee membership, clubs etc.).**

   volunteer with No Coal in Richmond, the Richmond Air Monitoring Steering Committee, the Monitoring Outreach Team and the Community Design Team

10. **We all wear many hats, please select the sector you would represent on the Steering Committee:**

    Community-serving organization

11. **If you selected Government as your response to Question 10, what area of government best represents your primary focus?**

12. **If applicable, please select the secondary sector you would represent on the Steering Committee:**

13. If you selected Government as your response to Question 12, what area of government best represents your primary focus?

14. Do you have decision making power for your organization, agency, group, or company?

No

15. What are your community interests and your experiences with air quality in the Path to Clean Air Study Area? How do you see these interests and experiences contributing to the Steering Committee?

As a physician and UCB School of Public Health (semiretired) in Community Health Sciences and Maternal and Child Health, I have worked with communities, taught, and conducted research on the determinants of community heath and maternal and child health for

more than 30 years. My Professional life has focused on improving health of communities, especially the most vulnerable population groups. I am committed to improving health in Richmond, a city with a large vulnerable population that according to CalEnviroScreen3 has some of the highest rates of asthma and cardiorespiratory disease in the state with a life expectancy in the downtown area 7-8 years shorter than Berkeley. For more than 3 years I have been volunteering with No Coal in Richmond that led to the City Council passing an ordinance to stop the storage and handling of coal and petcoke in the City. I have been a member of the SC Air Monitoring, a liaison for the Technical Advisory Group, a member of the Monitoring Outreach Team and a member of the Community Design Team.

16. Why do you want to join the Path to Clean Air Steering Committee?

I joined the SC for Air Monitoring thinking that the committee would lead to regulations that would decrease stationary sources of air pollution and emissions in Richmond and improve the health of the vulnerable populations in the City and in San Pablo. Only by going through that process did I learn that that SC was only for establishing community based monitoring. It is the CERP that will actually recommend steps to decrease emissions that will improve the health of Richmond. I wish to join the CERP because I wish to bring my public health expertise and my familiarity with the Richmond Community through my years volunteering for NCIR to make recommendations about how to optimally improve the health of Richmond through improving air quality and emissions. Since I am

familiar with the SC process and working with BAAQMD, I will be more efficient in working through the next steps of the CERP process.

17. **A Community Emissions and Exposure Reduction Program may include many strategies. Choose the TOP THREE (3) areas that you are most excited to work in.**

    Public Health

    Ports/Marine Terminal

    Health Protection

OPTIONAL QUESTIONS

18. **What is your gender?**

    Female

19. **What is your ethnicity?**

    Caucasian/White

20. **Do you, or someone in your household, experience health conditions that can be impacted by poor air quality?**

    Yes

Candidate G

RICHMOND · SAN PABLO COMMUNITY PATH TO CLEAN AIR

Conflict of Interest Disclosure Form for the Path to Clean Air in the Richmond-North Richmond-San Pablo Area

[redacted]

Job Title: Retired Prof Public Health **Employer:** Retierd

Do you live in the Richmond-North Richmond-San Pablo Area? ☑ No ☐ Yes

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List all names under which you or members of your household do any business which may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions. Include the business address and a brief description of the business. (If you need more space, please use a Word document to submit additional information.)

Name	Business Name & Address	Description
NONE		

If you, a member of your household, or the business/organization you own or work for has engaged or intends to engage in any financial transactions with businesses or organizations that may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions, please describe the nature of the transactions and the amount of money involved. A business or organization is "impacted" if it is subject to additional emission reduction requirements, or if it is otherwise affected in a substantial way. For example, include professional or service contracts, grants awarded, and provisions of materials or supplies. (If you need more space, please use a Word document to submit additional information.)

Name of Business	Type of Transaction	Amount of Transaction
NONE		

Do you, or a member of your household have, or think you may have, any **actual conflicts of interest** relative to your role on the committee? ☑ NO ☐ YES

If YES, please describe:

Do you or a member of your household have, or think you may have, any **potential conflicts of interest** relative to your role on the committee? ☑ NO ☐ YES

If YES, please describe:

Are you aware of any situations that **might give the appearance of a conflict of interest** – even if it may not be a potential or actual conflict of interest – relative to your role on the committee? ☑ NO ☐ YES

If YES, please describe:

My signature on this document affirms that all information I have supplied for this form is true and complete to the best of my knowledge and that I will update this information on an ongoing basis should any relevant situation(s) arise. I understand that failure to disclose conflicts may result in dismissal from the Committee.

Signature: [redacted] **Date:** Dec 4, 2020

(Digital or wet signatures are accepted)

Approved by Richmond/San Pablo CERP Community Design Team on 10/27/20

1. **Please share your name and contact information.**

   Name: Matt Renner

   City/Town: Richmond

   ZIP/Postal Code: 94805

2. **Were you a member of the Path to Clean Air Steering Committee?**

   No

3. **Do you live in the Path to Clean Air Study Area?**

   Yes

4. **If you live in the Path to Clean Air Study Area, what is the name of the neighborhood or community you reside in?**

   East Richmond Heights

5. **Do you work in the Path to Clean Air Study Area?**

   Yes

6. **If you work in the Path to Clean Air Study Area, please share the name and address of your place ofwork.**

   Work at home

7. **Do you own a business in the Path to Clean Air Study Area?**

   No

8. **If you own a business in the Path to Clean Air Study Area, please share the name and address of your business.**

9. **If you are a part of the Path to Clean Air Study Area in any other way, please specify (for example: volunteer, committee membership, clubs etc.).**

10. **We all wear many hats, please select the sector you would represent on the Steering Committee:**

    People who live in the Richmond-San Pablo Area

11. **If you selected Government as your response to Question 10, what area of government best represents your primary focus?**

12. **If applicable, please select the secondary sector you would represent on the Steering Committee:**

13. **If you selected Government as your response to Question 12, what area of government best represents your primary focus?**

14. **Do you have decision making power for your organization, agency, group, or company?**

    Yes

15. **What are your community interests and your experiences with air quality in the Path to Clean Air Study Area? How do you see these interests and experiences contributing to the Steering Committee?**

    I have a young child who is going to grow up here. His lungs are developing near a freeway and down wind of toxic fires and industrial dust. I want to make sure he and other kids here breathe as clean or cleaner air than kids in San Francisco or Silicon Valley.

16. **Why do you want to join the Path to Clean Air Steering Committee?**

    I am a local resident who is very interested in the subject. I also believe in our political process and want to understand and uphold the goals of a citizen oversight committee in order to carry out the goals of the legislature and regulators who created this body.

17. **A Community Emissions and Exposure Reduction Program may include many strategies. Choose the TOP THREE (3) areas that you are most excited to work in.**

    Energy

    Health Protection

    Climate

OPTIONAL QUESTIONS

18. **What is your gender?**

    Male

19. **What is your ethnicity?**

    Caucasian/White

20. **Do you, or someone in your household, experience health conditions that can be impacted by poor air quality?**

    Yes

Candidate H

RICHMOND · SAN PABLO COMMUNITY PATH TO CLEAN AIR

Conflict of Interest Disclosure Form for the Path to Clean Air in the Richmond-North Richmond-San Pablo Area

[redacted]

Job Title: Executive Director **Employer:** The Climate Mobilization

Do you live in the Richmond-North Richmond-San Pablo Area? ☐ No ☑ Yes

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List all names under which you or members of your household do any business which may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions. Include the business address and a brief description of the business. (If you need more space, please use a Word document to submit additional information.)

Name	Business Name & Address	Description
	N/A	

If you, a member of your household, or the business/organization you own or work for has engaged or intends to engage in any financial transactions with businesses or organizations that may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions, please describe the nature of the transactions and the amount of money involved. A business or organization is "impacted" if it is subject to additional emission reduction requirements, or if it is otherwise affected in a substantial way. For example, include professional or service contracts, grants awarded, and provisions of materials or supplies. (If you need more space, please use a Word document to submit additional information.)

Name of Business	Type of Transaction	Amount of Transaction
	N/A	

Do you, or a member of your household have, or think you may have, any **actual conflicts of interest** relative to your role on the committee? ☑ NO ☐ YES

If YES, please describe:

Do you or a member of your household have, or think you may have, any **potential conflicts of interest** relative to your role on the committee? ☑ NO ☐ YES

If YES, please describe:

Are you aware of any situations that **might give the appearance of a conflict of interest** – even if it may not be a potential or actual conflict of interest – relative to your role on the committee? ☑ NO ☐ YES

If YES, please describe:

My signature on this document affirms that all information I have supplied for this form is true and complete to the best of my knowledge and that I will update this information on an ongoing basis should any relevant situation(s) arise. I understand that failure to disclose conflicts may result in dismissal from the Committee.

Signature: [redacted] **Date:** 12/22/20

(Digital or wet signatures are accepted)

1. **Please share your name and contact information.**

   Name: Brian Gillis

   City/Town: Richmond

   ZIP/Postal Code: 94804

2. **Were you a member of the Path to Clean Air Steering Committee?**

   No

3. **Do you live in the Path to Clean Air Study Area?**

   Yes

4. **If you live in the Path to Clean Air Study Area, what is the name of the neighborhood or community you reside in?**

   Pullman Neighborhood Council

5. **Do you work in the Path to Clean Air Study Area?**

   No

6. **If you work in the Path to Clean Air Study Area, please share the name and address of your place ofwork.**

7. **Do you own a business in the Path to Clean Air Study Area?**

   No

8. **If you own a business in the Path to Clean Air Study Area, please share the name and address of your business.**

9. **If you are a part of the Path to Clean Air Study Area in any other way, please specify (for example: volunteer, committee membership, clubs etc.).**

10. **We all wear many hats, please select the sector you would represent on the Steering Committee:**

    People who live in the Richmond-San Pablo Area

11. **If you selected Government as your response to Question 10, what area of government best represents your primary focus?**

12. **If applicable, please select the secondary sector you would represent on the Steering Committee:**

13. **If you selected Government as your response to Question 12, what area of government best represents your primary focus?**

14. **Do you have decision making power for your organization, agency, group, or company?**

    No

15. **What are your community interests and your experiences with air quality in the Path to Clean Air Study Area? How do you see these interests and experiences contributing to the Steering Committee?**

    I am a law student focusing on environmental law. I have a belief that a clean environment (and most importantly clean air) should be considered a fundamental right. As a father of a young daughter, it pains me to think about harmful pollutants that my daughter (and all young, growing kids) breath in every day.

16. **Why do you want to join the Path to Clean Air Steering Committee?**

    If possible, I would like to support our community's efforts to mitigating harmful pollution that impact residents of our community. I believe that an engaged community leads to a more healthy community -- and if I can support efforts to increase engagement, I would be honored to do so.

17. **A Community Emissions and Exposure Reduction Program may include many strategies. Choose the TOP THREE (3) areas that you are most excited to work in.**

    Active Transportation/Bike/Walk

    Energy

    Health Protection

OPTIONAL QUESTIONS

18. **What is your gender?**

    Male

19. **What is your ethnicity?**

    Caucasian/White

20. **Do you, or someone in your household, experience health conditions that can be impacted by poor air quality?**

    I don't know

Candidate I

Conflict of Interest Disclosure Form for the
Path to Clean Air in the Richmond-North Richmond-San Pablo Area

[redacted]

Student — Golden Gate University School of Law

Job Title: _____ **Employer:** _____

Do you live in the Richmond-North Richmond-San Pablo Area? [ ] No [ ] Yes

Transparency related to members' financial, material, and vested interests is essential to ensuring public trust and building strong programs. Those seeking to serve on the Committee must disclose any actual, potential, or perceived conflicts of interest in their applications. Committee members must disclose such conflicts on an ongoing basis and failure to do so may result in dismissal from the Steering Committee.

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List all names under which you or members of your household do any business which may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions. Include the business address and a brief description of the business. (If you need more space, please use a Word document to submit additional information.)

Name	Business Name & Address	Description
n/a		

RICHMOND-NORTH RICHMOND-SAN PABLO COMMUNITY PATH TO CLEAN AIR

If you, a member of your household, or the business/organization you own or work for has engaged or intends to engage in any financial transactions with businesses or organizations that may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions, please describe the nature of the transactions and the amount of money involved. A business or organization is "impacted" if it is subject to additional emission reduction requirements, or if it is otherwise affected in a substantial way. For example, include professional or service contracts, grants awarded, and provisions of materials or supplies. (If you need more space, please use a Word document to submit additional information.)

Name of Business	Type of Transaction	Amount of Transaction
n/a		

Do you, or a member of your household have, or think you may have, any **actual conflicts of interest** relative to your role on the committee? [ ] NO [ ] YES

If YES, please describe:

No

Do you or a member of your household have, or think you may have, any **potential conflicts of interest** relative to your role on the committee? [ ] NO [ ] YES

If YES, please describe:

No

Are you aware of any situations that **might give the appearance of a conflict of interest** – even if it may not be a potential or actual conflict of interest – relative to your role on the committee? [ ] NO [ ] YES

If YES, please describe:

My wife Jessie Stewart is the FORMER executive director of a non profit in Richmond called the Richmond Promise, which was funded in part by the Environmental Community Investment Agreement between the City of Richmond and Chevron Richmond Refinery. She no longer works there.

My signature on this document affirms that all information I have supplied for this form is true and complete to the best of my knowledge and that I will update this information on an ongoing basis should any relevant situation(s) arise. I understand that failure to disclose conflicts may result in dismissal from the Commi

Signature: [redacted] **Date:** 11/12/2021

(Digital or wet signatures are accepted)

Approved by Richmond/San Pablo CERP Community Design Team on 10/27/20

1. **Please share your name and contact information.**

   Name: Oscar Garcia

   City/Town: RIchmond

   ZIP/Postal Code: 94801

2. **Were you a member of the Path to Clean Air Steering Committee?**

   Yes

3. **Do you live in the Path to Clean Air Study Area?**

   Yes

4. **If you live in the Path to Clean Air Study Area, what is the name of the neighborhood or community you reside in?**

   Iron Triangle Neighborhood Council

5. **Do you work in the Path to Clean Air Study Area?**

   Yes

6. **If you work in the Path to Clean Air Study Area, please share the name and address of your place ofwork.**

   Chevron Refinery 841 Chevron Way

7. **Do you own a business in the Path to Clean Air Study Area?**

   No

8. **If you own a business in the Path to Clean Air Study Area, please share the name and address of your business.**

9. **If you are a part of the Path to Clean Air Study Area in any other way, please specify (for example: volunteer, committee membership, clubs etc.).**

   President of the Iron Triangle, Commissioner on the Community Police Review Commission, Co-Chair Concilio Latino, Cinco de Mayo Parade Committee Member, Cinco de Mayo Festival Committee Member, Co-Chair Accion West County Voter Project, Richmond Rotarian,

10. **We all wear many hats, please select the sector you would represent on the Steering Committee:**

    Neighborhood Group

11. **If you selected Government as your response to Question 10, what area of government best represents your primary focus?**

12. **If applicable, please select the secondary sector you would represent on the Steering Committee:**

13. **If you selected Government as your response to Question 12, what area of government best represents your primary focus?**

14. **Do you have decision making power for your organization, agency, group, or company?**

    Yes

15. **What are your community interests and your experiences with air quality in the Path to Clean Air Study Area? How do you see these interests and experiences contributing to the Steering Committee?**

    I am born and raised in the Iron Triangle, and I live and breath the air from Richmond's industrial corridor. I also am well connected in the city to have engage and support for these efforts. I also have over 15 years working on air quality throughout the world.

16. **Why do you want to join the Path to Clean Air Steering Committee?**

    To ensure the local Richmond community is well represented, plus my technical background allows me add better perspective. I am bilingual and I do a lot of work in Latino organization so I can engage the Latino community, plus I have many contacts within the local Black community.

17. **A Community Emissions and Exposure Reduction Program may include many strategies. Choose the TOP THREE (3) areas that you are most excited to work in.**

    Public Health

    Public Transportation/Transit

    Health Protection

OPTIONAL QUESTIONS

18. **What is your gender?**

    Male

19. **What is your ethnicity?**

    Hispanic/Latinx

20. Do you, or someone in your household, experience health conditions that can be impacted by poor air quality?

Yes

RICHMOND - NORTH RICHMOND - SAN PABLO COMMUNITY **PATH TO CLEAN AIR**

Conflict of Interest Disclosure Form for the Path to Clean Air in the Richmond-North Richmond-San Pablo Area

[redacted]

Job Title: Engineer **Employer:** Chevron

Do you live in the Richmond-North Richmond-San Pablo Area? ☐ No ☑ Yes

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List all names under which you or members of your household do any business which may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions. Include the business address and a brief description of the business. (If you need more space, please use a Word document to submit additional information.)

Name	Business Name & Address	Description
Me	Chevron Refinery	Employer

COMMUNITY PATH TO CLEAN AIR

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Name of Business	Type of Transaction	Amount of Transaction
None		

Do you, or a member of your household have, or think you may have, any **actual conflicts of interest** relative to your role on the committee? ☑ NO ☐ YES

If YES, please describe:

Do you or a member of your household have, or think you may have, any **potential conflicts of interest** relative to your role on the committee? ☑ NO ☐ YES

If YES, please describe:

Are you aware of any situations that **might give the appearance of a conflict of interest** – even if it may not be a potential or actual conflict of interest – relative to your role on the committee? [ ] NO [ ] YES

If YES, please describe:

I am participating as a lifelong resident of Richmond. I recognize my employment at Chevron may give the appearance of a conflict, but my compensation will not be impacted by this process. I am doing this on my own accord.

My signature on this document affirms that all information I have supplied for this form is true and complete to the best of my knowledge and that I will update this information on an ongoing basis should any relevant situation(s) arise. I understand that failure to disclose conflicts may result in dismissal from the Committee.

Signature: [redacted] **Date:** 11/12/2021

(Digital or wet signatures are accepted)

Approved by Richmond/San Pablo CERP Community Design Team on 10/27/20

1. **Please share your name and contact information.**

   Name: Simren Sandhu

   City/Town: San Pablo

   ZIP/Postal Code: 94806

2. **Were you a member of the Path to Clean Air Steering Committee?**

   No

3. **Do you live in the Path to Clean Air Study Area?**

   Yes

4. **If you live in the Path to Clean Air Study Area, what is the name of the neighborhood or community you reside in?**

   Other (please specify)San Pablo (Contra Costa College)

5. **Do you work in the Path to Clean Air Study Area?**

   Yes

6. **If you work in the Path to Clean Air Study Area, please share the name and address of your place ofwork.**

   Youth Vs Apocalypse (online work based in Bay Area)

7. **Do you own a business in the Path to Clean Air Study Area?**

   No

8. **If you own a business in the Path to Clean Air Study Area, please share the name and address of your business.**

9. **If you are a part of the Path to Clean Air Study Area in any other way, please specify (for example: volunteer, committee membership, clubs etc.).**

   Attend school(Making Waves Academy), go to worship(El Sobrante Sikh Center), take martial arts classes(Sama Martial Arts Academy), school clubs(Climate Justice, Associated Student Body, Asian and Pacific Islander Alliance), activist organizational work(CA Youth Vs Big Oil and Youth Vs Apocalypse)

10. **We all wear many hats, please select the sector you would represent on the Steering Committee:**

    Youth

11. **If you selected Government as your response to Question 10, what area of government best represents your primary focus?**

12. **If applicable, please select the secondary sector you would represent on the Steering Committee:**

13. **If you selected Government as your response to Question 12, what area of government best represents your primary focus?**

14. **Do you have decision making power for your organization, agency, group, or company?**

    Yes

15. **What are your community interests and your experiences with air quality in the Path to Clean Air Study Area? How do you see these interests and experiences contributing to the Steering Committee?**

    I currently do work with CA Youth Vs Big Oil and Youth Vs Apocalypse, which are organizations that talk about how the climate crisis influences people in the Bay Area, specifically BIPOC and low-income residents. Through these experiences, I have learned a lot about the air quality in Richmond, the factors that have the most impact on it, and the effects that it has on residents. I believe that my voice and knowledge as a POC youth activist will offer a fresh perspective and ideas to the committee.

16. **Why do you want to join the Path to Clean Air Steering Committee?**

    As someone who is passionate about climate justice and knows a good deal about the climate crisis in the Bay Area and its effects on the air quality and health of fellow Richmond residents, I feel that being a member on the Path to Clean Air Steering Committee will allow me to fulfill my passion of further supporting my community along with other communities in the Bay Area.

17. **A Community Emissions and Exposure Reduction Program may include many strategies. Choose the TOP THREE (3) areas that you are most excited to work in.**

    Public Health

    Environmental Conservation

    Climate

OPTIONAL QUESTIONS

18. **What is your gender?**

    Female

19. What is your ethnicity?

Asian

20. Do you, or someone in your household, experience health conditions that can be impacted by poor air quality?

No

RICHMOND - NORTH RICHMOND - SAN PABLO COMMUNITY **PATH TO CLEAN AIR**

Conflict of Interest Disclosure Form for the Path to Clean Air in the Richmond-North Richmond-San Pablo Area

[redacted]

Job Title: _____ **Employer:** _____

Do you live in the Richmond-North Richmond-San Pablo Area? [ ] No [ ] Yes

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Name	Business Name & Address	Description

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Name of Business	Type of Transaction	Amount of Transaction

Do you, or a member of your household have, or think you may have, any **actual conflicts of interest** relative to your role on the committee? [ ] NO [ ] YES

If YES, please describe:

Do you or a member of your household have, or think you may have, any **potential conflicts of interest** relative to your role on the committee? [ ] NO [ ] YES

If YES, please describe:

Are you aware of any situations that **might give the appearance of a conflict of interest** – even if it may not be a potential or actual conflict of interest – relative to your role on the committee? [ ] NO [ ] YES

If YES, please describe:

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Signature: [redacted] **Date:** _____

(Digital or wet signatures are accepted)

Approved by Richmond/San Pablo CERP Community Design Team on 10/27/20

1. **Please share your name and contact information.**

   Name: Rae Jones

   City/Town: Berkeley

   ZIP/Postal Code: 94702

2. **Were you a member of the Path to Clean Air Steering Committee?**

   No

3. **Do you live in the Path to Clean Air Study Area?**

   No

4. **If you live in the Path to Clean Air Study Area, what is the name of the neighborhood or community you reside in?**

5. **Do you work in the Path to Clean Air Study Area?**

   Yes

6. **If you work in the Path to Clean Air Study Area, please share the name and address of your place ofwork.**

7. **Do you own a business in the Path to Clean Air Study Area?**

8. **If you own a business in the Path to Clean Air Study Area, please share the name and address of your business.**

9. **If you are a part of the Path to Clean Air Study Area in any other way, please specify (for example: volunteer, committee membership, clubs etc.).**

10. **We all wear many hats, please select the sector you would represent on the Steering Committee:**

11. **If you selected Government as your response to Question 10, what area of government best represents your primary focus?**

12. **If applicable, please select the secondary sector you would represent on the Steering Committee:**

13. **If you selected Government as your response to Question 12, what area of government best represents your primary focus?**

14. **Do you have decision making power for your organization, agency, group, or company?**

15. **What are your community interests and your experiences with air quality in the Path to Clean Air Study Area? How do you see these interests and experiences contributing to the Steering Committee?**

16. **Why do you want to join the Path to Clean Air Steering Committee?**

17. **A Community Emissions and Exposure Reduction Program may include many strategies. Choose the TOP THREE (3) areas that you are most excited to work in.**

OPTIONAL QUESTIONS

18. **What is your gender?**

19. **What is your ethnicity?**

20. **Do you, or someone in your household, experience health conditions that can be impacted by poor air quality?**

1. **Please share your name and contact information.**

   Name: Susan Nishizaka

   City/Town: Richmond

   ZIP/Postal Code: 94803

2. **Were you a member of the Path to Clean Air Steering Committee?**

   No

3. **Do you live in the Path to Clean Air Study Area?**

   No

4. **If you live in the Path to Clean Air Study Area, what is the name of the neighborhood or community you reside in?**

5. **Do you work in the Path to Clean Air Study Area?**

   No

6. **If you work in the Path to Clean Air Study Area, please share the name and address of your place ofwork.**

7. **Do you own a business in the Path to Clean Air Study Area?**

   No

8. **If you own a business in the Path to Clean Air Study Area, please share the name and address of your business.**

9. **If you are a part of the Path to Clean Air Study Area in any other way, please specify (for example: volunteer, committee membership, clubs etc.).**

10. **We all wear many hats, please select the sector you would represent on the Steering Committee:**

    Neighborhood group

11. **If you selected Government as your response to Question 10, what area of government best represents your primary focus?**

12. **If applicable, please select the secondary sector you would represent on the Steering Committee:**

13. **If you selected Government as your response to Question 12, what area of government best represents your primary focus?**

14. **Do you have decision making power for your organization, agency, group, or company?**

    No

15. **What are your community interests and your experiences with air quality in the Path to Clean Air Study Area? How do you see these interests and experiences contributing to the Steering Committee?**

16. **Why do you want to join the Path to Clean Air Steering Committee?**

17. **A Community Emissions and Exposure Reduction Program may include many strategies. Choose the TOP THREE (3) areas that you are most excited to work in.**

OPTIONAL QUESTIONS

18. **What is your gender?**

19. **What is your ethnicity?**

20. **Do you, or someone in your household, experience health conditions that can be impacted by poor air quality?**

1. **Please share your name and contact information.**

   Name: Maria Hernandez

   City/Town: San Pablo cal

   ZIP/Postal Code: 94806

2. **Were you a member of the Path to Clean Air Steering Committee?**

   No

3. **Do you live in the Path to Clean Air Study Area?**

   No

4. **If you live in the Path to Clean Air Study Area, what is the name of the neighborhood or community you reside in?**

5. **Do you work in the Path to Clean Air Study Area?**

   No

6. **If you work in the Path to Clean Air Study Area, please share the name and address of your place ofwork.**

7. **Do you own a business in the Path to Clean Air Study Area?**

   No

8. **If you own a business in the Path to Clean Air Study Area, please share the name and address of your business.**

9. **If you are a part of the Path to Clean Air Study Area in any other way, please specify (for example: volunteer, committee membership, clubs etc.).**

   Volunteer

10. **We all wear many hats, please select the sector you would represent on the Steering Committee:**

    People who live in the Richmond-San Pablo Area

11. **If you selected Government as your response to Question 10, what area of government best represents your primary focus?**

12. **If applicable, please select the secondary sector you would represent on the Steering Committee:**

13. **If you selected Government as your response to Question 12, what area of government best represents your primary focus?**

14. **Do you have decision making power for your organization, agency, group, or company?**

    Yes

15. **What are your community interests and your experiences with air quality in the Path to Clean Air Study Area? How do you see these interests and experiences contributing to the Steering Committee?**

    I want to learn more on this committee .

16. **Why do you want to join the Path to Clean Air Steering Committee?**

    Because is interested to know and hel my community.

17. **A Community Emissions and Exposure Reduction Program may include many strategies. Choose the TOP THREE (3) areas that you are most excited to work in.**

    Public Health

    Environmental Conservation

    Health Protection

OPTIONAL QUESTIONS

18. **What is your gender?**

    Female

19. **What is your ethnicity?**

    Hispanic/Latinx

20. **Do you, or someone in your household, experience health conditions that can be impacted by poor air quality?**

    No

Candidate O

1. **Please share your name and contact information.**

   Name: Lea Murray

   City/Town: Richmond

   ZIP/Postal Code: 94804

2. **Were you a member of the Path to Clean Air Steering Committee?**

   No

3. **Do you live in the Path to Clean Air Study Area?**

   No

4. **If you live in the Path to Clean Air Study Area, what is the name of the neighborhood or community you reside in?**

5. **Do you work in the Path to Clean Air Study Area?**

   Yes

6. **If you work in the Path to Clean Air Study Area, please share the name and address of your place of work.**

   Collaborising 2502 Baywood Way Richmond, CA 94804

7. **Do you own a business in the Path to Clean Air Study Area?**

   Yes

8. **If you own a business in the Path to Clean Air Study Area, please share the name and address of your business.**

   same as question #6. Collaborising is a nonprofit

9. **If you are a part of the Path to Clean Air Study Area in any other way, please specify (for example: volunteer, committee membership, clubs etc.).**

   n/a

10. **We all wear many hats, please select the sector you would represent on the Steering Committee:**

    Collaborising works with unhoused residents in Richmond. Collaborising is a nonprofit.

11. **If you selected Government as your response to Question 10, what area of government best represents your primary focus?**

12. **If applicable, please select the secondary sector you would represent on the Steering Committee:**

13. **If you selected Government as your response to Question 12, what area of government best represents your primary focus?**

14. **Do you have decision making power for your organization, agency, group, or company?**

    Yes

15. **What are your community interests and your experiences with air quality in the Path to Clean Air Study Area? How do you see these interests and experiences contributing to the Steering Committee?**

    I work with unhoused residents of Richmond who live in encampments. The unsanitary conditions under which they live negatively impact their health and hygiene. I hope to represent unhoused communities that live near highways, train tracks, BART, etc and have to breathe "bad air".

16. **Why do you want to join the Path to Clean Air Steering Committee?**

    I'd like to be a voice for the unhoused community.

17. **A Community Emissions and Exposure Reduction Program may include many strategies. Choose the TOP THREE (3) areas that you are most excited to work in.**

    Public Health

    Land use

    homelessness

OPTIONAL QUESTIONS

18. **What is your gender?**

    Female

19. **What is your ethnicity?**

    Black/African

20. **Do you, or someone in your household, experience health conditions that can be impacted by poor air quality?**

    Yes

Candidate O

COMMUNITY PATH TO CLEAN AIR

Conflict of Interest Disclosure Form for the
Path to Clean Air in the Richmond-North Richmond-San Pablo Area

[redacted]

Job Title: Executive Director **Employer:** Collaborative

Do you live in the Richmond-North Richmond-San Pablo Area? [ ] No [ ] Yes

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List all names under which you or members of your household do any business which may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions. Include the business address and a brief description of the business. (If you need more space, please use a Word document to submit additional information.)

Name	Business Name & Address	Description
N/A	N/A	N/A

Approved by Richmond/San Pablo CERP Community Design Team on 10/27/20

RICHMOND-NORTH RICHMOND-SAN PABLO COMMUNITY **PATH TO CLEAN AIR**

If you, a member of your household, or the business/organization you own or work for has engaged or intends to engage in any financial transactions with businesses or organizations that may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions, please describe the nature of the transactions and the amount of money involved. A business or organization is "impacted" if it is subject to additional emission reduction requirements, or if it is otherwise affected in a substantial way. For example, include professional or service contracts, grants awarded, and provisions of materials or supplies. (If you need more space, please use a Word document to submit additional information.)

Name of Business	Type of Transaction	Amount of Transaction
N/A	N/A	N/A

Do you, or a member of your household have, or think you may have, any **actual conflicts of interest** relative to your role on the committee? [X] NO [ ] YES

If YES, please describe:

N/A

Do you or a member of your household have, or think you may have, any **potential conflicts of interest** relative to your role on the committee? [ ] NO [ ] YES

If YES, please describe:

N/A

Are you aware of any situations that **might give the appearance of a conflict of interest** – even if it may not be a potential or actual conflict of interest – relative to your role on the committee? [ ] NO [ ] YES

If YES, please describe:

N/A.

My signature on this document affirms that all information I have supplied for this form is true and complete to the best of my knowledge and that I will update this information on an ongoing basis should any relevant situation(s) arise. I understand that failure to disclose conflicts may result in dismissal from the Committee.

Signature: [redacted] **Date:** 11/17/2021

(Digital or wet signatures are accepted)

Approved by Richmond/San Pablo CERP Community Design Team on 10/27/20

1. **Please share your name and contact information.**

   Name: Daniella Zacky

   City/Town: Alameda

   ZIP/Postal Code: 94501

2. **Were you a member of the Path to Clean Air Steering Committee?**

   No

3. **Do you live in the Path to Clean Air Study Area?**

   No

4. **If you live in the Path to Clean Air Study Area, what is the name of the neighborhood or community you reside in?**

5. **Do you work in the Path to Clean Air Study Area?**

   Yes

6. **If you work in the Path to Clean Air Study Area, please share the name and address of your place of work.**

   2540 Macdonald Ave, Richmond, CA 94801

7. **Do you own a business in the Path to Clean Air Study Area?**

   No

8. **If you own a business in the Path to Clean Air Study Area, please share the name and address of your business.**

9. **If you are a part of the Path to Clean Air Study Area in any other way, please specify (for example: volunteer, committee membership, clubs etc.).**

   I work on a project funded by the Richmond Progressive Alliance, but we work with community members throughout Richmond, often in North Richmond.

10. **We all wear many hats, please select the sector you would represent on the Steering Committee:**

    Community-serving organization

11. **If you selected Government as your response to Question 10, what area of government best represents your primary focus?**

12. **If applicable, please select the secondary sector you would represent on the Steering Committee:**

13. **If you selected Government as your response to Question 12, what area of government best represents your primary focus?**

14. **Do you have decision making power for your organization, agency, group, or company?**

    I have the power to bring things to the table and bring up discussion

15. **What are your community interests and your experiences with air quality in the Path to Clean Air Study Area? How do you see these interests and experiences contributing to the Steering Committee?**

    Currently I am working on a project that is focused on Chevrons impacts on community members throughout Richmond. Not surprisingly, air quality is a common theme that arises as an impact on the community. Where I am from, Long Beach, has similar air quality issues due to the 710 freeway and the Long Beach and Los Angeles Ports. I am currently in my last semester of undergraduate studies in Geography focusing on environmental justice and policy. My background that is focused here in the bay, along with my previous work and involvement in Long Beach air quality issues would be applicable to the steering committee work.

16. **Why do you want to join the Path to Clean Air Steering Committee?**

    Joining the Path to Clean Air Steering Committee would allow me to continue to learn about air quality issues that plague low-income communities of color disportionately. I also believe I have a valuable perspective as a student, and environmental justice focused person on the Steering Committee.

17. **A Community Emissions and Exposure Reduction Program may include many strategies. Choose the TOP THREE (3) areas that you are most excited to work in.**

    Public Health

    Active Transportation/Bike/Walk

    Equity

OPTIONAL QUESTIONS

18. **What is your gender?**

    She/They

19. **What is your ethnicity?**

    Hispanic/Latinx

    Jewish

20. Do you, or someone in your household, experience health conditions that can be impacted by poor air quality?

Yes

RICHMOND - NORTH RICHMOND - SAN PABLO COMMUNITY PATH TO CLEAN AIR

Conflict of Interest Disclosure Form for the Path to Clean Air in the Richmond-North Richmond-San Pablo Area

[redacted]

Job Title: Community Organizer Employer: Richmond Progressive Alliance

Do you live in the Richmond-North Richmond-San Pablo Area? [X] No [ ] Yes

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List all names under which you or members of your household do any business which may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions. Include the business address and a brief description of the business. (If you need more space, please use a Word document to submit additional information.)

Name	Business Name & Address	Description

COMMUNITY PATH TO CLEAN AIR

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Name of Business	Type of Transaction	Amount of Transaction

Do you, or a member of your household have, or think you may have, any **actual conflicts of interest** relative to your role on the committee? [x] NO [ ] YES

If YES, please describe:

Do you or a member of your household have, or think you may have, any **potential conflicts of interest** relative to your role on the committee? [x] NO [ ] YES

If YES, please describe:

Are you aware of any situations that **might give the appearance of a conflict of interest** – even if it may not be a potential or actual conflict of interest – relative to your role on the committee? [x] NO [ ] YES

If YES, please describe:

My signature on this document affirms that all information I have supplied for this form is true and complete to the best of my knowledge and that I will update this information on an ongoing basis should any relevant situation(s) arise. I understand that failure to disclose conflicts may result in dismissal from the Committee.

Signature: [redacted] **Date:** 11/16/2021

(Digital or wet signatures are accepted)

Approved by Richmond/San Pablo CERP Community Design Team on 10/27/20

1. **Please share your name and contact information.**

   Name: Marisol (Noell) Cantú

   City/Town: Richmond

   ZIP/Postal Code: 94805

2. **Were you a member of the Path to Clean Air Steering Committee?**

   No

3. **Do you live in the Path to Clean Air Study Area?**

   Yes

4. **If you live in the Path to Clean Air Study Area, what is the name of the neighborhood or community you reside in?**

   Richmond Heights Neighborhood Council (Richmond)

5. **Do you work in the Path to Clean Air Study Area?**

   Yes

6. **If you work in the Path to Clean Air Study Area, please share the name and address of your place ofwork.**

   Contra Costa Community College- 2600 Mission Bell Dr. San Pablo, CA 94806

7. **Do you own a business in the Path to Clean Air Study Area?**

   No

8. **If you own a business in the Path to Clean Air Study Area, please share the name and address of your business.**

9. **If you are a part of the Path to Clean Air Study Area in any other way, please specify (for example: volunteer, committee membership, clubs etc.).**

   No

10. **We all wear many hats, please select the sector you would represent on the Steering Committee:**

    People who live in the Richmond-San Pablo Area

11. **If you selected Government as your response to Question 10, what area of government best represents your primary focus?**

12. **If applicable, please select the secondary sector you would represent on the Steering Committee:**

13. **If you selected Government as your response to Question 12, what area of government best represents your primary focus?**

14. **Do you have decision making power for your organization, agency, group, or company?**

    No

15. **What are your community interests and your experiences with air quality in the Path to Clean Air Study Area? How do you see these interests and experiences contributing to the Steering Committee?**

    I have been directly impacted by air pollution in Richmond along with generations of families who have experienced issues with poor air quality.

16. **Why do you want to join the Path to Clean Air Steering Committee?**

    As an ESL professor at Contra Costa College, I work with undocumented, DACAmented, and many multilingual speakers who often do not have the communications skills in English to be engaged in this work. For me, I want to bring their voices into our collective Path to Clean Air. I want to make sure their voices are centered and not forgotten along with the communities most harmed by poor air quality.

17. **A Community Emissions and Exposure Reduction Program may include many strategies. Choose the TOP THREE (3) areas that you are most excited to work in.**

    Active Transportation/Bike/Walk

    Parks Openspace

    Climate

OPTIONAL QUESTIONS

18. **What is your gender?**

    Female

19. **What is your ethnicity?**

    Hispanic/Latinx

20. **Do you, or someone in your household, experience health conditions that can be impacted by poor air quality?**

    Yes

COMMUNITY PATH TO CLEAN AIR

Conflict of Interest Disclosure Form for the Path to Clean Air in the Richmond-North Richmond-San Pablo Area

[redacted]

Job Title: Professor **Employer:** Contra Costa College

Do you live in the Richmond-North Richmond-San Pablo Area? [ ] No [x] Yes

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Name	Business Name & Address	Description

COMMUNITY PATH TO CLEAN AIR

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Name of Business	Type of Transaction	Amount of Transaction

Do you, or a member of your household have, or think you may have, any **actual conflicts of interest** relative to your role on the committee? ☑ NO [ ] YES

If YES, please describe:

Do you or a member of your household have, or think you may have, any **potential conflicts of interest** relative to your role on the committee? ☑ NO [ ] YES

If YES, please describe:

Are you aware of any situations that **might give the appearance of a conflict of interest** – even if it may not be a potential or actual conflict of interest – relative to your role on the committee? ☑ NO [ ] YES

If YES, please describe:

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Signature: [redacted] **Date:** 11/16/2021

(Digital or wet signatures are accepted)

Approved by Richmond/San Pablo CERP Community Design Team on 10/27/20

1. **Please share your name and contact information.**

   Name: Andres Soto

   City/Town: Richmond

   ZIP/Postal Code: 94801

2. **Were you a member of the Path to Clean Air Steering Committee?**

   No

3. **Do you live in the Path to Clean Air Study Area?**

   No

4. **If you live in the Path to Clean Air Study Area, what is the name of the neighborhood or community you reside in?**

5. **Do you work in the Path to Clean Air Study Area?**

   Yes

6. **If you work in the Path to Clean Air Study Area, please share the name and address of your place ofwork.**

   340 Marina Way Richmond, CA 94801

7. **Do you own a business in the Path to Clean Air Study Area?**

   No

8. **If you own a business in the Path to Clean Air Study Area, please share the name and address of your business.**

9. **If you are a part of the Path to Clean Air Study Area in any other way, please specify (for example: volunteer, committee membership, clubs etc.).**

10. **We all wear many hats, please select the sector you would represent on the Steering Committee:**

    Community-serving organization

11. **If you selected Government as your response to Question 10, what area of government best represents your primary focus?**

12. **If applicable, please select the secondary sector you would represent on the Steering Committee:**

13. **If you selected Government as your response to Question 12, what area of government best represents your primary focus?**

14. **Do you have decision making power for your organization, agency, group, or company?**

    Yes

15. **What are your community interests and your experiences with air quality in the Path to Clean Air Study Area? How do you see these interests and experiences contributing to the Steering Committee?**

16. **Why do you want to join the Path to Clean Air Steering Committee?**

17. **A Community Emissions and Exposure Reduction Program may include many strategies. Choose the TOP THREE (3) areas that you are most excited to work in.**

    Land use

    Health Protection

    Petrochemical industry

OPTIONAL QUESTIONS

18. **What is your gender?**

    Male

19. **What is your ethnicity?**

    Chicano/Mestizo/Latino

20. **Do you, or someone in your household, experience health conditions that can be impacted by poor air quality?**

    Yes

Candidate R

Conflict of Interest Disclosure Form for the Path to Clean Air in the Richmond-North Richmond-San Pablo Area

[redacted]

Job Title: Organizer **Employer:** Communities for a Better Enviropnment

Do you live in the Richmond-North Richmond-San Pablo Area? ☑ **No** ☐ **Yes**

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Name	Business Name & Address	Description

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Name of Business	Type of Transaction	Amount of Transaction

Do you, or a member of your household have, or think you may have, any **actual conflicts of interest** relative to your role on the committee? ☑ NO ☐ YES

If YES, please describe:

Do you or a member of your household have, or think you may have, any **potential conflicts of interest** relative to your role on the committee? ☑ NO ☐ YES

If YES, please describe:

Are you aware of any situations that **might give the appearance of a conflict of interest** – even if it may not be a potential or actual conflict of interest – relative to your role on the committee? ☑ NO ☐ YES

If YES, please describe:

My signature on this document affirms that all information I have supplied for this form is true and complete to the best of my knowledge and that I will update this information on an ongoing basis should any relevant situation(s) arise. I understand that failure to disclose conflicts may result in dismissal from the Committee.

Signature: [redacted] **Date:** 12.29.2020

(Digital or wet signatures are accepted)

Approved by Richmond/San Pablo CERP Community Design Team on 10/27/20

1. **Please share your name and contact information.**

   Name: Whitney Richardson

   City/Town: Richmond

   ZIP/Postal Code: 94804

2. **Were you a member of the Path to Clean Air Steering Committee?**

   No

3. **Do you live in the Path to Clean Air Study Area?**

   Yes

4. **If you live in the Path to Clean Air Study Area, what is the name of the neighborhood or community you reside in?**

   Marina Bay Neighborhood Council (Richmond)

5. **Do you work in the Path to Clean Air Study Area?**

   Yes

6. **If you work in the Path to Clean Air Study Area, please share the name and address of your place ofwork.**

   Work from home: 97 Bayside Ct. 94804

7. **Do you own a business in the Path to Clean Air Study Area?**

   No

8. **If you own a business in the Path to Clean Air Study Area, please share the name and address of your business.**

9. **If you are a part of the Path to Clean Air Study Area in any other way, please specify (for example: volunteer, committee membership, clubs etc.).**

   I live in the area, have lived in the area for most of my life and attended elementary and middle school in the area (ECHS is just out of the boundary!).

10. **We all wear many hats, please select the sector you would represent on the Steering Committee:**

    People who live in the Richmond-San Pablo Area

11. **If you selected Government as your response to Question 10, what area of government best represents your primary focus?**

12. **If applicable, please select the secondary sector you would represent on the Steering Committee:**

13. **If you selected Government as your response to Question 12, what area of government best represents your primary focus?**

14. **Do you have decision making power for your organization, agency, group, or company?**

    No

15. **What are your community interests and your experiences with air quality in the Path to Clean Air Study Area? How do you see these interests and experiences contributing to the Steering Committee?**

16. **Why do you want to join the Path to Clean Air Steering Committee?**

17. **A Community Emissions and Exposure Reduction Program may include many strategies. Choose the TOP THREE (3) areas that you are most excited to work in.**

OPTIONAL QUESTIONS

18. **What is your gender?**

19. **What is your ethnicity?**

20. **Do you, or someone in your household, experience health conditions that can be impacted by poor air quality?**

Conflict of Interest Disclosure Form for the Path to Clean Air in the Richmond-North Richmond-San Pablo Area

[redacted]

Phone: [redacted] **Email:** [redacted]

Job Title: Regulatory Analyst **Employer:** State of California

Do you live in the Richmond-North Richmond-San Pablo Area? [ ] No [ ] Yes

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List all names under which you or members of your household do any business which may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions. Include the business address and a brief description of the business. (If you need more space, please use a Word document to submit additional information.)

Name	Business Name & Address	Description

PATH TO CLEAN AIR

If you, a member of your household, or the business/organization you own or work for has engaged or intends to engage in any financial transactions with businesses or organizations that may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions, please describe the nature of the transactions and the amount of money involved. A business or organization is "impacted" if it is subject to additional emission reduction requirements, or if it is otherwise affected in a substantial way. For example, include professional or service contracts, grants awarded, and provisions of materials or supplies. (If you need more space, please use a Word document to submit additional information.)

Name of Business	Type of Transaction	Amount of Transaction

Do you, or a member of your household have, or think you may have, any **actual conflicts of interest** relative to your role on the committee? [ ] NO [ ] YES

If YES, please describe:

Do you or a member of your household have, or think you may have, any **potential conflicts of interest** relative to your role on the committee? [ ] NO [ ] YES

If YES, please describe:

Are you aware of any situations that **might give the appearance of a conflict of interest** – even if it may not be a potential or actual conflict of interest – relative to your role on the committee? [ ] NO [ ] YES

If YES, please describe:

My signature on this document affirms that all information I have supplied for this form is true and complete to the best of my knowledge and that I will update this information on an ongoing basis should any relevant situation(s) arise. I understand that failure to disclose conflicts may result in dismissal from the Committee.

Signature: [redacted] **Date:** 11/19/21

(Digital or wet signatures are accepted)

Approved by Richmond/San Pablo CERP Community Design Team on 10/27/20

1. **Please share your name and contact information.**

   Name: Allan Moskowitz

   City/Town: San Pablo

   ZIP/Postal Code: 94806

2. **Were you a member of the Path to Clean Air Steering Committee?**

   No

3. **Do you live in the Path to Clean Air Study Area?**

   Yes

4. **If you live in the Path to Clean Air Study Area, what is the name of the neighborhood or community you reside in?**

   Other (please specify)San Pablo

5. **Do you work in the Path to Clean Air Study Area?**

   Yes

6. **If you work in the Path to Clean Air Study Area, please share the name and address of your place ofwork.**

   6317 Fairmount Avenue, El Cerrito, CA

7. **Do you own a business in the Path to Clean Air Study Area?**

   Yes

8. **If you own a business in the Path to Clean Air Study Area, please share the name and address of your business.**

   Transformative Wealth Management, LLC 6317 Fairmount Ave, El Cerrito, CA 94530

9. **If you are a part of the Path to Clean Air Study Area in any other way, please specify (for example: volunteer, committee membership, clubs etc.).**

   no

10. **We all wear many hats, please select the sector you would represent on the Steering Committee:**

    Industry/business

11. **If you selected Government as your response to Question 10, what area of government best represents your primary focus?**

12. **If applicable, please select the secondary sector you would represent on the Steering Committee:**

13. **If you selected Government as your response to Question 12, what area of government best represents your primary focus?**

14. **Do you have decision making power for your organization, agency, group, or company?**

    Yes

15. **What are your community interests and your experiences with air quality in the Path to Clean Air Study Area? How do you see these interests and experiences contributing to the Steering Committee?**

    Sustainability is very important to me and my family

16. **Why do you want to join the Path to Clean Air Steering Committee?**

    service to the community

17. **A Community Emissions and Exposure Reduction Program may include many strategies. Choose the TOP THREE (3) areas that you are most excited to work in.**

    Public Health

    Active Transportation/Bike/Walk

    Climate

OPTIONAL QUESTIONS

18. **What is your gender?**

    Male

19. **What is your ethnicity?**

    Caucasian/White

20. **Do you, or someone in your household, experience health conditions that can be impacted by poor air quality?**

    Yes

Candidate T

COMMUNITY PATH TO CLEAN AIR

Conflict of Interest Disclosure Form for the
Path to Clean Air in the Richmond-North Richmond-San Pablo Area

[redacted]

CFP - INVESTMENT ADVISOR — Self - TRANSFORMATIVE WEALTH MANAGEMENT, LLC

Job Title: _____ **Employer:** _____

Do you live in the Richmond-North Richmond-San Pablo Area? [ ] No [X] Yes

Transparency related to members' financial, material, and vested interests is essential to ensuring public trust and building strong programs. Those seeking to serve on the Committee must disclose any actual, potential, or perceived conflicts of interest in their applications. Committee members must disclose such conflicts on an ongoing basis and failure to do so may result in dismissal from the Steering Committee.

"Interest" as used in this Conflict of Interest Disclosure Forum means a substantial financial, material, or vested interest in a business or organization that may be impacted by the work of this Committee. To avoid an actual, potential or perceived conflict of interest, a person who serves on the Richmond CERP Steering Committee that works for, is employed by, receives compensation from or serves on the Board of Directors or as an officer of an organization that receives funding, in-kind services or volunteers from an entity that is required to report emissions to or regulated by BAAQMD or CARB, must disclose said conflict.

A conflict of interest occurs when an individual's personal or professional interests and affiliations – family, friendships, financial, or social factors – could compromise his or her judgment, decisions, or actions as a member of the Steering Committee. Conflicts of interest can be differentiated between actual, potential, and perceived conflicts of interest. An **actual conflict** exists if an action taken by a member **will** result in a financial or personal gain or loss to the member or to the member's relative or any business/organization in which they have a material interest. A **potential conflict** exists if an action taken by a member **may** result in a financial or personal gain or loss to the member or to the member's Relative or any business/organization in which they have a material interest. A **perceived conflict** exists when the public or a third party could form the view that a member's private or professional interests could improperly influence their decisions or actions, now or in the future.

List all names under which you or members of your household do any business which may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions. Include the business address and a brief description of the business. (If you need more space, please use a Word document to submit additional information.)

Name	Business Name & Address	Description
ALLAN MOSKOWITZ	TRANSFORMATIVE WEALTH MGT, LLC (TWML)	REGISTERED INVESTMENT ADVISORY FIRM

COMMUNITY PATH TO CLEAN AIR

If you, a member of your household, or the business/organization you own or work for has engaged or intends to engage in any financial transactions with businesses or organizations that may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions, please describe the nature of the transactions and the amount of money involved. A business or organization is "impacted" if it is subject to additional emission reduction requirements, or if it is otherwise affected in a substantial way. For example, include professional or service contracts, grants awarded, and provisions of materials or supplies. (If you need more space, please use a Word document to submit additional information.)

Name of Business	Type of Transaction	Amount of Transaction
TRANSFORMATIVE WEALTH MGMT, LLC	BUSINESS IMPACTED IF CONSTRUCTION IS MAJOR	UNKNOWN

Do you, or a member of your household have, or think you may have, any **actual conflicts of interest** relative to your role on the committee? [X] NO [ ] YES

If YES, please describe:

Do you or a member of your household have, or think you may have, any **potential conflicts of interest** relative to your role on the committee? [X] NO [ ] YES

If YES, please describe:

Are you aware of any situations that **might give the appearance of a conflict of interest** – even if it may not be a potential or actual conflict of interest – relative to your role on the committee? [ ] NO [X] YES

If YES, please describe:

MY BUSINESS BORDERS ON THE IMPACTED AREA NEAR SAN PABLO AVENUE & CARLSON BLVD/FAIRMOUNT AVE. & WE LIVE IN SAN PABLO PROPER, WHICH COULD ALSO BE IMPACTED INDIRECTLY, BUT NOTHING DIRECTLY.

My signature on this document affirms that all information I have supplied for this form is true and complete to the best of my knowledge and that I will update this information on an ongoing basis should any relevant situation(s) arise. I understand that failure to disclose conflicts may result in dismissal from the Committ

Signature: [redacted] **Date:** 11/18/21

(Digital or w

1. **Please share your name and contact information.**

   Name: David Tucker

   City/Town: Richmond

   ZIP/Postal Code: 94803

2. **Were you a member of the Path to Clean Air Steering Committee?**

   No

3. **Do you live in the Path to Clean Air Study Area?**

   No

4. **If you live in the Path to Clean Air Study Area, what is the name of the neighborhood or community you reside in?**

5. **Do you work in the Path to Clean Air Study Area?**

   No

6. **If you work in the Path to Clean Air Study Area, please share the name and address of your place ofwork.**

7. **Do you own a business in the Path to Clean Air Study Area?**

   No

8. **If you own a business in the Path to Clean Air Study Area, please share the name and address of your business.**

9. **If you are a part of the Path to Clean Air Study Area in any other way, please specify (for example: volunteer, committee membership, clubs etc.).**

   Volunteer - City of Richmond - Planning Commission

10. **We all wear many hats, please select the sector you would represent on the Steering Committee:**

    People who live in the Richmond-San Pablo Area

11. **If you selected Government as your response to Question 10, what area of government best represents your primary focus?**

12. **If applicable, please select the secondary sector you would represent on the Steering Committee:**

    Industry/business

13. **If you selected Government as your response to Question 12, what area of government best represents your primary focus?**

14. **Do you have decision making power for your organization, agency, group, or company?**

    No

15. **What are your community interests and your experiences with air quality in the Path to Clean Air Study Area? How do you see these interests and experiences contributing to the Steering Committee?**

    As a member of the City of Richmond Planning Commission and 20 year resident of Richmond, I am exposed to several projects or drive around areas impacted by questionable air quality, that could be mitigated through proper policy or rationale decision making efforts as a result of AB 617.

16. **Why do you want to join the Path to Clean Air Steering Committee?**

    To assist in developing reasonable, effective Clean Air policies, that respects both the business that may be impacted but also the community that it supports. Finding solutions that value compromise yet achieves maximum benefit.

17. **A Community Emissions and Exposure Reduction Program may include many strategies. Choose the TOP THREE (3) areas that you are most excited to work in.**

    Public Health

    Land use

    Goods Movement

OPTIONAL QUESTIONS

18. **What is your gender?**

    Male

19. **What is your ethnicity?**

    Black/African

20. **Do you, or someone in your household, experience health conditions that can be impacted by poor air quality?**

    No

RICHMOND - NORTH RICHMOND - SAN PABLO COMMUNITY **PATH TO CLEAN AIR**

Conflict of Interest Disclosure Form for the Path to Clean Air in the Richmond-North Richmond-San Pablo Area

[redacted]

Job Title: Self Employed **Employer:** David Tucker Company

Do you live in the Richmond-North Richmond-San Pablo Area? [X] No [ ] Yes

Transparency related to members' financial, material, and vested interests is essential to ensuring public trust and building strong programs. Those seeking to serve on the Committee must disclose any actual, potential, or perceived conflicts of interest in their applications. Committee members must disclose such conflicts on an ongoing basis and failure to do so may result in dismissal from the Steering Committee.

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List all names under which you or members of your household do any business which may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions. Include the business address and a brief description of the business. (If you need more space, please use a Word document to submit additional information.)

Name	Business Name & Address	Description

COMMUNITY PATH TO CLEAN AIR

If you, a member of your household, or the business/organization you own or work for has engaged or intends to engage in any financial transactions with businesses or organizations that may be impacted by the Path to Clean Air in Richmond-North Richmond-San Pablo Steering Committee decisions, please describe the nature of the transactions and the amount of money involved. A business or organization is "impacted" if it is subject to additional emission reduction requirements, or if it is otherwise affected in a substantial way. For example, include professional or service contracts, grants awarded, and provisions of materials or supplies. (If you need more space, please use a Word document to submit additional information.)

Name of Business	Type of Transaction	Amount of Transaction

Do you, or a member of your household have, or think you may have, any **actual conflicts of interest** relative to your role on the committee? [X] NO [ ] YES

If YES, please describe:

Do you or a member of your household have, or think you may have, any **potential conflicts of interest** relative to your role on the committee? [X] NO [ ] YES

If YES, please describe:

Are you aware of any situations that **might give the appearance of a conflict of interest** – even if it may not be a potential or actual conflict of interest – relative to your role on the committee? [X] NO [ ] YES

If YES, please describe:

My signature on this document affirms that all information I have supplied for this form is true and complete to the best of my knowledge and that I will update this information on an ongoing basis should any relevant situation(s) arise. I understand that failure to disclose conflicts may result in dismissal from the Committee.

Signature: [redacted] **Date:** November 19, 2021

(Digital or wet signatures are accepted)

Approved by Richmond/San Pablo CERP Community Design Team on 10/27/20

1. **Please share your name and contact information.**

   Name: Antoinette Bailey-Nesbitt

   City/Town: Richmond

   ZIP/Postal Code: 94804

2. **Were you a member of the Path to Clean Air Steering Committee?**

   No

3. **Do you live in the Path to Clean Air Study Area?**

   Yes

4. **If you live in the Path to Clean Air Study Area, what is the name of the neighborhood or community you reside in?**

   Park Plaza Neighborhood Council (Richmond)

5. **Do you work in the Path to Clean Air Study Area?**

   No

6. **If you work in the Path to Clean Air Study Area, please share the name and address of your place ofwork.**

7. **Do you own a business in the Path to Clean Air Study Area?**

   No

8. **If you own a business in the Path to Clean Air Study Area, please share the name and address of your business.**

9. **If you are a part of the Path to Clean Air Study Area in any other way, please specify (for example: volunteer, committee membership, clubs etc.).**

10. **We all wear many hats, please select the sector you would represent on the Steering Committee:**

11. **If you selected Government as your response to Question 10, what area of government best represents your primary focus?**

12. **If applicable, please select the secondary sector you would represent on the Steering Committee:**

13. **If you selected Government as your response to Question 12, what area of government best represents your primary focus?**

14. **Do you have decision making power for your organization, agency, group, or company?**

15. **What are your community interests and your experiences with air quality in the Path to Clean Air Study Area? How do you see these interests and experiences contributing to the Steering Committee?**

16. **Why do you want to join the Path to Clean Air Steering Committee?**

17. **A Community Emissions and Exposure Reduction Program may include many strategies. Choose the TOP THREE (3) areas that you are most excited to work in.**

OPTIONAL QUESTIONS

18. **What is your gender?**

19. **What is your ethnicity?**

20. **Do you, or someone in your household, experience health conditions that can be impacted by poor air quality?**

    No

1. **Please share your name and contact information.**

   Name: Michelle Gomez Garcia

   City/Town: Richmond

   ZIP/Postal Code: 94804

2. **Were you a member of the Path to Clean Air Steering Committee?**

   No

3. **Do you live in the Path to Clean Air Study Area?**

   Yes

4. **If you live in the Path to Clean Air Study Area, what is the name of the neighborhood or community you reside in?**

   North Richmond (Unincorporated Contra Costa County)

5. **Do you work in the Path to Clean Air Study Area?**

   No

6. **If you work in the Path to Clean Air Study Area, please share the name and address of your place ofwork.**

7. **Do you own a business in the Path to Clean Air Study Area?**

   No

8. **If you own a business in the Path to Clean Air Study Area, please share the name and address of your business.**

9. **If you are a part of the Path to Clean Air Study Area in any other way, please specify (for example: volunteer, committee membership, clubs etc.).**

   I am currently working and volunteering around this area on projects and within the community. Like helping distribute food to community members and working on the Clean Air Study.

10. **We all wear many hats, please select the sector you would represent on the Steering Committee:**

    People who live in the Richmond-San Pablo Area

11. **If you selected Government as your response to Question 10, what area of government best represents your primary focus?**

12. **If applicable, please select the secondary sector you would represent on the Steering Committee:**

13. **If you selected Government as your response to Question 12, what area of government best represents your primary focus?**

14. **Do you have decision making power for your organization, agency, group, or company?**

    No

15. **What are your community interests and your experiences with air quality in the Path to Clean Air Study Area? How do you see these interests and experiences contributing to the Steering Committee?**

    I am interested in helping my community by trying to resolve some of the issues we have. I have worked on many projects that study some of the affects disorders and assets my community has and have spoke to many community members on their experiences pollution and have heard some potential feedback that can help the committee come up with solutions and find ways to help.

16. **Why do you want to join the Path to Clean Air Steering Committee?**

    I want to join the committee to get my voice and other people voices within my community heard. I think want there to be change for the pollution and struggles my community faces and I believe this is a great way for me to try and help improve my community.

17. **A Community Emissions and Exposure Reduction Program may include many strategies. Choose the TOP THREE (3) areas that you are most excited to work in.**

    Public Health

    Environmental Conservation

    Health Protection

OPTIONAL QUESTIONS

18. **What is your gender?**

    Female

19. **What is your ethnicity?**

    Hispanic/Latinx

20. Do you, or someone in your household, experience health conditions that can be impacted by poor air quality?

No

Candidate X

1. **Please share your name and contact information.**

   Name: Manuel Gomez

   City/Town: Richmond

   ZIP/Postal Code: 94804

2. **Were you a member of the Path to Clean Air Steering Committee?**

   Yes

3. **Do you live in the Path to Clean Air Study Area?**

   Yes

4. **If you live in the Path to Clean Air Study Area, what is the name of the neighborhood or community you reside in?**

   Park Plaza Neighborhood Council (Richmond)

5. **Do you work in the Path to Clean Air Study Area?**

   Yes

6. **If you work in the Path to Clean Air Study Area, please share the name and address of your place ofwork.**

   Lifelong Medical Clinic: 150 Harbour Way, Richmond, CA 94801

7. **Do you own a business in the Path to Clean Air Study Area?**

   No

8. **If you own a business in the Path to Clean Air Study Area, please share the name and address of your business.**

9. **If you are a part of the Path to Clean Air Study Area in any other way, please specify (for example: volunteer, committee membership, clubs etc.).**

10. **We all wear many hats, please select the sector you would represent on the Steering Committee:**

    Youth

11. **If you selected Government as your response to Question 10, what area of government best represents your primary focus?**

12. **If applicable, please select the secondary sector you would represent on the Steering Committee:**

13. **If you selected Government as your response to Question 12, what area of government best represents your primary focus?**

14. **Do you have decision making power for your organization, agency, group, or company?**

    I don't know

15. **What are your community interests and your experiences with air quality in the Path to Clean Air Study Area? How do you see these interests and experiences contributing to the Steering Committee?**

    I am working in a research study that involves “the path to clean air” in Richmond and San Pablo. This experience allows us to understand the opinions of our community members.

16. **Why do you want to join the Path to Clean Air Steering Committee?**

    I want to voice my opinions and suggestions, and share my experiences with the committee.

17. **A Community Emissions and Exposure Reduction Program may include many strategies. Choose the TOP THREE (3) areas that you are most excited to work in.**

    Public Health

    Health Protection

    Climate

OPTIONAL QUESTIONS

18. **What is your gender?**

    Male

19. **What is your ethnicity?**

    Hispanic/Latinx

20. **Do you, or someone in your household, experience health conditions that can be impacted by poor air quality?**

    No

2021

Community Steering Committee Members Recommendations and Input for Path to Clean Air CERP Steering Committee

THIS DOCUMENT CONTAINS THE RECOMMENDATIONS AND REVIEW SUMMARIES OF THE PATH TO CLEAN AIR CERP STEERING COMMITTEE APPLICANTS FROM THREE VOLUNTEER COMMUNITY STEERING COMMITTEE MEMBERS. ALL APPLICANTS WERE ANONOMIZED AND RANKED BY MEMBERS ALFREDO ANGULO CASTRO, NANCY AGUIRRE, AND KEVIN G RUANO HERNANDEZ. THESE RECOMMENDATIONS ARE FOR THE CONSIDERATION OF THE COMMUNITY EQUITY, HEALTH, AND JUSTICE COMMITTEE OF THE AIR DISTRICT BOARD.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

	COMMUNITY STEERING COMMITTEE RECOMMENDATIONS		MEMBER/LIVE/WORK IN STUDY AREA					SECTOR		DEMOGRAPHICS		
Applicant Name	Average Score	Community Steering Committee Comments	Applicant City / Town	Neighborhood (if applicable)	Live in Study Area?	Work in Study Area?	Employer	Primary Sector Represented	Secondary Sector Represented (if applicable)	Gender	Ethnicity	**COI Form yes / no**
Simren Sandhu	8.3	See Comments	San Pablo	San Pablo (Contra Costa College)	Yes	Yes	Youth V. Apocalypse	Youth	N/A	Female	Asian	Yes
Marisol (Noell) Cantú	7.7	See Comments	Richmond	Richmond Heights Neighborhood Council	Yes	Yes	Contra Costa College	People who live in the Richmond-San Pablo Area	N/A	Female	Hispanic / Latinx	Yes
Daniella Zacky	7.3	See Comments	Alameda	Not applicable	No	Yes	Richmond Progressive Alliance	Community-serving organization	N/A	She / They	Hispanic / Latinx, Jewish	Yes
Michelle Gomez Garcia	7	See Comments	North Richmond	North Richmond (Unincorporated Contra Costa County)	Yes	No		People who live in the Richmond-San Pablo Area	N/A	Female	Hispanic / Latinx	No
Andres Soto	7	See Comments	Richmond	No answer	No	Yes	Communities for a Better Environment	Community-serving organization	N/A	Male	Chicano / Mestizo / Latino	Yes
Joann Pavlinec	6.7	See Comments	Richmond	East Richmond Heights	Yes	No	N/A - Retired	Neighbor-hood group	Government – Land Use	Female	Caucasian / White	Yes
Floy Andrews	6	See Comments	Richmond	Point Richmond Neighborhood Council	Yes	Yes	Self-employed, Contra Costa County	People who live in the Richmond-San Pablo Area	Community-serving organization	Female	Caucasian / White	Yes
Manuel Gomez	6	See Comments	Richmond	Park Plaza Neighborhood Council	Yes	Yes	Lifelong Medical Clinic	Youth	N/A	Male	Hispanic / Latinx	No

	COMMUNITY STEERING COMMITTEE RECOMMENDATIONS		MEMBER/LIVE/WORK IN STUDY AREA					SECTOR		DEMOGRAPHICS		
Applicant Name	Average Score	Community Steering Committee Comments	Applicant City / Town	Neighborhood (if applicable)	Live in Study Area?	Work in Study Area?	Employer	Primary Sector Represented	Secondary Sector Represented (if applicable)	Gender	Ethnicity	COI Form yes / no
Julia Walsh	5.3	See Comments	Piedmont	Not applicable	No	No	N/A - Retired	Community-serving organization	N/A	Female	Caucasian / White	Yes
Matt Renner	5.3	See Comments	Richmond	East Richmond Heights	Yes	Yes	The Climate Mobilization	People who live in the Richmond-San Pablo Area	N/A	Male	Caucasian / White	Yes
Bethany Lourie	5	See Comments	Richmond	North & East Neighborhood Council	Yes	No	Berkeley Unified School District	People who live in the Richmond-San Pablo Area	Other – Education Provider	Female	Caucasian / White	Yes
Lea Murray	5	See Comments	Richmond	No answer	No	Yes	Collaborising	Other -	N/A	Female	Black / African	Yes
James Becker	4.7	See Comments	Richmond	Not applicable	No	Yes	Richmond Community Foundation	Community-serving organization	Other – Foundation/ Philanthropy	Male	Caucasian / White	Yes
Troy Almeida	4.7	See Comments	El Sobrante	El Sobrante	No	No	SFGH	Health care provider	N/A	Male	Black / African	Yes
David Tucker	4.7	See Comments	Richmond	No Answer	No	No	Self-employed	People who live in the Richmond-San Pablo Area	Industry/ business	Male	Black / African	Yes
Brian Gillis	4.3	See Comments	Richmond	Pullman Neighborhood Council	Yes	No	N/A - Student	People who live in the Richmond-San Pablo Area	N/A	Male	Caucasian / White	Yes

	COMMUNITY STEERING COMMITTEE RECOMMENDATIONS		MEMBER/LIVE/WORK IN STUDY AREA					SECTOR		DEMOGRAPHICS		
Applicant Name	Average Score	Community Steering Committee Comments	Applicant City / Town	Neighborhood (if applicable)	Live in Study Area?	Work in Study Area?	Employer	Primary Sector Represented	Secondary Sector Represented (if applicable)	Gender	Ethnicity	COI Form yes / no
Adam W Oliver	4	See Comments	Richmond	Marina Bay Neighborhood Council	Yes	No	N/A - Retired	People who live in the Richmond-San Pablo Area	N/A	Male	Black/ African, Caucasian / White	Yes
Oscar Garcia	4	See Comments	Richmond	Iron Triangle Neighborhood Council	Yes	Yes	Chevron	Neighbor-hood group	N/A	Male	Hispanic / Latinx	Yes
Allan Moskowitz	3.7	See Comments	San Pablo	San Pablo	Yes	Yes	Self-employed	Industry/ business	N/A	Male	Caucasian / White	Yes
Maria Hernandez	2.7	See Comments	San Pablo	No Answer	No	No		People who live in the Richmond-San Pablo Area	N/A	Female	Hispanic / Latinx	No
Whitney Richardson	2	See Comments	Richmond	Marina Bay Neighborhood Council	Yes	Yes	State of California	People who live in the Richmond-San Pablo Area	N/A	No Answer	No Answer	Yes
Antoinette Bailey-Nesbitt	1	See Comments	Richmond	Park Plaza Neighborhood Council	Yes	No		N/A	N/A	No Answer	No Answer	No
Rae Jones	0.7	See Comments	Berkeley	No Answer	No	Yes	N/A	N/A	N/A	No Answer	No Answer	No
Susan Nishizaka	0.7	See Comments	Richmond	No Answer	No	No	N/A	Neighbor-hood group	N/A	No Answer	No Answer	No

Community Steering Committee Comments on Path to Clean Air CERP Steering Committee Applicants

Adam W Oliver

Community Steering Committee Reviewer	Score	Please describe the reasons for your score
Nancy Aguirre	6	• Impacted by air/study area • From impacted air/study area • Seemed knowledgeable with air pollution
Kevin G Ruano Hernandez	2	The applicant identified "I'm not sure" under a member of the committee. Also, under question 16, the applicant stated that he is knowledgeable on "air pollution control equipment and industrial processes within the area of interest" however, did answer later identified that they did not know if anyone in their household is being impacted by poor air quality. This application does not meet the criteria.
Alfredo Angulo Castro	4	Retiree, knowledgeable about air pollution control equipment as it relates to industrial processes. Doesn't present many community ties or contribute any of the criteria we're looking to expand on.
Average Score	4	

Allan Moskowitz

Community Steering Committee Reviewer	Score	Please describe the reasons for your score
Nancy Aguirre	5	• Investment advisor, wealth management • Represents San Pablo
Kevin G Ruano Hernandez	5	I believe that the applicant does show promise and considering their business, it may be great to have their perspective on the committee. I believe that the applicant should expand more about their interests and why they would like to join.
Alfredo Angulo Castro	1	Very little effort put into application, nearly incomplete.
Average Score	3.7	

Andres Soto

Community Steering Committee Reviewer	Score	Please describe the reasons for your score
Nancy Aguirre	8	Diverse: latinx *works, lives and outreach in impacted study area
Kevin G Ruano Hernandez	10	Andres Soto is more than a community organizer from one of the solid Environmental Justice nonprofits in California; he is a mentor to several of us on the committee and the community. His wisdom and work have impacted us to focus on several topics, not just the local refineries. Now, though Mr. Soto did not include any additional information, I can tell of his intentions by his commitment to the CERP AB 617 process here for not only Richmond and San Pablo but California as well. If anyone deserves to be on the committee, it is him; I believe we envision us to be. Also, we need more Communities for a Better Environment representatives considering they received the AB 617 Community Grant and have been active in public comment discussions and activities.
Alfredo Angulo Castro	3	Incomplete application.
Average Score	7	

Antoinette Bailey-Nesbitt

Community Steering Committee Reviewer	Score	Please describe the reasons for your score
Nancy Aguirre	2	Does not have enough information for an informed score
Kevin G Ruano Hernandez	0	Insignificant information.
Alfredo Angulo Castro	1	Incomplete application.
Average Score	1	

Bethany Lourie

Community Steering Committee Reviewer	Score	Please describe the reasons for your score
Nancy Aguirre	7	• Teacher • Seems to represent several neighborhoods • Lives in impacted air/study
Kevin G Ruano Hernandez	4	Recently moved to study area, wants to to be involved in local air quality issues. Mentions interest in environmental conservation. Works directly with youth though mostly in Berkeley. Does not add much from the criteria selected by CSC.
Alfredo Angulo Castro	4	Not much general knowledge about the community. She wants to make a difference, however, she is vague and needs more detail on her responses. Also, answered I don't know to question 20.
Average Score	5	

Brian Gillis

Community Steering Committee Reviewer	Score	Please describe the reasons for your score
Nancy Aguirre	6	• Environmental law student • Represents other neighborhood
Kevin G Ruano Hernandez	2	It is great that this applicant is studying environmental law however, it is a concern that he does not know that he is being affected by air pollution but also that his wife is the former executive director of the Richmond Promise. Which takes money from Chevron, as a result, it makes me concerned and wonders if there are still ties.
Alfredo Angulo Castro	5	Lives in Pullman Neighborhood. Law student focussed on environmental law, interested in engaging with the community on local community health efforts.
Average Score	4.3	

Daniella Zacky

Community Steering Committee Reviewer	Score	Please describe the reasons for your score
Nancy Aguirre	8	• Diverse: represents latinx needed for our committee • Environmental studies and policy student • Represents several neighborhoods/communities in study area • Works in study area
Kevin G Ruano Hernandez	9	Although some may argue that the applicant is not born and raised in Richmond, they acknowledge that they have some history with air pollution and is a community organizer for the Richmond Progressive Alliance. Their educational background in geography and their knowledge about environmental justice and policy may come into use in the future in the CERP steering committee process moving forward. They are a student and has shown that although they are originally from a different city, they can bring a different perspective and valuable insight.
Alfredo Angulo Castro	5	Lives in Alameda but works in study area with local organization. Young person with environmental justice background.
Average Score	7.3	

David Tucker

Community Steering Committee Reviewer	Score	Please describe the reasons for your score
Nancy Aguirre	5	• Does not live, work or has business in impacted area • Volunteer with planning committee
Kevin G Ruano Hernandez	3	Though I do believe we should have those from the City of Richmond on the committee, we have a significant amount of members on the committee. As a result, I would like to lower my vote because of the industrial affiliations that the applicant has. I believe we need more diverse community members on the committee with perspectives that aim for a better future.
Alfredo Angulo Castro	6	Local long-time resident; involved in local planning commission in the past;
Average Score	4.7	

Floy Andrews

Community Steering Committee Reviewer	Score	Please describe the reasons for your score
Nancy Aguirre	6	• Impacted by air/study area • Seems to represent neighborhoods across our area and county Environmental attorney
Kevin G Ruano Hernandez	6	As a person that has an officer position for the Richmond Progressive Alliance and a background not only in environmental education and law would make her a good candidate for this committee. However, it is important to consider the demographics of the committee itself. However, with their background in environmental law and her affiliations with the county, she would be a good candidate.
Alfredo Angulo Castro	6	This person lives near a high pollution source, used to work as an environmental attorney and has experience working directly with air district. They mention work with local community-serving organizations and an understanding of the health impacts from local pollution sources.
Average Score	6	

James Becker

Community Steering Committee Reviewer	Score	Please describe the reasons for your score
Nancy Aguirre	6	*works in impacted area *creates homes with environmental forward energy design
Kevin G Ruano Hernandez	2	Though this candidate has shown that they have a good list of experience, I scored them low because it is not the experience that the committee needs. Also, the candidate included Richmond as their city while later on, the candidate mentioned they do not live in Richmond. It is also unusual that the applicant is also a part of the Santa Fe Neighborhood Council while not living in Richmond. Also, there has been some concern that the Kiwanis Club, Galileo Club, and Richmond Community Foundation receive money from industrial companies such as Chevron. I believe this would be a conflict of interest.
Alfredo Angulo Castro	6	Resident of Santa Fe neighborhood, represents neighborhood highly impacted by air pollution. Does work in renovating homes to carbon neutral standards, plus has knowledge of local-level electrification. Mentions deep community ties and a respect for data-driven decision making.
Average Score	4.7	

Joann Pavlinec

Community Steering Committee Reviewer	Score	Please describe the reasons for your score
Nancy Aguirre	6	• Represents a balance of neighborhoods • Environmental/green building background
Kevin G Ruano Hernandez	7	Shows great potential in becoming a member of the steering committee considering their enthusiasm and their educational background. Would like to know more about their views on not only sustainability but also air pollution, and public health.
Alfredo Angulo Castro	7	Resident of East Richmond Heights, represents neighborhood groups and has experience working with local government on land use. Retired city planner with experience on renovating existing buildings to meet greener standards. Deep community ties and and much experience on sustainability and environmental policy development. Does not add much in terms of the criteria highlighted by CSC, but is overall a good fit.
Average Score	6.7	

Julia Walsh

Community Steering Committee Reviewer	Score	Please describe the reasons for your score
Nancy Aguirre	5	• Volunteers in several environmental studies/committees • Does not work, live or own a business in impacted study area
Kevin G Ruano Hernandez	8	Seems to be very knowledgeable about Public Health considering they were a professor at UCB. Very knowledgeable on the AB617 process and have been a community ally for a long time. The only thing that is holding me back is where she is living. However, other than that, she is an ideal candidate for the committee considering her education and knowledge about the CERP and BAAQMD.
Alfredo Angulo Castro	3	Does not live or work in study area. Great fit for our work overall, very familiar with CERP process, member of MOT and extensive knowledge in public health. but again, does not live or work in study area.
Average Score	5.3	

Lea Murray

Community Steering Committee Reviewer	Score	Please describe the reasons for your score
Nancy Aguirre	8	• Unique perspective for the unhoused/homeless population • Executive Dir of nonprofit • Represents several neighborhoods/ communities
Kevin G Ruano Hernandez	4	The candidate shows so much promise to this committee through her perspective on unhoused people and her nonprofit, however, does not meet the desired skills we need on this committee such as air quality knowledge and environmental justice principles.
Alfredo Angulo Castro	3	Does not live in study area but owns local non-profit focused on working with unhoused resident in encampments; could provide direct ties to work with unhoused population.
Average Score	5	

Manuel Gomez

Community Steering Committee Reviewer	Score	Please describe the reasons for your score
Nancy Aguirre	6	Works with medical clinic In impacted area
Kevin G Ruano Hernandez	8	The applicant is a Latinx youth member who is working on a research study. They haven't mentioned anything related to air quality however, this would be a good candidate.
Alfredo Angulo Castro	4	Youth working in local healthcare; very little information put into application.
Average Score	6	

Maria Hernandez

Community Steering Committee Reviewer	Score	Please describe the reasons for your score
Nancy Aguirre	7	• Volunteers in study area • Diverse: latinx voice needed on our committee • Willing to learn & get involved • Represents San Pablo area
Kevin G Ruano Hernandez	1	Doesn't show strong responses, poor answers.
Alfredo Angulo Castro	0	Incomplete application
Average Score	2.6	

Marisol (Noell) Cantú

Community Steering Committee Reviewer	Score	Please describe the reasons for your score
Nancy Aguirre	8	• Diverse: latinx, ESL professor at CCC, voice needed in our committee • Lives and works in impacted study area • Represents other neighborhoods
Kevin G Ruano Hernandez	9	Hailing from East Richmond Heights and has a title as an ESL professor at one of the local community colleges that our community members attend, it is important to capture their voices and invite a seat at a table for professors to speak. In their application, it seems that they value the community perspective and capturing voices considering her area is uplifting and teaching communication skills to undocumented students. She speaks on Public Health principles and shows (if chosen) to assist the community engagement team in the future with her connections to not only the college but, her community that we are focusing on.
Alfredo Angulo Castro	6	Educator at Contra Costa college; works directly with undocumented community and could provide a direct connection for involvement in process.
Average Score	7.7	

Matt Renner

Community Steering Committee Reviewer	Score	Please describe the reasons for your score
Nancy Aguirre	6	• Impacted by the air quality • Works in climate change
Kevin G Ruano Hernandez	5	Being the executive director of a climate action movement is very admirable however when you are the executive director you can't just be "interested in the subject." It is your job and focuses on sustainability and environmental justice practices. As a result, I like his views and how he expresses his purpose of applying but, don't believe he would be a good candidate just to be interested in joining.
Alfredo Angulo Castro	5	Lives and works in study area. Lives near high pollution source, has children and community ties in the Study Area. Demonstrates understanding of local health disparities.
Average Score	5.3	

Michelle Gomez Garcia

Community Steering Committee Reviewer	Score	Please describe the reasons for your score
Nancy Aguirre	8	• Diverse: latinx voice needed on our committee • Works within clean air study • Represents several neighborhoods/ communities
Kevin G Ruano Hernandez	7	The applicant shows promise considering they live in an unincorporated area we are also focusing on, and they bring a different perspective since their profession seems to be distributing food to community members. Also, they seem very passionate about uplifting unrepresented community members' voices I believe the applicant would be a good addition.
Alfredo Angulo Castro	6	Interested in volunteering on clean air efforts; lives in North Richmond.
Average Score	7	

Oscar Garcia

Community Steering Committee Reviewer	Score	Please describe the reasons for your score
Nancy Aguirre	5	• Works for Chevron as an engineer • Represents missing neighborhood on committee
Kevin G Ruano Hernandez	3	Though the applicant does show some potential in some areas, it is a big conflict that this candidate is an engineer for a refinery that we already have a non-voting seat for. Though this applicant's experience has shown so much potential, it concerns me to have another Chevron employee on the committee.
Alfredo Angulo Castro	4	Lives and works in Study Area. Longtime resident involved with many local community organizations. They do fit some of the criteria the CSC highlighted (Latinx, from under-represented part of Study Area). Possible conflict of interest seeing as they are an employee of Chevron and would serve as a voting member.
Average Score	4	

Rae Jones

Community Steering Committee Reviewer	Score	Please describe the reasons for your score
Nancy Aguirre	2	Not enough information to give an informed score
Kevin G Ruano Hernandez	0	Not enough information.
Alfredo Angulo Castro	0	incomplete application.
Average Score	.7	

Simren Sandhu

Community Steering Committee Reviewer	Score	Please describe the reasons for your score
Nancy Aguirre	8	• Diverse: Asian voice missing on our committee • Youth representative • Represents San Pablo • Represents the people impacted in area of study
Kevin G Ruano Hernandez	9	The candidate is a young, Asian, woman who attends a local high school and is an activist with one of the biggest environmental justice organizations in the Bay Area and she holds a decision-making power position within CA Youth Vs Big Oil, which expands all over California. This applicant shows great potential and would be a good asset from the youth perspective.
Alfredo Angulo Castro	8	Lives and works in Study Area; young person very involved in local community organizations; Presents understanding of the intersection between climate change and air quality concerns; fits some of the criteria highlighted by CSC (youth; more Asian representation; San Pablo representation).
Average Score	8.3	

Susan Nishizaka

Community Steering Committee Reviewer	Score	Please describe the reasons for your score
Nancy Aguirre	2	Not enough information to give an informed score
Kevin G Ruano Hernandez	0	Insignificant information.
Alfredo Angulo Castro	0	Incomplete application.
Average Score	.7	

Troy Almeida

Community Steering Committee Reviewer	Score	Please describe the reasons for your score
Nancy Aguirre	7	• Nurse • Representative from other neighborhoods • Diverse: person of color, voice needed from our community/commitee
Kevin G Ruano Hernandez	3	Resident of El Sobrante with experience in health care, though the application is pretty empty.
Alfredo Angulo Castro	4	employed as a nurse for SFGH and claims to have witnessed the effects of poor air quality but stated that they are not being affected by air pollution. Also, being interested in this committee isn't essentially the criteria for becoming a member.
Average Score	4.7	

Whitney Richardson

Community Steering Committee Reviewer	Score	Please describe the reasons for your score
Nancy Aguirre	5	• Analyst for state of CA • Represents neighborhood impacted
Kevin G Ruano Hernandez	0	The applicant provided insignificant information about themselves.
Alfredo Angulo Castro	1	incomplete application.
Average Score	2	

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairpersons Davina Hurt and Tyrone Jue, and Members of the Community Equity, Health and Justice Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: November 23, 2021

Re: Update on the Office of Diversity, Equity & Inclusion and Efforts to Advance Equity

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

The Office of Diversity, Equity & Inclusion (DE&I)'s strategy seeks to build internal capacity by continuing to train Air District staff in racial equity and advancing equity in the development of Air District programs and policies. This strategy seeks to embed equity initiatives in Air District work. The Air District is also simultaneously committed to continuing to recruit and retain a diverse, highly skilled workforce and to build an inclusive, supportive culture.

The work of the Air District benefits from diverse perspectives, talents, and life experiences to solve complex technical air quality issues. Diversity and inclusion help attract and retain an extraordinary workforce and to fully engage and utilize the talents and backgrounds of our employees and the communities we serve. In addition, commitment to these values allows the Air District to create and maintain a work environment that is professionally supportive, intellectually stimulating, fully respectful of diverse ideas, and allows engagement with our stakeholders to be rich and transparent.

The Community Equity, Health and Justice Committee will receive periodic updates on programs, initiatives, policy updates and activities from the Office of DE&I.

DISCUSSION

The Office of DE&I will provide an update on current efforts, activities, and programming underway to foster equity and inclusion. Items discussed will include:

- the strategic approach to normalize, organize and operationalize diversity, equity, and inclusion initiatives;
- the "If Beale Street Could Talk" series where employees are provided a platform and outlet to discuss events that impact their communities;
- the Air District's Equity Resource Team's work;
- the newly formed Community Advisory Council members' role as related to the Community Equity, Health and Justice Committee's Community Perspectives;

- staff and Board of Directors equity related trainings, and;
- updated employee demographic data by race/ethnicity and gender, including 5-year trends

The Air District continues efforts to lead by example locally, regionally, and nationally as related to diversity, equity, and inclusion practices, policies, and procedures.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Tim Williams
Reviewed by: Veronica Eady

AGENDA: 15.1

COMMITTEE CHAIR SUMMARY REPORT OF THE MOBILE SOURCE AND CLIMATE IMPACTS COMMITTEE

(Co-Chairs: David Canepa; Katie Rice)

The Mobile Source and Climate Impacts Committee met on Monday, December 6, 2021, and approved the minutes of October 28, 2021. This meeting was conducted under procedures authorized by Assembly Bill 361. Members of the Committee participated by teleconference.

The Committee reviewed and discussed the staff presentation *Projects and Contracts with Proposed Awards Over $100,000.* The Committee recommends the Board:

1. Approve recommended projects with proposed grant awards over $100,000 as shown in Attachment 1; and
2. Authorize the Executive Officer/APCO to enter into all necessary agreements with applicants for the recommended projects.

The Committee then reviewed and discussed the staff presentation *Report on Transportation Fund for Clean Air Projects Expenditures and Effectiveness for Fiscal Year Ending 2021.*

The Committee then reviewed and discussed the staff presentation *Transportation Fund for Clean Air (TFCA) Program Regional Fund Projects Audit #22 Results.*

The next meeting of the Mobile Source and Climate Impacts Committee will be held on Thursday, January 27, 2022, at 9:30 a.m. via webcast, pursuant to procedures in accordance with Assembly Bill 361. I move that the Board approves the Committee's recommended actions. This concludes the Chair Report of the Mobile Source and Climate Impacts Committee.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Cindy Chavez and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: December 6, 2021

Re: Report of the Mobile Source and Climate Impacts Committee Meeting of December 6, 2021

RECOMMENDED ACTIONS

The Mobile Source and Climate Impacts Committee (Committee) recommends Board of Directors (Board) approval of the following:

A) Projects and Contracts with Proposed Grant Awards Over $100,000;

1) Approve recommended projects with proposed grant awards over $100,000 as shown in Attachment 1; and

2) Authorize the Executive Officer/APCO to enter into all necessary agreements with applicants for the recommended projects.

B) Report on Transportation Fund for Clean Air Projects Expenditures and Effectiveness for Fiscal Year Ending 2021; and

1) None; receive and file.

C) Transportation Fund for Clean Air Program Regional Fund Projects - Audit #22 Results.

1) None; receive and file.

BACKGROUND

The Committee met on Monday, December 6, 2021, and received the following reports:

A) Projects and Contracts with Proposed Grant Awards Over $100,000;

B) Report on Transportation Fund for Clean Air Projects Expenditures and Effectiveness for Fiscal Year Ending 2021; and

C) Transportation Fund for Clean Air Program Regional Fund Projects - Audit #22 Results.

BUDGET CONSIDERATION/FINANCIAL IMPACT

A) None. The Air District distributes the CMP, MSIF, CAPP Program, FARMER, and TFCA funding to project sponsors on a reimbursement basis. Funding for administrative costs is provided by each funding source;

B) None. The Air District distributes TFCA monies as "pass-through" funds to public and nonpublic entities. Administrative costs for project staff are provided by the Air District's TFCA funding; and

C) None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Vanessa Johnson
Reviewed by: Justine Buenaflor

Attachment 15.2A: 12/06/2021 – Mobile Source and Climate Impacts Committee Meeting Agenda #3
Attachment 15.2B: 12/06/2021 – Mobile Source and Climate Impacts Committee Meeting Agenda #4
Attachment 15.2C: 12/06/2021 – Mobile Source and Climate Impacts Committee Meeting Agenda #5

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairpersons David Canepa and Katie Rice, and Members of the Mobile Source and Climate Impacts Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: December 2, 2021

Re: Projects and Contracts with Proposed Grant Awards Over $100,000

RECOMMENDED ACTIONS

Recommend Board of Directors:

1. Approve recommended projects with proposed grant awards over $100,000 as shown in Attachment 1; and

2. Authorize the Executive Officer/APCO to enter into all necessary agreements with applicants for the recommended projects.

BACKGROUND

The Bay Area Air Quality Management District (Air District) has participated in the Carl Moyer Program (CMP), in cooperation with the California Air Resources Board (CARB), since the program began in fiscal year 1998-1999. The CMP provides grants to public and private entities to reduce emissions of nitrogen oxides (NOx), reactive organic gases (ROG), and particulate matter (PM) from existing heavy-duty engines by either replacing or retrofitting them. Eligible heavy-duty diesel engine applications include on-road trucks and buses, off-road industrial, construction, and agricultural equipment, marine vessels, locomotives, and stationary agricultural pump engines. Since 2018, this funding may also be used to incentivize the installation of infrastructure that will support the deployment of new zero-emissions vehicles and equipment.

Assembly Bill (AB) 923 (Firebaugh), enacted in 2004 (codified as Health and Safety Code (HSC) Section 44225), authorized local air districts to increase their motor vehicle registration surcharge up to an additional $2 per vehicle. The revenues from the additional $2 surcharge are deposited in the Air District's Mobile Source Incentive Fund (MSIF). AB 923 stipulates that air districts may use the revenues generated by the additional $2 surcharge for projects eligible under the CMP.

On January 20, 2021, the Board of Directors (Board) authorized the Air District's participation in Year 23 of the CMP and authorized the Executive Officer/APCO to execute grant agreements and amendments for projects funded with CMP funds or MSIF revenues with individual grant award amounts up to $100,000.

In 2017, AB 617 directed the CARB, in conjunction with local air districts to establish the Community Air Protection Program (CAPP). AB 617 provides a new community-focused action framework to improve air quality and reduce exposure to criteria air pollutants and toxic air contaminants in communities most impacted by air pollution. AB 617 includes a variety of strategies to address air quality issues in impacted communities, including community-level monitoring, uniform emission reporting across the State, stronger regulation of pollution sources, and incentives for reducing air pollution and public health impacts from mobile and stationary sources. Funding for incentives to support AB 617 communities was approved by the California Legislature beginning in fiscal year ending (FYE) 2018. Funding for the CAPP comes from the State's Greenhouse Gas Reduction Fund (GGRF), which is used to reduce criteria pollutants, toxic air contaminants, and greenhouse gases.

In May 2020, the Governor issued a revised budget that authorized up to $200 million for a third cycle of CAPP incentive funding. On June 17, 2020, the Board authorized the Air District to accept, obligate, and expend up to $40 million in year-3 CAPP. CAPP funds are primarily distributed through the Air District's Community Health Protection (CHP) Grant Program to implement projects eligible under the CMP and optionally on-road truck replacements under the Proposition 1B Goods Movement Emission Reduction Program. Staff has also begun working with CARB to expand eligibility to include stationary source projects and projects that have been identified and prioritized by communities with a Community Emissions Reduction Program, pursuant to HSC Section 44391.2.

In February 2018, CARB developed the Funding Agricultural Replacement Measures for Emission Reductions (FARMER) Program Guidelines that outline requirements for eligible equipment, i.e., agricultural harvesting equipment, heavy-duty trucks, agricultural pump engines, tractors, and other equipment used in agricultural operations. On October 21, 2019, CARB's Executive Officer approved an update to the FARMER Program Guidelines to include eligibility criteria for demonstration projects. The 2020 California State Budget appropriated $65 million in Fiscal Year 2019-20 GGRF funds to the CARB for the continued reduction of criteria, toxic, and greenhouse gas emissions from the agricultural sector through the FARMER Program. On November 20, 2019, the Board authorized the Air District's participation in the current cycle of the FARMER program.

In 1991, the California State Legislature authorized the 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 and requirements for the Transportation Fund for Clean Air (TFCA) are set forth in the HSC Sections 44241 and 44242. Sixty percent of TFCA funds are awarded by the Air District to eligible projects and programs implemented directly by the Air District (e.g., Spare the Air program) and to a program referred to as the Regional Fund. Each year, the Board allocates funding and adopts policies and evaluation criteria that govern the expenditure of TFCA monies. The remaining forty percent of TFCA funds are passed through to the designated County Program Manager in each of the nine counties within the Air District's jurisdiction that in turn award TFCA funds to eligible projects within their communities.

On April 7, 2021, the Board authorized funding allocations for use of the sixty percent of the TFCA revenue in FYE 2022, cost-effectiveness limits for Air District-sponsored FYE 2022 programs, and the Executive Officer/APCO to execute grant agreements and amendments for projects with individual grant award amounts up to $100,000. On June 16, 2021, the Board adopted policies and evaluation criteria for the FYE 2022 Regional Fund program.

Projects with grant award amounts over $100,000 are brought to the Mobile Source and Climate Impacts Committee for consideration at least on a quarterly basis. Staff reviews and evaluates grant applications based upon the respective governing policies and guidelines established by the CARB, the Board, and other funding agencies/entities. Along with recommendations for projects and grant awards over $100,000, staff also updates the Committee on the status of incentive funding for the current fiscal year, including total funding awarded, incentive fund balance available for award, funds allocated by county and by equipment category type, and percentages of funding benefitting impacted and low-income communities. The reported emissions reduction benefits to counties and impacted communities are based on information provided by each applicant.

DISCUSSION

Carl Moyer Program and Community Air Protection Program:

For the FYE 2022, the Air District had approximately $46 million available in CMP, MSIF, CAPP, and FARMER funds for eligible projects, including prior year funds. This total may change as additional revenue are awarded to the Air District. The Air District accepts project applications on a rolling basis and evaluates them on a first-come, first-served basis.

As of November 4, 2021, the Air District has awarded or evaluated 47 project applications. Of the new applications that were evaluated between September 28, 2021 and November 4, 2021, two eligible projects have proposed grant awards over $100,000. One marine project will replace two engines with cleaner diesel engines on a charter fishing vessel. One school bus project will replace three diesel buses with zero emission electric buses and install supporting infrastructure and will be co-funded by TFCA, with all emissions reductions being credited to the CMP/MSIF/CAPP as required by the CMP guidelines. These projects will reduce over 1.5 tons of NOx, ROG, and PM per year. Staff recommends the allocation of $1,890,616 for these projects from a combination of CMP, FARMER, CAPP, and MSIF revenues, and a portion from TFCA to co-fund the school bus project. Attachment 1, Table 1, provides additional information on these projects.

Attachment 2 lists all of the eligible projects that have been awarded by the Air District between July 1, 2021, and November 4, 2021, and includes information about equipment category, award amounts, estimated emissions reductions, county location, and whether the project benefits Air District designated Community Air Risk Evaluation (CARE) areas or disadvantaged (Senate Bill

(SB) 535) and/or low-income (AB 1550) communities. To date, approximately 87% of the funds[1] have been awarded or allocated to low-income residents or to projects that reduce emissions CARE areas, disadvantaged SB 535 communities, and/or low-income AB 1550 communities. This percentage will change over time as the remaining funds are awarded later in the fiscal year and as more complete information about the location of projects and program participants becomes available.

Transportation Fund for Clean Air Program:

For the FYE 2022, the Air District had approximately $29.39 million in TFCA monies available for eligible projects and programs consisting of new and prior-year revenues. The Air District accepts project applications for certain project categories on a rolling basis and evaluates them on a first-come, first-served basis. There was one project evaluated between September 28, 2021, and November 4, 2021, with a proposed grant award over $100,000. The proposed school bus project is recommended in the CMP section above for co-funding between CMP/MSIF/CAPP and TFCA revenues.

Attachment 3, Table 1, lists all eligible TFCA projects that have been evaluated and awarded between July 1, 2021, and November 4, 2021, including information about the project category, award amount, estimated emissions reduction, county location, and whether the project benefits Air District designated CARE areas or disadvantaged SB 535 and/or low-income AB 1550 communities. To date, approximately 85% of the funds[1] have been awarded or allocated to low-income residents or to projects that reduce emissions in CARE, disadvantaged SB 535 communities, and/or low-income AB 1550 communities. The percentage of projects in these communities will change over time as the remaining funds are awarded later in the fiscal year and as more complete information about the location of projects and program participants becomes available.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None. The Air District distributes the CMP, MSIF, CAPP Program, FARMER, and TFCA funding to project sponsors on a reimbursement basis. Funding for administrative costs is provided by each funding source.

[1] For the purpose of determining whether funding was awarded or allocated to low-income residents or to projects that reduce emissions in CARE, SB 535, and/or low-income AB 1550 communities, funds awarded and allocated to date does not include any amounts awarded to regional projects where all communities receive the benefit. It also does not include amounts awarded to projects where the location of the benefit is unknown until additional information becomes available.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Linda Hui, Ken Mak, Chad White, Alona Davis
Reviewed by: Minda Berbeco, Chengfeng Wang

Attachment 1: Projects with grant awards greater than $100,000 (evaluated between 9/28/21 and 11/4/21)
Attachment 2: CMP/MSIF, FARMER and CAPP projects awarded and allocated between 7/1/21 and 11/4/21
Attachment 3: TFCA projects awarded and allocated projects between 7/1/21 and 11/4/21
Attachment 4: Summary of funding awarded and allocated between 7/1/21 and 11/4/21

AGENDA 3 - ATTACHMENT 1

Table 1 - Carl Moyer Program, Mobile Source Incentive Fund, FARMER, Community Air Protection Program, and Transportation Fund for Clean Air projects with grant awards greater than $100k (Evaluated between 9/28/21 and 11/4/21)

Project #	Applicant Name	Project Category	Project Description	Proposed Contract Award	Total Project Cost	Emission Reductions (tons per year)			County
						NO_X	ROG	PM	
22SBP216	Campbell Union High School District	School Bus	Replace three diesel school buses with three electric school buses and install supporting charging infrastructure.	$ 1,510,616	$ 1,510,616	0.192	0.010	0.001	Santa Clara
22MOY217	Happy Hooker Sportfishing, LLC	Marine	Replace two Tier 0 main engines with two Tier 3 main engines	$ 380,000	$ 475,429	1.340	-0.036	0.056	Alameda, San Francisco, Contra Costa
2 Projects				**$ 1,890,616**	**$ 1,986,045**	**1.532**	**-0.026**	**0.057**	

AGENDA 3 - ATTACHMENT 2

CMP/MSIF, FARMER and Community Air Protection Program projects
(awarded and allocated between 7/1/21 and 11/4/21)

Project #	Project Category	Project Type	Number of Engines	Proposed Contract Award	Applicant Name	Emission Reductions (tons per year)			Board Approval Date	CARE Area	AB1550/ SB535 Area	County
						NOx	ROG	PM				
22SBP71***	School Bus	Equipment replacement + Infrastructure	12	$ 3,775,186	Petaluma City Schools	0.932	0.071	0.005	7/7/2021	No	Yes	Sonoma
22MOY138	Ag/ off-road	Equipment replacement	3	$ 525,300	Dave Soiland	2.035	0.165	0.097	7/7/2021	No	No	Sonoma
22SBP84***	School Bus	Equipment replacement + Infrastructure	4	$ 803,786	Rincon Valley Union School District	0.228	0.015	0.003	7/7/2021	No	Yes	Sonoma
22MOY149	Ag/ off-road	Equipment replacement	1	$ 170,500	Renati Dairy	0.522	0.068	0.048	7/7/2021	No	No	Sonoma
22MOY127	Ag/ off-road	Equipment replacement	2	$ 107,100	Napa Select Vineyard Services, Inc.	0.187	0.012	0.011	7/7/2021	No	No	Napa
22MOY142	Ag/ off-road	Equipment replacement	2	$ 105,500	Cobb Creek Holdings, LLC DBA CCH Ag Services	0.205	0.034	0.021	7/7/2021	No	No	Napa
22MOY135	Marine	Engine replacement	1	$ 154,000	William E. Smith	1.831	0.018	0.069	7/7/2021	No	No	San Mateo
22SBP105	School Bus	Equipment replacement + Infrastructure	4	$ 1,731,969	Fremont Unified School District	0.414	0.036	0.018	7/7/2021	No	Yes	Alameda
22MOY169	Ag/ off-road	Equipment replacement	2	$ 132,260	Kenzo Estate, Inc.	0.223	0.020	0.015	7/7/2021	No	No	Napa
22SBP40***	School Bus	Equipment replacement + Infrastructure	5	$ 889,832	Franklin-McKinley School District	0.250	0.015	0.003	7/7/2021	Yes	Yes	Santa Clara
22MOY158	Marine	Engine replacement	1	$ 174,000	Laurence J Collins	0.790	0.018	0.028	7/7/2021	No	No	San Francisco
2102-16395	LD Infrastructure	Charge!	--	$ 21,000	The Millennium Tower Association	0.007	0.004	0.000	7/7/2021	Yes	No	San Francisco
2103-17230	LD Infrastructure	Charge!	--	$ 64,000	REEF Energy CA Operations LLC	0.098	0.058	0.002	7/7/2021	Yes	Yes	San Francisco
2103-17359	LD Infrastructure	Charge!	--	$ 48,000	The Shores at Marina Bay Community Association	0.005	0.003	0.000	7/7/2021	Yes	Yes	Contra Costa
2103-17527	LD Infrastructure	Charge!	--	$ 24,000	EVmatch, Inc.	0.003	0.002	0.000	7/7/2021	Yes	Yes	Alameda
2103-17603	LD Infrastructure	Charge!	--	$ 32,000	Bollinger Crest Apartment Investors, LP	0.011	0.006	0.000	7/7/2021	No	No	Alameda
2103-17638	LD Infrastructure	Charge!	--	$ 48,000	Intertie, Incorporated	0.017	0.010	0.000	7/7/2021	Yes	Yes	San Francisco
22MOY130	On-road	Equipment replacement	1	$ 25,000	Min Jian Huang (jianhuang)	0.841	0.070	0.000	APCO	Yes	Yes	Alameda
22MOY151	Ag/ off-road	Equipment replacement	2	$ 86,000	Hardin Vineyard Management LLC	0.257	0.055	0.023	APCO	No	No	Napa
22MOY124	On-road	Equipment replacement	1	$ 25,000	Kulwant Khera (kskhera)	0.773	0.065	0.000	APCO	Yes	Yes	Alameda
22MOY78	Ag/ off-road	Equipment replacement	1	$ 31,642	Cortina Vineyard Management	0.047	0.011	0.008	APCO	Yes	Yes	Napa
22MOY143	Ag/ off-road	Equipment replacement	1	$ 120,800	Kabeela Inc.	0.304	0.022	0.015	10/6/2021	No	Yes	Santa Clara
22MOY131	On-road	Equipment replacement	1	$ 25,000	Karanbir Singh (karanbirsg)	0.820	0.690	0.000	APCO	No	No	Contra Costa
22MOY166	Ag/ off-road	Equipment replacement	2	$ 96,400	Stone Bridge Cellars Inc.	0.166	0.009	0.009	APCO	No	No	Napa
22MOY174	On-road	Equipment replacement	1	$ 25,000	Can Yuan Chen (canchen)	1.008	0.085	0.000	APCO	Yes	Yes	Alameda

AGENDA 3 - ATTACHMENT 2

CMP/MSIF, FARMER and Community Air Protection Program projects
(awarded and allocated between 7/1/21 and 11/4/21)

Project #	Project Category	Project Type	Number of Engines	Proposed Contract Award	Applicant Name	Emission Reductions (tons per year)			Board Approval Date	CARE Area	AB1550/ SB535 Area	County
						NOx	ROG	PM				
22MOY92	Ag/ off-road	Equipment replacement	1	$ 29,550	Paul P. Bianchi, Inc	0.025	0.023	0.007	APCO	No	No	Sonoma
22SBP52	School Bus	Equipment replacement	3	$ 435,306	Pittsburg Unified School District	0.290	0.022	0.000	10/6/2021	Yes	Yes	Contra Costa
22MOY185	Ag/ off-road	Equipment replacement	1	$ 67,100	Domenico J. Carinalli, Jr.	0.156	0.010	0.009	APCO	No	No	Sonoma
22MOY99	Ag/ off-road	Equipment replacement	1	$ 41,100	Daylight Vineyard Management, Inc.	0.062	0.005	0.007	APCO	No	No	Sonoma
22MOY179	Marine	Engine replacement	1	$ 72,000	Kyle Dryer dba Diamond Sportfishing	0.705	0.009	0.028	APCO	Yes	No	Alameda/Contra Costa/San Francisco
22MOY183	Marine	Engine Replacement	2	$ 172,500	Joseph Mantua	0.661	0.028	0.028	10/6/2021	No	No	Marin/San Maeto/San Francisco/Sonoma
22MOY140	Marine	Engine Replacement	1	$ 72,000	Mike Carpenter	0.249	0.008	0.010	APCO	No	No	Marin/San Francisco/Sonoma
22MOY22	Ag/ off-road	Equipment replacement	2	$ 57,100	Joseph Pinheiro	0.047	0.018	0.010	APCO	No	No	Sonoma
22MOY160	Marine	Engine replacement	4	$ 3,529,000	Baydelta Navigation LTD	30.665	2.726	1.021	10/6/2021	Yes	Yes	San Francisco, Alameda, Contra Costa, Marin, Solano
21SBP98*	School Bus	Equipment replacement + Infrastructure	--	$ 242,828	Palo Alto Unified School District	--	--	--	10/6/2021	Yes	Yes	Santa Clara
22SBP14**	School Bus	Equipment replacement + Infrastructure	--	$ 95,327	Milpitas Unified School District	--	--	--	10/6/2021	Yes	Yes	Santa Clara
22MOY128	On-road	Equipment replacement	1	$ 15,000	Aman Khan	0.420	0.035	0.000	APCO	Yes	Yes	Alameda
22MOY187	Ag/ off-road	Equipment replacement	1	$ 30,100	Dierke's Enterprises	0.017	0.015	0.004	APCO	No	No	Sonoma
22MOY190	Ag/ off-road	Equipment replacement	2	$ 91,170	Anderson's Conn Valley Winery, Inc.	0.108	0.034	0.015	APCO	No	No	Napa
22MOY170	Off-road	Equipment replacement	1	$ 106,000	Argent Materials INC	0.814	0.041	0.021	11/172021	Yes	Yes	Alameda
22MOY209	Ag/ off-road	Equipment replacement	1	$ 192,600	Global Mushrooms LLC.	0.362	0.049	0.030	11/172021	No	Yes	Santa Clara
22MOY167	Ag/ off-road	Equipment replacement	2	$ 285,700	Ielmorini Moody Dairy	0.871	0.107	0.052	11/172021	No	Yes	Sonoma
22MOY196	Marine	Engine replacement	2	$ 256,000	A.C. Fishing Charters Inc., dba Tigerfish Sportfishing	0.576	0.000	0.031	11/172021	Yes	No	Alameda/Contra Costa/Marin/San Francisco
TBD	LD Infrastructure	Charge![§]	--	$ 2,000,000	BAAQMD	TBD[‡]	TBD[‡]	TBD[‡]	11/172021	TBD[‡]	TBD[‡]	Regional
22MOY211	Ag/ off-road	Equipment Replacement	1	$ 88,900	Pomponio Farms LLC	0.412	0.054	0.031	APCO	No	Yes	San Mateo
22SBP216***	School Bus	Equipment replacement + Infrastructure	3	$ 887,025	Campbell Union High School District	0.192	0.011	0.001	**TBD**	Yes	Yes	Santa Clara County
22MOY217	Marine	Engine replacement	2	$ 380,000	Happy Hooker Sportfishing, LLC	1.340	-0.036	0.056	**TBD**	Yes	Yes	Alameda, San Francisco, Contra Costa
	47 Projects		**79**	**$ 18,387,581**		**49.9**	**4.7**	**1.7**				

*This project award reflects an approved increase of $242,828 in CMP/MSIF/CAPP funds to allow for DC fast-charging infrastructure to be included as part of this project.This project was previously awarded $513,500.00 of TFCA funds and $323,778.00 of CMP/MSIF/CAPP funds on 3/4/20.

**The project award reflects an approved increase of $95,327 in CMP/MSIF/CAPP funds to allow for DC fast-charging infrastructure to be included as part of this project. This project was previously awarded $204,598.00 of TFCA funds and $622,556.00 of CMP/MSIF/CAPP funds on 4/7/21.

*** This project is co-funded with TFCA funds as shown on Attachment 3.

[§] Award Amount may come from either the Mobile Source Incentive Fund (MSIF) or the Transportation Fund for Clean Air (TFCA).

[‡] Funds have been allocated to these programs and project results will be determined at the end of project period.

AGENDA 3 - ATTACHMENT 3

Table 1 - TFCA projects awarded and allocated (between 7/1/21 and 11/4/21)

Project #	Project Category	Project Description	Award Amount	Applicant Name	Emission Reductions (tons per year)			Board/ APCO Approval Date	CARE Area	AB1550/ SB535 Area	County
					NO_X	ROG	PM				
2101-15735	LD Infrastructure	Install and operate 38 DC Fast chargers at 6 transportation corridor facilities in San Francisco, South San Francisco, Millbrae, Menlo Park, and San Jose.	$ 950,000	EVgo Services LLC	0.350	0.207	0.008	7/7/21	Yes	No	Multi-County
2103-17065	LD Infrastructure	Install and operate 5 Level 2 (high) dual port chargers at 1 transit parking facility in Napa.	$ 20,000	Napa Valley Transportation Authority	0.014	0.008	0.000	7/7/21	No	No	Napa
2103-17315	LD Infrastructure	Install and operate 135 Level 2 (high) single port chargers and 123 DC fast chargers at 40 destination, transportation corridor, and transit parking facilities in Vallejo, San Jose, Kenwood, Fairfield, Vacaville, Mountain View, and Santa Clara.	$ 2,999,000	EV Charging Solutions, Inc.	1.446	0.853	0.035	7/7/21	Yes	Yes	Multi-County
2103-17345	LD Infrastructure	Install and operate 2 DC Fast and 2 dual port Level 2 (high) chargers at 2 destination facilities in San Ramon.	$ 44,000	City of San Ramon	0.024	0.014	0.001	7/7/21	Yes	No	Alameda
2103-17497	LD Infrastructure	Install and operate 17 DC Fast chargers at 1 transportation corridor facility in Oakland.	$ 425,000	East Bay Community Energy Authority	0.157	0.093	0.004	7/7/21	Yes	Yes	Alameda
2103-17499	LD Infrastructure	Install and operate 8 Level 2 (high) dual port chargers at 1 multi-unit dwelling facility in Alameda.	$ 64,000	Alameda Multifamily Owner LLC	0.023	0.013	0.001	7/7/21	Yes	No	Alameda
2103-17520	LD Infrastructure	Install and operate 5 Level 2 (high) dual port and 2 Level 2 (high) single port chargers at 2 destination facilities in Dublin.	$ 26,000	City of Dublin	0.019	0.011	0.000	7/7/21	No	No	Alameda
2103-17524	LD Infrastructure	Install and operate 110 Level 2 (high) single port chargers with solar and 24 Level 2 (high) single port chargers at 3 workplace and 1 destination facilities in Solano.	$ 406,000	County of Solano	0.309	0.182	0.007	7/7/21	Yes	Yes	Solano
2103-17554	LD Infrastructure	Install and operate 2 Level 2 (high) dual port chargers with solar at 1 workplace facility in Richmond.	$ 12,000	West County Wastewater District	0.006	0.003	0.000	7/7/21	Yes	Yes	Contra Costa
2103-17625	LD Infrastructure	Install and operate 11 Level 2 (high) dual port chargers at 1 multi-unit dwelling facility in Brentwood.	$ 44,000	Silvergate Brentwood, LLC	0.037	0.022	0.001	7/7/21	No	No	Contra Costa
21R05	LD Infrastructure	FYE 21 Charge! Program	$ 10,000	BAAQMD	TBD*	TBD*	TBD*	7/7/21	TBD*	TBD*	Regional
22R02	LD Vehicles	Vehicle Buy Back Program	$ 200,000	BAAQMD	N/A**	N/A**	N/A**	6/16/21	N/A	N/A	Regional
21RSB03	School Bus	Match funding for Project #22SBP71 for the replacement of 12 diesel school buses with 12 electric school buses.	$ 1,153,346	BAAQMD	N/A**	N/A**	N/A**	7/7/21	No	Yes	Sonoma
21RSB04	School Bus	Match funding for Project #22SBP84 for the replacement of 3 diesel school buses & 1 CNG school bus with 4 electric school buses.	$ 892,045	BAAQMD	N/A**	N/A**	N/A**	7/7/21	No	Yes	Sonoma
21RSB05	School Bus	Match funding for Project #22SBP40 for the replacement of 5 diesel special needs school buses with 5 electric special needs school buses.	$ 1,232,175	BAAQMD	N/A**	N/A**	N/A**	7/7/21	Yes	Yes	Santa Clara
22SBP216	School Bus	Match funding for the replacement of 3 diesel school buses with electric school buses	$ 623,591	Campbell Union High School District	N/A**	N/A**	N/A**	TBD	Yes	Yes	Santa Clara
21R12	Trip Reduction	Pleasanton Connector Shuttles	$ 80,000	San Joaquin Regional Rail Commission	N/A ‡	N/A ‡	N/A ‡	6/22/21	No	No	Alameda
22R01	Trip Reduction	Enhanced Mobile Source & Commuter Benefits Enforcement	$ 150,000	BAAQMD	TBD*	TBD*	TBD*	6/16/21	N/A	N/A	Regional
22R03	Trip Reduction	Spare The Air/Intermittent Control/Flex Your Commute Programs	$ 2,290,000	BAAQMD	TBD*	TBD*	TBD*	6/16/21	N/A	N/A	Regional
Total	**19 Projects**		**$11,621,157**		**2.384**	**1.408**	**0.057**				

* Funds have been allocated to these programs and projects and results will be determined at the end of project period.
** Emission reductions are fully reported under the Carl Moyer Program to prevent double counting.
‡ Emission reductions will be reported as part of the Spare the Air program (Project #21R03).

AGENDA 3 - ATTACHMENT 4

Summary of funding awarded and allocated from the following revenue sources between 7/1/21 and 11/4/21

- Carl Moyer Program (CMP)
- Community Air Protection Program (CAPP)
- Mobile Source Incentive Fund (MSIF)
- Transportation Fund for Clean Air (TFCA)
- Funding Agricultural Replacement Measures for Emission Reductions (FARMER)

Figure 1. Status of FYE 2022 funding by source

includes funds awarded, recommended for award, and available

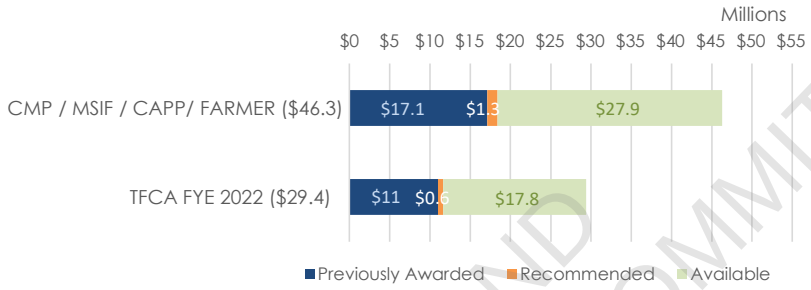


Figure 2. Funding awarded and allocated in FYE 2022 by county

includes funds awarded & recommended for award

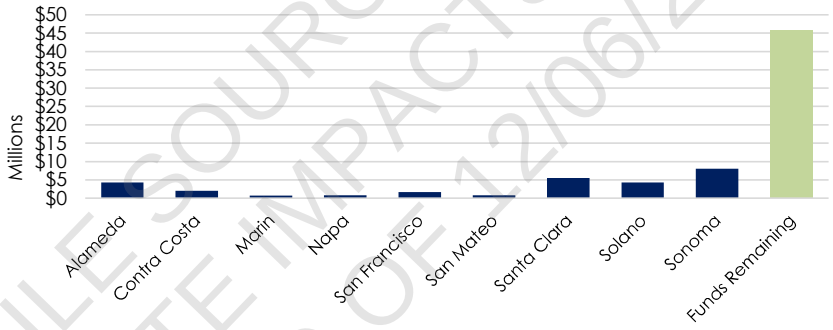
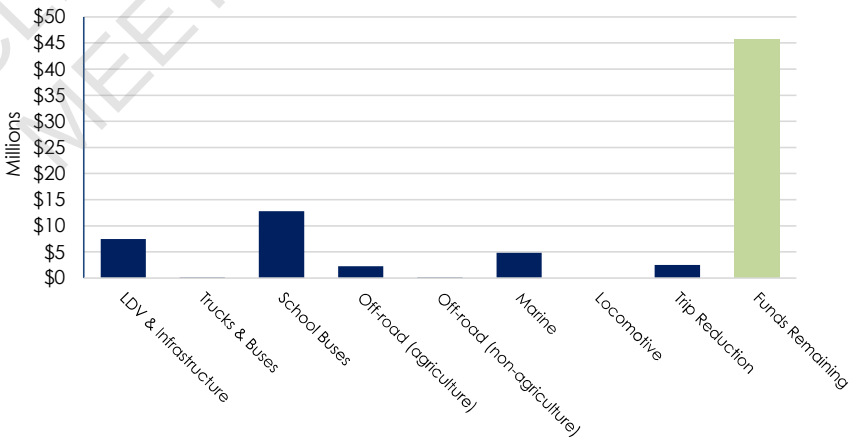


Figure 3. Funding awarded and allocated in FYE 2022 by project category

includes funds awarded & recommended for award



BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairpersons David Canepa and Katie Rice, and Members of the Mobile Source and Climate Impacts Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: December 2, 2021

Re: Report on Transportation Fund for Clean Air Projects Expenditures and Effectiveness for Fiscal Year Ending 2021

RECOMMENDED ACTION

None; receive and file.

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. Since 1992, the Air District has allocated these funds to its Transportation Fund for Clean Air (TFCA) Program to fund eligible projects and programs. 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.

Sixty percent of TFCA funds are awarded by the Air District to eligible projects and programs implemented directly by the Air District (e.g., Spare the Air and Commuter Benefits Program) and through a grant program known as the Regional Fund. The remaining 40% of TFCA funds are forwarded to a designated agency ("County Program Manager") within each Bay Area county to be distributed via the County Program Manager Fund.

HSC Section 44241 requires that the Board hold a public hearing each year to review the Air District's expenditure of TFCA funds to determine their effectiveness in improving air quality. Additionally, County Program Managers are required to hold a public hearing each year to review their expenditure of TFCA funds.

DISCUSSION

The Fiscal Year Ending (FYE) 2021 Report on Expenditures and Effectiveness of Transportation Fund for Clean Air Regional Fund Projects and Air District-Sponsored Programs, found in Attachment 1, evaluated 16 TFCA Regional Fund projects and four Air District-sponsored programs that were completed prior to June 30, 2021. The following are key findings of the FYE 2021 report:

- TFCA funds were allocated to eligible projects and programs, consistent with the legislation that authorizes the TFCA program.
- The TFCA expenditures for projects and programs totaled $5.26 million, which includes $2.55 million in Regional Fund projects, $1.74 million in Air District-sponsored programs, and $0.96 million in administrative and indirect costs.
- 54% of TFCA Regional Fund expenditures went to projects in communities identified as cumulative impact areas by the Air District's Community Air Risk Evaluation (CARE) Program.
- During their operational period, the projects and programs reduced criteria pollutant emissions by an estimated 58.54 tons, including 9.69 tons of reactive organic gases (ROG), 31.02 tons of nitrogen oxides (NOx), and 17.82 tons of particulate matter (PM_{10}) – and reduced emissions of carbon dioxide (CO_2) by over 24,000 tons.

A discussion of the expenditures, emission reductions, and cost-effectiveness of these TFCA Regional Fund projects and Air District-sponsored programs will be presented at the Committee meeting.

BUDGET CONSIDERATION / FINANCIAL IMPACT

None. The Air District distributes TFCA monies as "pass-through" funds to public and nonpublic entities. Administrative costs for project staff are provided by the Air District's TFCA funding.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Linda Hui
Reviewed by: Minda Berbeco and Ken Mak

Attachment 1: Fiscal Year Ending 2021 Report on Expenditures and Effectiveness of Transportation Fund for Clean Air Regional Fund Projects and Air District-Sponsored Programs

FISCAL YEAR ENDING (FYE) 2021
REPORT ON EXPENDITURES AND EFFECTIVENESS OF TRANSPORTATION FUND FOR CLEAN AIR (TFCA) REGIONAL FUND PROJECTS AND AIR DISTRICT-SPONSORED PROGRAMS

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

375 BEALE STREET, SUITE 600, SAN FRANCISCO, CA 94105
WWW.BAAQMD.GOV

DECEMBER 2021

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CONTENTS

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The Bay Area Air Quality Management District

The California State Legislature created the Bay Area Air Quality Management District (Air District) in 1955 as the first regional air pollution control agency in the country, recognizing that air pollution transcends political boundaries. The San Francisco Bay Area forms a regional air basin, sharing common geographical features and weather patterns, and therefore similar air pollution burdens, which cannot be addressed by counties acting on their own.

The Air District is the public agency entrusted with regulating stationary sources of air pollution in the nine counties that surround San Francisco Bay: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, southwestern Solano, and southern Sonoma counties.

Background

On-road motor vehicles, including cars, trucks, and buses, constitute the most significant source of air pollution in the San Francisco Bay Area. Vehicle emissions contribute to unhealthful levels of ozone (summertime "smog"), particulate matter, and greenhouse gases. Because of this, emission reductions from the on-road transportation sector are essential to helping the region attain State and Federal ambient air quality standards and meet greenhouse gas reduction commitments.

To protect public health, the California State Legislature enacted the California Clean Air Act in 1988. As part of the requirements, the Air District prepared and adopted the *2017 Clean Air Plan,* which includes transportation control measures, defined as any strategy "to reduce vehicle trips, vehicle use, vehicle miles traveled, vehicle idling, or traffic congestion for reducing motor vehicle emissions," and mobile source measures, which encourage the introduction of newer, cleaner motor vehicle technologies and the retirement of older, more polluting vehicles.

The Transportation Fund for Clean Air

In 1991, the California State Legislature authorized the Air District to impose a $4 surcharge on motor vehicles registered within the San Francisco Bay Area to fund projects that reduce on-road motor vehicle emissions. The Air District has allocated these funds to its Transportation Fund for Clean Air (TFCA) to fund eligible projects. 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.

Sixty percent of TFCA funds are awarded by the Air District's Board of Directors (Board) to eligible projects and programs implemented directly by the Air District (e.g., Commuter Benefits, Vehicle Buy-Back, and Spare the Air) and through a grant program known as the Regional Fund. The remaining forty percent of TFCA funds are pass-through funds to a designated agency within each Bay Area county to be distributed via the County Program Manager Fund. Each year, the Board adopts cost-effectiveness and other criteria for the evaluation and ranking of project applications for the TFCA Program.

In addition to reducing air pollution, including toxic diesel particulate matter, TFCA-funded projects have other benefits including the following:

- Conserving energy and helping to reduce emissions of carbon dioxide (CO_2);
- Reducing traffic congestion;

- Improving quality of life for residents and commuters by expanding access to services that provide first- and last-mile connections to rail, ferry, and mass transit; and
- Improving physical fitness and public safety by facilitating active modes of transportation such as walking and biking.

State legislation restricts TFCA funding to the following <u>11 categories</u> of projects:

1. Implementation of ridesharing programs
2. Clean fuel school and transit bus purchases or leases
3. Last-mile commuter connection to rail/ferry stations and airports
4. Arterial traffic management
5. Rail-bus integration and regional transit information systems
6. Demonstration of congestion pricing of highways, bridges, and public transit
7. Low-emission vehicle projects
8. A smoking-vehicle program
9. A vehicle buy-back scrappage program
10. Bicycle facility improvement projects
11. Physical improvements that support "smart growth" projects

California HSC Section 44241.5 requires the Board to hold a public hearing annually to review the expenditure of revenues received by the Air District pursuant to Section 44241 to determine their effectiveness in improving air quality. This report serves this purpose.

FYE 2021 Summary

This report summarizes the *expenditures* and *effectiveness* of the 16 Regional Fund projects and 4 Air District-sponsored programs that were completed[1] as of the end of fiscal year ending (FYE) 2021 – which was June 30, 2021 – and that were not included in previous reports. **Appendix A** lists each of the Regional Fund projects and Air District-sponsored programs that were summarized as part of this report.

[1] For the purpose of this report, staff considers a project to be "completed" when the Air District accepts and approves the project sponsor's final invoice, which documents the project sponsor's expenditure of all eligible project funds and the completion of transportation services or all initial project milestones (e.g., having procured, installed and/or placed all project-related vehicles, equipment, and infrastructure into service). Projects that involve the procurement of equipment/vehicles and construction of infrastructure typically also require continued operation of the funded equipment, vehicles, or infrastructure. These projects may continue to operate for several years after the final invoice is accepted and approved – until the operational and usage requirements are met.

Key Highlights of the Projects and Programs Included in this Report

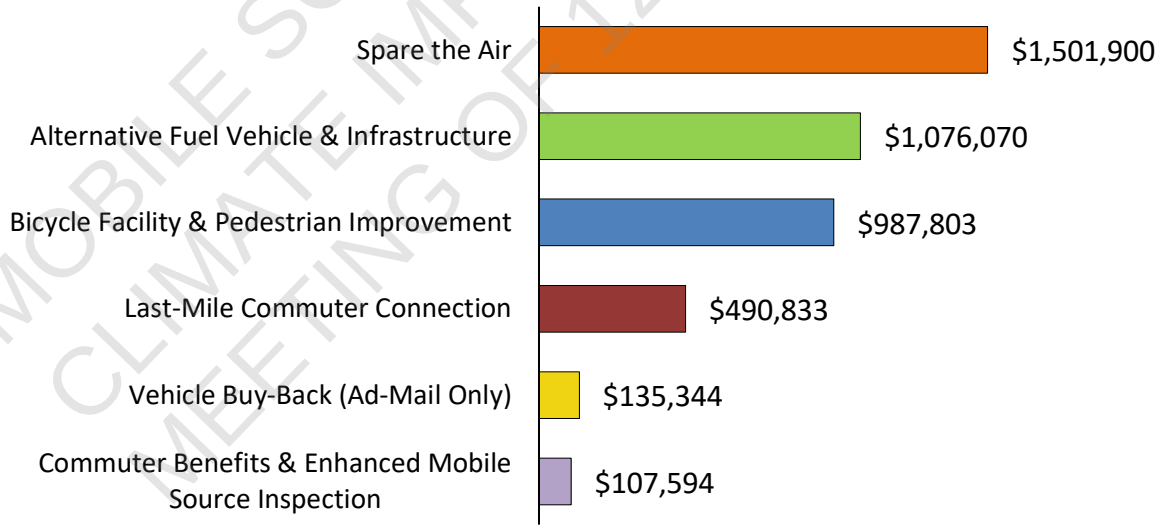
- TFCA funds were allocated to eligible projects and programs, consistent with the legislation that authorizes the TFCA program.
- The TFCA expenditures for projects and programs totaled $5.26 million. These expenditures include $2.55 million in Regional Fund projects, $1.74 million in Air District-sponsored programs, and $0.96 million in administrative and indirect costs.
- 54% of TFCA Regional Fund expenditures went to projects in communities identified as *cumulative impact areas* by the Air District's Community Air Risk Evaluation (CARE) Program.
- During their operational periods, the projects and programs reduced criteria pollutant emissions by an estimated 58.54 tons, including 9.69 tons of reactive organic gases (ROG), 31.02 tons of nitrogen oxides (NO_X), and 17.82 tons of particulate matter (PM_{10}) – and reduced emissions of carbon dioxide (CO_2), by over 24,000 tons.

Expenditures

The expenditure of these projects and programs totals approximately $5.26 million. This total includes $1.74 million for the programs administered directly by the Air District, $2.55 million in Regional Fund grants to other organizations, and $0.96 million in administrative and audit costs associated with the oversight of the TFCA program in FYE 2021.

A summary of the expenditures for these TFCA Regional Fund projects and Air District-sponsored programs is shown in **Figure 1**.

Figure 1. Summary of FYE 2021 Expenditures



EFFECTIVENESS

The cost-effectiveness of a project or program is calculated by dividing the amount of TFCA funds assigned to the project (awarded or expended) by the sum of criteria pollutant emissions (ROG, NO_x, and weighted PM_{10}) reduced by the project during its operational period. Therefore, projects with a lower value in cost-effectiveness require fewer TFCA funds to reduce one ton of criteria emissions. In other words, a lower numeric value means that the project is more cost-effective. Typically, cost-effective projects are highly utilized, involve the operation of zero-emission vehicles, are located in densely-populated areas or near activity centers or mass transit hubs, and/or are supported with high percentages of matching funds.

Projects and programs included in this report will reduce criteria pollutant emissions over their operational periods by an estimated total of 58.54 tons. This total is the sum of ozone precursors (9.69 tons of ROG and 31.02 tons of NO_x) and particulate matter (17.82 tons of PM_{10}). These projects and programs will also reduce CO_2 emissions over their operational periods by an estimated 24,000 tons.[2]

The combined weighted-average cost-effectiveness of the projects and programs reported for FYE 2021 is $66,927 per ton of criteria pollutant emissions reduced. The Board-adopted cost-effectiveness limits for these projects and programs ranged from $90,000 per ton of criteria pollutant emissions reduced to $500,000 depending on the project category and the year it was funded. Thus, the resulting combined weighted-average cost effectiveness indicates that these projects and programs are more cost-effective than the lower bound of the approved limit. Many projects continue to operate and reduce emissions even after their operational periods ended; these projects have the potential to be more cost-effective (i.e. lower cost per ton of emissions reduced) in reducing emissions than what is presented in this report.

A summary of expenditures, emission reductions, and cost-effectiveness values by program category is provided in **Table 1**.

[2] Emission reductions reported for criteria pollutants and CO_2 do not include emissions from the Vehicle Buy-Back and Enhanced Mobile Source Inspection Programs.

Table 1: Emission Reductions and Cost-Effectiveness by Program Category for Projects and Programs Completed by the End of FYE 2021

Category	# of Projects	TFCA $ Expended	% of TFCA $ Expended	Emissions Reduced (tons)[a]	% of Emissions Reduced	Weighted Cost-Effective-ness ($/ton)[b]
Bicycle Facility & Pedestrian Improvement	7	$987,803	22.97%	5.33	9.10%	$182,541
Last-Mile Commuter Connection	4	$490,833	11.42%	1.31	2.24%	$339,496
Alternative Fuel Vehicle & Infrastructure	5	$1,076,070	25.03%	26.21	44.78%	$39,526
Commuter Benefits & Enhanced Mobile Source Inspection Programs	2	$107,594	2.50%	0.23	0.39%	$435,107
Spare the Air Program	1	$1,501,900	34.93%	25.46	43.49%	$53,849
Vehicle Buy-Back Program (Ad-Mail Only)	1	$135,344	3.15%	-	-	-
Total for Projects and Programs[c]	**20**	**$4,299,543**	**100%**	**58.54**	**100%**	**$66,927**
Administration		$960,158				

(a) Combined emission reductions of ROG, NO_x, and PM_{10} over project operational period.

(b) Consistent with the current California Air Resources Board methodology to calculate cost-effectiveness for the Carl Moyer Program (CMP), PM emissions were weighted by a factor of 20 to account for their harmful impacts on human health.

(c) Totals may vary due to rounding.

The combined weighted-average cost-effectiveness of the projects and programs reported in FYE 2021 is an 81% decline from FYE 2020. The variation of combined weighted-average cost-effectiveness from year to year is primarily due to that fact that different types of projects that have different cost-effectiveness limits were completed and included in the cost-effectiveness evaluation each year. However, in FYE 2021, many of the TFCA-projects in this report have been impacted by the COVID-19, including the FYE 2021 programs, and a few FYE 2020 and 2019 projects. Given the recent impacts from shelter-in-place orders, many TFCA-funded projects experienced lower usage than originally projected. As a result, these projects had higher cost-effectiveness values (less cost-effective) than originally projected.

Three of the Regional Fund projects and one Air District-sponsored program listed in Appendix A did not meet the cost-effectiveness threshold of its respective program at the conclusion of its operational period. Below is a discussion on the performance of these projects and programs, which resulted in a higher than expected cost-effectiveness value.

Project Sponsor: Richmond Community Redevelopment Agency	**Project #:** 08R74
Project Description: Richmond Transit Village Pedestrian Improvements	
Estimated Weighted Cost-Effectiveness: $17,628	**Actual Weighted Cost-Effectiveness:** $1,358,852
Discussion: The cost-effectiveness limit for FYE 2008 Regional Fund projects was $90,000 per ton of emissions reductions. The project was evaluated based on pedestrian and bicyclist counts from 2009 and 2017. On average the number of pedestrians and bicyclists using the improved intersections increased after the project was implemented. However, the project did not increase the usage of the intersection as much as initially estimated. This lower usage may be in part due to when the post-construction study was	

completed, which was a few months after the construction was completed. This short time period between project completion and the study may not completely reflect the emissions benefits that could be achieved over the project useful life. Staff is exploring options to refine and improve the methodology that is used to evaluate this project type to better reflect the realized cost-effectiveness of these projects.

Project Sponsor: County of Alameda	**Project #:** 19R13
Project Description: Juvenile Justice Center/Fairmont Hospital Shuttle	
Estimated Weighted Cost-Effectiveness: $249,426	**Actual Weighted Cost-Effectiveness:** $17,012,163
Discussion: The cost-effectiveness limit in FYE 2019 for this project category (*Existing Shuttle/Feeder Bus Services*) was $250,000 per ton of emissions reductions. The project was originally awarded using past survey and ridership data. The completed project was closed out and evaluated using current survey and ridership data. One key difference between the ridership survey results was that a lower percentage of riders had switched from a single-occupancy vehicle commute to the bus service than in previous years. In general, attributing emission reductions for existing services is difficult since the cost of attracting new ridership is higher for existing services. This may be in part due to the fact that existing bus ridership numbers are higher and those who would've changed their travel behavior may have already done so in previous years.	

Project Sponsor: Peninsula Corridor Joint Powers Board	**Project #:** 20R10
Project Description: Caltrain Shuttles	
Estimated Weighted Cost-Effectiveness: $47,132	**Actual Weighted Cost-Effectiveness:** $412,381
Discussion: The cost-effectiveness limit in FYE 2020 for this project category (*Existing Shuttle/Feeder Bus Services*) was $250,000 per ton of emissions reductions. The project operational period was for calendar year 2020. Due to the pandemic, many project sponsors are facing unanticipated challenges and impacts. For this project, starting in mid-March when shelter-in-place orders were in effect, transit ridership dropped and the project sponsor reduced service due to demand. Despite the pandemic, four of the nine routes continued service through the end of the year. The completed project was closed out and evaluated using the number of riders who switched from a single-occupancy vehicle commute to the Caltrain shuttle. This was lower than originally projected, resulting in the project not being cost effective.	

Project Sponsor: Bay Area Air Quality Management District	**Project #:** 21R01a
Project Description: FYE 2021 Commuter Benefits	
Estimated Weighted Cost-Effectiveness: N/A	**Actual Weighted Cost-Effectiveness:** $390,049

Discussion: The cost-effectiveness limit in FYE 2021 for this project category (*Commuter Benefits*) was $90,000 per ton of emissions reductions. Since TFCA dollars can only be used to support projects that will result in surplus emission reductions, the methodology used to evaluate cost-effectiveness for this program includes emissions reduction only from organizations that have voluntarily provided commuter benefits to their employees. Employers with 50 or more employees are required to provide commuter benefits to their employees and therefore their emission reductions are not included in this evaluation.

During the pandemic and shelter-in-place orders, many small businesses closed. Additionally, non-essential workers were required to work from home due to the pandemic. 87 employers were voluntarily offering commuter benefits to their employees compared to 561 employers pre-pandemic, resulting in a not cost-effective program. Note that enforcement action was suspended since March 2020 and reactivation is anticipated in early 2022. Because impacts will continue, on April 7, 2021, the Board approved a temporary increase to the cost effectiveness limit for this program starting in FYE 2022.

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APPENDIX A: TFCA REGIONAL FUND PROJECTS AND AIR DISTRICT-SPONSORED PROGRAMS

Project #	Project Sponsor	Project Description	Weighted Cost-Effectiveness (per ton)	TFCA Funds Expended
08R74	Successor Agency to the Richmond Community Redevelopment Agency	Richmond Transit Village Pedestrian Improvements	$1,358,852[a]	$451,406
16BR022	Gunn High School	Install 92 bike racks for Gunn High School (188 spaces) in Palo Alto	$48,369	$11,280
16HDG002	Alameda-Contra Costa Transit District (AC Transit)	Replace 10 2002 buses with electric fuel cell hydrogen buses	$37,211	$1,000,000
17EV008	Fremont Lakeview Investment LLC	Install 3 single port Level 2 (high) charging stations & 8 kW solar array in Fremont	$433,135	$17,000
17R18	City of Daly City	Install 0.31 miles of Class II and 10.48 miles of Class III bikeways in Daly City	$57,503	$125,117
17R27	City of Richmond	Install 5 electronic bicycle lockers (20 spaces) in Richmond	$242,901	$40,000
17R29	San Francisco Municipal Transportation Agency	Install 5 electronic bicycle lockers (20 spaces) at a Caltrain station in San Francisco	$212,409	$50,000
19EV007	City of Concord	Install 2 dual-port & 1 single-port level 2 (high) charging stations at 2 destination facilities in Concord	$234,842	$11,000
19EV022	W-K Arastradero, LLC	Install 2 single-port Level 2 (high) charging stations at a multi-dwelling unit facility in Palo Alto	$491,809	$14,000
19EV042	Cool Earth Solar Development LLC	Install 10 dual-port level 2 (high) charging stations at 5 workplace and 1 multi-dwelling unit facilities in Sunnyvale, Fairfield, Pleasanton, and San Ramon	$144,615	$34,070
19R13	County of Alameda	Juvenile Justice Center/Fairmont Hospital Shuttle	$17,012,163[a]	$23,480

Project #	Project Sponsor	Project Description	Weighted Cost-Effectiveness (per ton)	TFCA Funds Expended
19R14	Presidio Trust	PresidiGo Downtown Shuttle	$241,823	$100,000
20R08	San Joaquin Regional Rail Commission	Pleasanton Connector Shuttles	$151,836	$33,658
20R10	Peninsula Corridor Joint Powers Board	Caltrain Shuttles	$412,381[a]	$333,695
20R17	Peninsula Corridor Joint Powers Board	Install 80 secure bike locker spaces in Belmont, Redwood City, Mountain View, Lawrence, and San Jose Diridon Caltrain Stations	$118,566	$200,000
20R23	Bay Area Rapid Transit District (BART)	Install electronic bike lockers at El Cerrito (24 spaces) and San Leandro (20 spaces) BART Stations	$188,592	$110,000
16 Regional Fund Projects			**Subtotal of Regional Fund Projects:**	**$2,554,705**

Project #	Project Sponsor	Project Description	Weighted Cost-Effectiveness (per ton)	TFCA Funds Expended
21R01a	BAAQMD	FYE 2021 Commuter Benefits	$390,049[a,c]	$96,452
21R01b	BAAQMD	FYE 2021 Enhanced Mobile Source Inspection	not determined[d]	$11,142
21R02	BAAQMD	FYE 2021 Admail for Vehicle Buy-Back (TFCA portion)	N/A	$135,344[b]
21R03	BAAQMD	FYE 2021 Spare the Air	$53,849[c]	$1,501,900

4 Air District-Sponsored Programs			**Subtotal of Air District-Sponsored Programs:**	**$1,744,837**
21R00	BAAQMD	FYE 2021 Administration[e]	N/A	$960,158
		Subtotal of Administration Expenditures for Regional Fund Projects and Air District-Sponsored Programs:		**$960,158**
			Grant Total:	$5,259,701

(a) Project or program did not meet the cost-effectiveness limit that was adopted by the Board for the year that the project was approved.
(b) Total FYE 2021 program cost (which includes funds from CMP, MSIF, and TFCA) is $3,367,604.68.
(c) Assumed that 55% of the pre-pandemic commuters were still commuting during the pandemic due to essential work.
(d) Cost-effectiveness cannot be determined due to a small sample size of 2 survey responses during the pandemic.
(e) Sixty percent of the total administrative and audit costs expended in FYE 2021.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairpersons David Canepa and Katie Rice, and Members of the Mobile Source and Climate Impacts Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: December 2, 2021

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Re: Transportation Fund for Clean Air Program Regional Fund Projects - Audit #22 Results

RECOMMENDED ACTION

None; receive and file.

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. Since 1992, the Air District has allocated these funds to its Transportation Fund for Clean Air (TFCA) Program to fund eligible projects and programs. 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.

Sixty percent of TFCA funds are awarded by the Air District to eligible projects and programs implemented directly by the Air District (e.g., Spare the Air) and through a grant program known as the Regional Fund. The remaining 40% of TFCA funds are forwarded to the designated agency within each Bay Area county to be distributed via the County Program Manager Fund.

HSC Section 44242 requires that the Air District conduct an audit of projects and programs funded with TFCA monies, at least once every two years. The Air District typically conducts an audit of Regional Fund projects and Air District-Sponsored programs annually and County Program Manager Fund projects biennially. On October 4, 2017, the Air District's Board of Directors (Board) approved the award of a contract to Simpson & Simpson, LLP for audit services, including a financial and compliance review of TFCA-funded projects and programs.

DISCUSSION

The *Audit Summary Report*, included as Attachment 1, summarizes the results of Audit #22 conducted by Simpson & Simpson covering Regional Fund and Air District-sponsored projects completed prior to June 30, 2020 and a review of Air District's administrative expense of TFCA funds incurred between July 1, 2019 and June 30, 2020. For the purpose of TFCA audits, projects are considered "completed" after the Air District has approved a project sponsor's final invoice, which documents the project sponsor's expenditure of all eligible project funds and the completion of transportation services or all initial project milestones. A list of these projects is available in Appendix B of the attached report. **No audit findings were identified during this audit.**

Audit field work was conducted by Simpson & Simpson, LLP during the months of April 2021 through September 2021. Following the completion of field work, Simpson & Simpson, LLP issued a draft audit report to each of the project sponsors and offered an opportunity to those with any preliminary findings to provide a management response.

In addition to conducting the financial and compliance audits, Simpson & Simpson, LLP also performed a review of Agreed-Upon Procedures (AUP) to verify project sponsors' compliance with other aspects of the TFCA Funding Agreement, including that

1. Expenditures are properly supported;
2. Administrative expenses are appropriately documented;
3. Use of an indirect cost rate is consistent with the Air District Guidelines;
4. Appropriate resolutions authorizing the grant application are adopted or, where applicable, an authorizing letter of commitment is included;
5. Required reports are submitted on time and contained all information required;
6. The Air District is acknowledged as a project funder;
7. Matching Funds requirements are met or exceeded.

The AUP results are currently being reviewed internally and will be used by staff to further improve its administration of the TFCA program.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Sara Lanning
Reviewed by: Karen Schkolnick, Minda Berbeco and Ken Mak

Attachment 1: TFCA Audit #22 Summary Report.

12/6/2021 MOBILE SOURCE AND CLIMATE IMPACTS COMMITTEE MEETING

AGENDA ITEM #5 – ATTACHMENT 1

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

TRANSPORTATION FUND FOR CLEAN AIR PROGRAM

AUDIT NO. 22 SUMMARY REPORT

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
TRANSPORTATION FUND FOR CLEAN AIR PROGRAM

Table of Contents

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
TRANSPORTATION FUND FOR CLEAN AIR PROGRAM
Audit No. 22 Summary Report

1 – INTRODUCTION

The Bay Area Air Quality Management District (Air District) was created by the California legislature in 1955. The Air District's structure, operating procedures and authority are established by Division 26 of the California Health and Safety Code.

The Air District includes seven counties: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo and Santa Clara and portions of two other counties, Southwestern Solano and Southern Sonoma. The Air District is governed by a twenty-two-member Board of Directors that includes representatives from all of the above counties.

The Air District's jurisdiction is limited principally to policing non-vehicular sources of air pollution within the Bay Area, primarily industry pollution and burning. Any company wishing to build or modify a facility in the Bay area must first obtain a permit from the Air District to ensure that the facility complies with all applicable rules.

The Air District also acts as the program administrator for Transportation Fund for Clean Air (TFCA) funds and Mobile Source Incentive funds (MSIF) derived from Assembly Bill 434 and Assembly Bill 923 respectively. TFCA and MSIF funding comes from a $4 and $2 surcharge, respectively, on motor vehicles registered within the Air District. TFCA funding may only be used to fund eligible projects that reduce motor vehicle emissions and support the implementation of the transportation and mobile source control measures in the Clean Air Plan in place at time of award. All projects must fall within the categories listed in State Law (Health and Safety Code Section 44241).

The Health and Safety Code requires the Air District to pass-through no less than 40% of the TFCA revenues raised within a particular county, after audit and administrative costs, to that county's designated Program Manager. The remaining 60% is for Regional Fund grants and is being allocated to projects on a competitive basis. Projects are evaluated using the Air District's Board adopted evaluation and scoring criteria.

2 – PROGRAM DESCRIPTION

Health and Safety Code Section 44223 and 44225 authorize a surcharge on the motor vehicle registration fee (surcharge) to be used by the Bay Area Air Quality Management District (Air District) and local governments specifically for programs to reduce air pollution from motor vehicles. The Department of Motor Vehicles collects the surcharge and allocates the amounts to the Air District. The Air District administers these funds through the Transportation Fund for Clean Air (TFCA) Program. Under the TFCA Program, money is allocated to two funds: (1) 60% is placed in the Regional Fund and allocated to agencies on a competitive basis by the Air District and (2) 40% is placed in the Program Manager Fund and allocated to designated agencies. Allowable projects under Health and Safety Code Section 44241 include the following:

- The implementation of ridesharing programs.
- The purchase or lease of clean fuel buses for school districts and transit operators.
- The provision of local feeder bus or shuttle service to rail and ferry stations and to airports.
- Implementation and maintenance of local arterial traffic management, including, but not limited to, signal timing, transit signal preemption, bus stop relocation and “smart streets.”

2 – PROGRAM DESCRIPTION (continued)

- Implementation of rail-bus integration and regional transit information systems.
- Implementation of demonstration projects in telecommuting and in congestion pricing of highways, bridges, and public transit.
- Implementation of vehicle-based projects to reduce mobile source emissions, including, but not limited to, engine repowers, engine retrofits, fleet modernization, alternative fuels, and advanced technology demonstrations.
- Implementation of a smoking vehicles program.
- Implementation of an automobile buy-back scrappage program operated by a governmental agency.
- Implementation of bicycle facility improvement projects that are included in an adopted countywide bicycle plan or congestion management program.
- The design and construction by local public agencies of physical improvements that support development projects that achieve motor vehicle emission reductions. The projects and the physical improvements shall be identified in an approved area-specific plan, redevelopment plan, general plan, or other similar plan.

State law requires that any agency receiving TFCA funding be subject to an audit, at least once every two years. Health and Safety Code Section 44242 provides the legal compliance guidelines for the Air District to follow in the event revenues are not spent appropriately or when projects do not result in emission reductions. Health and Safety Code Sections 44241 and 44242 are provided in Appendix A.

The Air District retained the firm of Simpson and Simpson LLP to conduct TFCA financial and compliance Audit No. 22, which included Regional Fund projects and Air District-sponsored programs completed prior to June 30, 2020. These audits were conducted during the months of April 2021 through September 2021.

A total of 28 individual project sponsors and 33 projects were audited, with $6,085,652.24 total funds expended for projects included in Audit No. 22. A listing of the projects audited is provided in Appendix B. Unmodified opinions were issued on all 28 financial audit reports.

3 – AUDIT PROCESS

The audits were designed to address numerous financial and compliance objectives; however, the principal objectives of the audits were to (1) provide assurance that amounts reported in the Schedules of Expenditures are fairly stated, and (2) determine whether projects financed through the Air District's Regional Fund met funding agreement requirements. The audit procedures were specifically designed for TFCA financial and compliance requirements, which is described below:

Audit of the Schedules of Expenditures

The financial audits were conducted in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States.

3 – AUDIT PROCESS (continued)

Procedures performed included, but were not limited to:

- Gaining an understanding of the project sponsors' internal controls over financial reporting of the TFCA program through observation, inquiry, and supporting documentation.
- Tracing expenditures related to the TFCA program to the project sponsor's accounting records.
- Validating TFCA expenditures related to vendor disbursements, payroll, and administrative charges to supporting documentation.
- Conducting interviews with project sponsors to inquire about known, alleged or suspected fraud related to the program.

Compliance Auditing Procedures

The audits were performed in accordance with the requirements outlined in the Health and Safety Code, individual funding agreements and Government Auditing Standards. The principal focus of the compliance auditing procedures was to ensure TFCA expenditures were paid in accordance with the program's objectives (Health and Safety Code Section (HSC) 44241). Compliance audits were planned and performed to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to in the HSC could have a direct and material effect on projects reported in the Schedules occurred.

The audit includes examining, on a test basis, evidence about the project sponsor's compliance with those requirements and performing such other procedures as considered necessary in the circumstances.

Auditing procedures performed included, but were not limited to:

- Testing expenditures for allowable costs in accordance with Section 44241 of the Health and Safety Code.
- Verifying that the project sponsor used the TFCA funds for the reduction of emissions from motor vehicles.

4 – PROJECT SPONSOR FINDINGS

Audit of the Schedules of Expenditures

No project sponsor findings were identified for the projects audited as part of Audit No. 22.

Compliance Auditing Procedures

No project sponsor findings were identified for the projects audited as part of Audit No. 22.

5 – OTHER PROGRAM COMPLIANCE REVIEW

An Agreed Upon Procedures (AUP) engagement was performed to test the project sponsor's compliance with other aspects of the TFCA Funding Agreement. These procedures were determined and prepared by the Air District for the auditors to perform.

The auditors issued a separate AUP Report over their results of the procedures performed.

APPENDIX A

HEALTH AND SAFETY CODE SECTIONS 44241 AND 44242

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
TRANSPORTATION FUND FOR CLEAN AIR PROGRAM
Appendix A - Health and Safety Code Sections 44241 and 44242
For Audit No. 22

44241

(a) Fee revenues generated under this chapter in the bay district shall be subvened to the bay district by the Department of Motor Vehicles after deducting its administrative costs pursuant to Section 44229.

(b) Fee revenues generated under this chapter shall be allocated by the bay district to implement the following mobile source and transportation control projects and programs that are included in the plan adopted pursuant to Sections 40233, 40717, and 40919:

(1) The implementation of ridesharing programs.

(2) The purchase or lease of clean fuel buses for school districts and transit operators.

(3) The provision of local feeder bus or shuttle service to rail and ferry stations and to airports.

(4) Implementation and maintenance of local arterial traffic management, including, but not limited to, signal timing, transit signal preemption, bus stop relocation and "smart streets."

(5) Implementation of rail-bus integration and regional transit information systems.

(6) Implementation of demonstration projects in telecommuting and in congestion pricing of highways, bridges, and public transit. No funds expended pursuant to this paragraph for telecommuting projects shall be used for the purchase of personal computing equipment for an individual's home use.

(7) Implementation of vehicle-based projects to reduce mobile source emissions, including, but not limited to, engine repowers, engine retrofits, fleet modernization, alternative fuels, and advanced technology demonstrations.

(8) Implementation of a smoking vehicles program.

(9) Implementation of an automobile buy-back scrappage program operated by a governmental agency.

(10) Implementation of bicycle facility improvement projects that are included in an adopted countywide bicycle plan or congestion management program.

(11) The design and construction by local public agencies of physical improvements that support development projects that achieve motor vehicle emission reductions. The projects and the physical improvements shall be identified in an approved area-specific plan, redevelopment plan, general plan, or other similar plan.

44241 (continued)

(c) (1) Fee revenue generated under this chapter shall be allocated by the bay district for projects and programs specified in subdivision (b) to cities, counties, the Metropolitan Transportation Commission, transit districts, or any other public agency responsible for implementing one or more of the specified projects or programs. Fee revenue generated under this chapter may also be allocated by the bay district for projects and programs specified in paragraph (7) of subdivision (b) to entities that include, but are not limited to, public agencies, consistent with applicable policies adopted by the governing board of the bay district. Those policies shall include, but are not limited to, requirements for cost-sharing for projects subject to the policies. Fee revenues shall not be used for any planning activities that are not directly related to the implementation of a specific project or program.

(2) The bay district shall adopt cost-effectiveness criteria for fee revenue generated under this chapter that projects and programs are required to meet. The cost-effectiveness criteria shall maximize emissions reductions and public health benefits.

(d) Not less than 40 percent of fee revenues shall be allocated to the entity or entities designated pursuant to subdivision (e) for projects and programs in each county within the bay district based upon the county's proportionate share of fee-paid vehicle registration.

(e) In each county, one or more entities may be designated as the overall program manager for the county by resolutions adopted by the county board of supervisors and the city councils of a majority of the cities representing a majority of the population in the incorporated area of the county. The resolution shall specify the terms and conditions for the expenditure of funds. The entities so designated shall be allocated the funds pursuant to subdivision (d) in accordance with the terms and conditions of the resolution.

(f) Any county, or entity designated pursuant to subdivision (e), that receives funds pursuant to this section, at least once a year, shall hold one or more public meetings for the purpose of adopting criteria for expenditure of the funds, if those criteria have been modified in any way from the previous year. Any county, or entity designed pursuant to subdivision (e), that receives funds pursuant to this section, at least once a year, shall also hold one or more public meetings to review the expenditure of revenues received pursuant to this section by any designated entity. If any county or entity designated pursuant to subdivision (e) that receives funds pursuant to this section has not allocated all of those funds within six months of the date of the formal approval of its expenditure plan by the bay district, the bay district shall allocate the unallocated funds in accordance with subdivision (c).

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
TRANSPORTATION FUND FOR CLEAN AIR PROGRAM
Appendix A - Health and Safety Code Sections 44241 and 44242
For Audit No. 22

44242

(a) Any agency which receives funds pursuant to Section 44241 shall, at least once every two years, undertake an audit of each program or project funded. The audit shall be conducted by an independent auditor selected by the bay district in accordance with Division 2 (commencing with Section 1100) of the Public Contract Code. The district shall deduct any audit costs which will be incurred pursuant to this section prior to distributing fee revenues to cities, counties, or other agencies pursuant to Section 44241.

(b) Upon completion of an audit conducted pursuant to subdivision (a), the bay district shall do both of the following:

(1) Make the audit available to the public and to the affected agency upon request.

(2) Review the audit to determine if the fee revenues received by the agency were spent for the reduction of air pollution from motor vehicles pursuant to the plan prepared pursuant to Sections 40233 and 40717.

(c) If, after reviewing the audit, the bay district determines that the revenues from the fees may have been expended in a manner which is contrary to this chapter or which will not result in the reduction of air pollution from motor vehicles pursuant to that plan, the district shall do all of the following:

(1) Notify the agency of its determination.

(2) Within 45 days of the notification pursuant to paragraph (1), hold a public hearing at which the agency may present information relating to expenditure of the revenues from the fees.

(3) After the public hearing, if the district determines that the agency has expended the revenues from the fees in a manner which is contrary to this chapter or which will not result in the reduction of air pollution from motor vehicles pursuant to the plan prepared pursuant to Sections 40233 and 40717, the district shall withhold these revenues from the agency in an amount equal to the amount which was inappropriately expended. Any revenues withheld pursuant to this paragraph shall be redistributed to the other cities within the county, or to the county, to the extent the district determines that they have complied with the requirements of this chapter.

(d) Any agency which receives funds pursuant to Section 44241 shall encumber and expend the funds within two years of receiving the funds, unless an application for funds pursuant to this chapter states that the project will take a longer period of time to implement and is approved by the district or the agency designated pursuant to subdivision (e) of Section 44241. In any other case, the district or agency may extend the time beyond two years, if the recipient of the funds applies for that extension and the district or agency, as the case may be, finds that significant progress has been made on the project for which the funds were granted.

APPENDIX B

LISTING OF AUDITED PROJECTS

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
TRANSPORTATION FUND FOR CLEAN AIR PROGRAM
Appendix B – Listing of Audited Projects
For Audit No. 22

TFCA Project Number	Project Sponsor	Project Description	Final Project Expenses
15R28	Clean Energy, a California Corporation	Clean Energy SNG Station Project	$ 58,690.84
16EV055	Marin Clean Energy	Electric Vehicle Charging Station Project	60,000.00
16EV056	Bay Area Headquarters Authority (BAHA)	Electric Vehicle Charging Station Project	64,872.31
16HDZ002	Solano County Transit	Electric Bus Project	63,728.00
16HDZ007	Marin County Transit District	Battery-Electric Bus Project	135,022.00
17EV021	North First SJ, LP	Electric Vehicle Charging Station Project	156,000.00
17EV023	San Francisco Estuary Institute	Electric Vehicle Charging Station Project	18,000.00
17EV024	Old Redwood Commons Association	Electric Vehicle Charging and Solar Project	120,000.00
17R18	City of Daly City	Bikeway Project	125,197.00
17R27	City of Richmond	Electronic Bicycle Locker Project	40,000.00
17R30	City of Oakland	Electronic Bicycle Locker Project	36,000.00
18EV029	Creative Center of Los Altos dba Pinewood School	Electric Vehicle Charging Station Project	48,000.00
18EV031	The Ignatian Corporation	Electric Vehicle Charging Station Project	20,000.00
18EV035	Marin Rowing Association	Electric Vehicle Charging Station Project	8,000.00
18R07	Santa Clara Valley Transportation Authority	ACE Shuttle Bus Program	743,741.00
18R09	Presidio Trust	PresidiGo Shuttle	100,000.00
19R14	Presidio Trust	PresidiGo Downtown Shuttle	100,000.00
18R11	Metropolitan Transportation Commission	511 Regional Carpool and Vanpool Program	584,662.50
18R14	City of Petaluma	Bikeway Project	33,037.42
19EV003	Union Investment Real Estate GmbH	Electric Vehicle Charging Station Project	23,298.00
19EV007	City of Concord	Electric Vehicle Charging Station Project	11,000.00
19EV022	W-K Arastradero, LLC	Electric Vehicle Charging Station Project	14,000.00
19EV023	Mode Residences, LLC	Electric Vehicle Charging Station Project	24,000.00
19EV025	Revere Residences LLC	Electric Vehicle Charging Station Project	16,000.00
19EV042	Cool Earth Solar Development LLC	Electric Vehicle Charging Station Project	22,614.00
19R10	San Joaquin Regional Rail Commission	Pleasanton Connector Shuttles	79,151.67
19R13	County of Alameda	Juvenile Justice Center/Fairmont Hospital Shuttle	23,480.00
20R26	California State University, Maritime Academy	Cal Maritime Electric Shuttle Bus Project	13,500.00
20R00	Bay Area Air Quality Management District	Administration	1,285,994.66
20R01	Bay Area Air Quality Management District	Enhanced Mobile Source & Commuter Benefits Enforcement	84,169.67
20R02	Bay Area Air Quality Management District	Vehicle Buy Back Program	120,013.42
20R03	Bay Area Air Quality Management District	Space the Air/Intermittent Control Programs	1,764,853.83
16BR00A	Bay Area Air Quality Management District	Bicycle Rack Voucher Program (BRVP)	88,625.92
	Final Project Expenses		**$ 6,085,652.24**
	Total Projects		33
	Total Project Sponsors		28

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Cindy Chavez and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: December 6, 2021

Re: Public Hearing to Consider Adoption of Proposed Amendments to Regulation 2, Rule 1: General Requirements (Rule 2-1) and Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants (Rule 2-5) and Adoption of a Negative Declaration Pursuant to the California Environmental Quality Act (CEQA).

RECOMMENDED ACTION

Recommend the Board of Directors consider adoption of proposed amendments to Regulation 2, Rule 1: General Requirements (Rule 2-1), Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants (Rule 2-5) and adoption of a Negative Declaration pursuant to the California Environmental Quality Act (CEQA).

BACKGROUND

In 2018, the Air District committed to evaluating changes to its permitting process in response to concerns from community advocates about permits issued in areas overburdened by air pollution and other environmental and public health stressors. Since that time, staff met internally and with community stakeholders who expressed concern over the Agency's permitting process to develop potential concepts to amend the Air District's permitting regulation, Regulation 2: Permits.

Air District staff held two virtual public workshops on May 12, 2021, and August 24, 2021, to present and receive public feedback on concepts and draft changes to two rules within the Air District's Permitting Regulation. The two rules for which amendments are proposed include Regulation 2, Rule 1, which details the general permitting requirements (Rule 2-1) and Regulation 2, Rule 5, which details the requirements for New Source Review of Toxic Air Contaminants (Rule 2-5). Air District staff revised the proposed amendments to Rule 2-1 and Rule 2-5 based on feedback received during both virtual public workshops. Additionally, staff presented updates on the rule development effort to the Air District Community Equity, Health and Justice Committee on July 1, 2021, and to the Stationary Source and Climate Impacts Committee on May 17, 2021, and September 27, 2021.

DISCUSSION

The proposed amendments fall into three broad categories. First, they will make health risk limits for new and modified projects more stringent if the project would be located in an Overburdened Community—a change that recognizes the fact that air quality, health burdens, and exposures to other environmental contaminants are concentrated in certain parts of the Bay Area—particularly in communities with the highest concentrations of Black and Brown residents. They will also require enhanced notification of nearby residents and businesses of proposed projects in Overburdened Communities to better inform the public of projects that are proposed in their communities. The proposed amendments would incorporate the findings of the California Communities Environmental Health Screening Tool (CalEnviroScreen) to identify Overburdened Communities. Second, the proposed amendments will update health risk evaluation procedures so that the Air District is using the most accurate and up to date information when it assesses health risk from proposed projects. Third, the proposed amendments will update and clarify internal processing procedures to ensure that the first two changes can be implemented effectively. The proposed amendments to Rules 2-1 and 2-5 are discussed further below.

Proposed Amendments to Rule 2-1: General Requirements

The proposed changes to Rule 2-1 include a new definition to identify areas that experience relatively high levels of cumulative impacts (areas that experience relatively high levels of environmental and health burdens). As mentioned above, areas that experience high levels of cumulative impacts are considered Overburdened Communities in the proposed changes to Rule 2-1. Overburdened Communities are defined as census tracts that score at or above the 70th percentile in CalEnviroScreen, Version 4.0, as well as areas that are within 1,000 feet of the boundaries of those census tracts. There are two additional significant proposed changes to Rule 2-1. First, the proposed changes expand the public notice requirement to require notification of nearby addresses if a project would require a health risk assessment because of toxic air contaminant (TAC) emissions and the project would be located within an Overburdened Community. Second, the proposed changes extend the Air District's permit application action times. The completeness review period will be increased from 15 working days (21 calendar days) to 30 calendar days. The final action period (from date of completeness to the date of the Air District's decision) is currently 35 working days (49 calendar days) for all permit applications, except those subject to California Environmental Quality Act (CEQA) review, major facility review, or public notice requirements. The Proposed Amendments will replace this time period with two possible final action periods: 90 days, which will apply to most applications, and 180 days for more complex applications, unless the application is subject to CEQA review. Applications subject to CEQA review will continue to require approval of CEQA certification documents before the Air District may decide on the application. The Proposed Amendments will also increase the time period allowed for responding to public comments on applications from 30 days to 60 days.

Proposed Amendments to Rule 2-5: New Source Review of Toxic Air Contaminants

There are three major categories of proposed changes to the Air District's Air Toxics New Source Review Rule, Rule 2-5. First, the cancer risk limit in Rule 2-5 will be more stringent in

Overburdened Communities, as defined in the proposed changes to Rule 2-1. In Overburdened Communities, the risk limit will be reduced from ten in one million to six in one million. Second, proposed revisions to the Air District's Health Risk Assessment Guidelines will incorporate updates to the health risk assessment procedures for gasoline dispensing facilities, to be consistent with existing procedures used to evaluate health risk from other sources of toxic air contaminants. Third, the proposed changes will update Table 2-5-1, the Toxic Air Contaminant Trigger Levels table, by adding and revising trigger levels based on new and revised health effects values developed and approved by the California Office of Environmental Health Hazard Assessment (OEHHA). In addition, proposed acute trigger levels will be updated based on an acute target hazard index of 0.20 to make them consistent with the acute hazard indices used to implement the Air District's Rule 11-18. Previous acute trigger levels were based on a target hazard index of 1.0. In addition to the proposed changes discussed above, Air District staff is proposing several changes to Rule 2-5 that are intended to prevent circumvention of Rule 2-5's health risk requirements and to enable the Air District to more effectively manage staff resources.

The Air District evaluated the potential for the proposed amendments to have significant adverse environmental impacts as required by the California Environmental Quality Act (CEQA), Public Resources Code Section 21800 et seq. An analysis of the potential environmental impacts of the Proposed Amendments concluded that there is no substantial evidence suggesting that the Proposed Amendments will have any significant adverse environmental impacts. Accordingly, Air District staff prepared a proposed Negative Declaration under CEQA for consideration by the Board of Directors.

The Air District also evaluated the socioeconomic impacts of the proposed amendments, as required by Health and Safety Code Section 40728.5. The Socioeconomic Impact Analysis considers the impacts of the rule or regulation on employment and the economy of the region affected by the adoption of the rule or regulation. The Socioeconomic Impact Analysis concludes that on average, the proposed amendments would not result in significant economic impacts. However, the analysis revealed potential significant impacts for several individual industries such as soil vapor extraction projects, foundry operations, solid waste operations, concrete batching facilities, and gasoline dispensing facilities. The analysis methodology utilized a conservative approach, by analyzing the worst-case scenarios (e.g., most expensive control measures) to determine impacts. Staff notes that businesses may opt for less expensive control measures or technologies, or may modify their projects to meet the standards of the proposed amendments.

On October 19, 2021, staff published the CEQA Initial Study and proposed Negative Declaration, text of the regulations with the proposed amendments, Final Staff Report and other supporting documents, and accepted public comments through November 18, 2021. A total of four written comment letter and emails were received from:

- California Council for Environmental and Economic Balance (CCEEB)
- Environmental Law and Justice Clinic at Golden Gate University School of Law (GGU) on behalf of:
    - First Generation Environmental Health & Economic Development
    - Communities for a Better Environment
    - West Oakland Environmental Indicators Project

    - Greenaction for Health and Environmental Justice
    - The Environmental Justice Committee of the National Lawyers Guild's San Francisco Chapter
    - Dr. Raymond J. Tompkins
    - All Positives Possible
- Illingworth & Rodkin, Inc.
- Tesla

Comments covered many topics including:

- Cancer Risk Limits
- CEQA
- Enhanced Notifications
- Essential Public Services
- Exemptions
- Overburdened Community
- Permit Review Timeline

Air District staff has prepared a Response to Comments document, which is included as Appendix F in the Final Staff Report.

BUDGET CONSIDERATIONS/FINANCIAL IMPACT

Staff anticipates that the Proposed Amendments will require additional staff time and resources in a number of areas. Additional Air District Engineering Division resources will be necessary due to more extensive engineering and health risk assessment reviews for permit applications for projects located in overburdened communities due to the potential need to refine projects to meet the proposed lower cancer risk limit. Engineering and possibly Community Engagement Division resources will also be necessary to implement the additional public noticing requirements for projects located in overburdened communities. Additional Engineering Division resources will be required to incorporate the updated Health Risk Assessment Guidelines into the gasoline dispensing facility program and to handle the more extensive health risk assessments that will be required for gas stations. Adding additional toxic air contaminants and updating health effects values are expected to result in a small number of additional health risk assessments per year. Air District Engineering Division resources may also be required for the processing and evaluation of permit applications for installations of new air pollution control equipment and abatement devices. And finally, Engineering Division resources will be needed to reduce overall application review times to ensure that the proposed review times are achieved for all permit applications. Overall, staff expects that eight (8) Engineering Division full-time equivalents (FTEs) will be needed to fully and properly implement the proposed amendments to Rule 2-1 and Rule 2-5.

Staff also anticipates additional staff resources will be necessary in the Air District Meteorology and Measurement Division. These resources will be needed to review monitoring and testing reports submitted, and to verify compliance with testing and monitoring procedures. Additional resources would be required to coordinate and conduct testing at the affected facilities. This may involve the procurement of additional equipment, instrumentation, and testing infrastructure, and

ongoing costs for additional staffing to conduct testing. Staff will need at least three (3) FTEs for the Source Test group to properly implement the Proposed Amendments.

Furthermore, at least one (1) additional FTE will be necessary for the Air District's Compliance and Enforcement Division to oversee additional compliance activities associated with implementing the Proposed Amendments. Compliance and Enforcement Division resources may be required for review and documentation of any rule requirements that are not met and may also be required for assistance in the evaluation of permit applications for any air pollution control equipment installations.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Mark Tang
Reviewed by: David Joe & Victor Douglas

Attachment 16A: Board Resolution (Draft) and Proposed Amendments to Regulation 2, Rule 1: General Requirements (Rule 2-1), Proposed Amendments to Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants (Rule 2-5), and Negative Declaration Pursuant to the California Environmental Quality Act (CEQA)
Attachment 16B: Final Staff Report – Proposed Amendments to Rule 2-1 and Rule 2-5
Attachment 16C: Final Staff Report – Appendix A: Proposed Amendments to Rule 2-1
Attachment 16D: Final Staff Report – Appendix B: Proposed Amendments to Rule 2-5
Attachment 16E: Final Staff Report – Appendix C: Proposed Amendments to the Air District HRA Guidelines
Attachment 16F: Final Staff Report – Appendix D: Maps of Overburdened Communities
Attachment 16G: Final Staff Report – Appendix E: Socioeconomic Impact Analysis of Proposed Amendments to Rules 2-1 and 2-5
Attachment 16H: Final Staff Report – Appendix F: CEQA Initial Study and Draft Negative Declaration
Attachment 16I: Final Staff Report – Appendix G: Overburdened Community Census Tracts
Attachment 16J: Final Staff Report – Appendix H: Response to Comments

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

RESOLUTION No. 2021-

A Resolution of the Board of Directors of the Bay Area Air Quality Management District Adopting Amendments to Regulation 2, Rule 1 (Permits – General Requirements) and Regulation 2, Rule 5 (Permits – New Source Review of Toxic Air Contaminants); Approving Amendments to the Health Risk Assessment Guidelines; and Adopting a Negative Declaration under the California Environmental Quality Act

RECITALS

WHEREAS, the Board of Directors of the Bay Area Air Quality Management District has the authority and the responsibility to adopt, amend and repeal rules and regulations as necessary and appropriate to control air pollution emissions from stationary sources in the San Francisco Bay Area, and to establish a permitting program for such sources, as provided in Sections 40000, 40001, 40702, and 42300 of the California Health & Safety Code;

WHEREAS, the Board of Directors of the Bay Area Air Quality Management District has determined that a need exists to amend the Air District's permitting regulations in District Regulation 2;

WHEREAS, the Air District's permitting regulations need to be amended to provide additional protections to disadvantaged communities within the Bay Area that experience disproportionately high levels of air pollution;

WHEREAS, the Air District's permitting regulations also need to be amended to update the regulations' health risk evaluation procedures so that the Air District uses the most accurate and up to date information when it assesses health risks from proposed projects;

WHEREAS, the Air District's permitting regulations also need to be amended to update and clarify internal processing procedures to ensure that the changes referenced in the preceding two Recitals can be implemented effectively;

WHEREAS, Air District staff have prepared proposed amendments to Air District Regulation 2 to accomplish these goals as set forth in Attached A hereto, which include (i) proposed amendments to District Regulation 2, Rule 1 (Permits – General Requirements) and District Regulation 2, Rule 5 (Permits – New Source Review of Toxic Air Contaminants), and (ii) proposed revisions to the District's Health Risk Assessment Guidelines, which are incorporated by reference into Regulation 2, Rule 5, Section 603 (collectively, the "Proposed Amendments");

WHEREAS, Air District staff published a Concept Paper on April 21, 2021, outlining the background and need for amending the District's permitting regulations, and then held a virtual public workshop to discuss conceptual ideas for implementing these necessary amendments with interested members of the public on May 12, 2021;

WHEREAS, Air District staff then published an initial draft of the Proposed Amendments on July 22, 2021, and held a further virtual public workshop to discuss the initial draft with interested members of the public on August 24, 2021;

WHEREAS, based on comments received on the initial draft amendments, and upon further consideration and analysis of the issues involved, Air District staff prepared a final version of the proposed amendments for consideration by the Board of Directors, which was published on October 19, 2021;

WHEREAS, Air District staff also presented briefings to various committees of the Board of Directors during this rule development process, including to the Stationary Source & Climate Impacts committee on May 17, 2021, and September 27, 2021, and to the Community Equity, Health & Justice Committee on July 1, 2021;

WHEREAS, Air District staff received important public feedback during this public engagement process, which is reflected in the final version of the Proposed Amendments that staff proposed for adoption by the Board of Directors;

WHEREAS, community advocates raised certain legal and policy concerns during the rule development process that were beyond the scope of the Proposed Amendments, but which Air District staff and the Board of Directors agree are important and should be addressed in future rule development activities;

WHEREAS, Air District staff intend to develop further rule amendments for consideration by the Board of Directors to address these legal and policy concerns raised by community advocates;

WHEREAS, Air District staff have prepared and presented to the public and to the Board of Directors a detailed Staff Report describing the purpose of and need for the Proposed Amendments, and how the Proposed Amendments will effect the Air District's permitting program, which Staff Report has been considered by the Board of Directors and is incorporated herein by reference;

WHEREAS, on or before October 19, 2021, Air District staff published in newspapers and published and distributed on the Air District's website a notice of a public hearing on December 15, 2021, to consider adoption of the Proposed Amendments;

WHEREAS, in connection with the notice of public hearing, Air District staff invited interested members of the public to submit comments on the Proposed Amendments, and have prepared summaries of the comments received and staff's responses in a Response to Comments document, which has been considered by the Board of Directors and is incorporated herein by reference;

WHEREAS, the Board of Directors of the Bay Area Air Quality Management District held a public hearing on December 15, 2021, which was properly noticed in accordance with the provisions of Health & Safety Code Section 40725 and was conducted in accordance with the provisions of Health & Safety Code Section 40726, to consider the Proposed Amendments in accordance with all provisions of law;

WHEREAS, at the public hearing, the subject matter of the Proposed Amendments was discussed with interested persons in accordance with all provisions of law;

WHEREAS, in accordance with Health & Safety Code Section 40727, and based on substantial evidence presented at the hearing and described in the Staff Report and other documentation, the Board of Directors of the Bay Area Air Quality Management District has found and determined that the Proposed Amendments are necessary; that the District has the authority to adopt the Proposed Amendments; that the Proposed Amendments are clearly written and displayed; that the Proposed Amendments are consistent with other legal requirements; that the Proposed Amendments are not impermissibly duplicative of existing regulatory requirements; and that the Proposed Amendments will implement specific provisions of law as referenced and identified below;

WHEREAS, the Board of Directors of the Bay Area Air Quality Management District has determined that a need exists to adopt the Proposed Amendments to Regulation 2 (i) to provide additional protections and transparency in connection with permitting new and modified sources of air pollution in overburdened communities; (ii) to update the Regulation's health risk evaluation procedures to incorporate the most accurate and up-to-date information and practices; and (iii) to update and clarify the Air District's permit processing procedures to ensure that the changes referenced in (i) and (ii) can be implemented effectively;

WHEREAS, the Board of Directors of the Bay Area Air Quality Management District has determined that the Air District has the authority to adopt the Proposed Amendments pursuant to Sections 40000, 40001, 40702, and 42300 of the Health & Safety Code, which authorize the Air District to adopt and implement regulations to control air pollution emissions from stationary sources, to execute the powers and duties imposed upon the Air District, and to establish a permitting program for air pollution sources, among other things;

WHEREAS, the Board of Directors of the Bay Area Air Quality Management District has determined, based on a review of the text of the Proposed Amendments set forth in Attachment A and the rulemaking materials prepared by District staff, that the Proposed Amendments are written and displayed so that their meaning can be easily understood by the persons directly affected by the Rules addressed by the Proposed Amendments, and by the public at large;

WHEREAS, the Board of Directors of the Bay Area Air Quality Management District has determined that the Proposed Amendments are in harmony with and not in conflict with or contradictory to existing statutes, court decisions, and state and federal regulations;

WHEREAS, the Board of Directors of the Bay Area Air Quality Management District has determined that the Proposed Amendments do not impose the same requirements as any existing state or federal regulations, except to the extent necessary and proper to execute the powers and duties granted to and imposed upon the Air District as the agency responsible for implementing state and/or federal permitting requirements in the San Francisco Bay Area;

WHEREAS, the Board of Directors of the Bay Area Air Quality Management District has identified and determined that the Proposed Amendments will implement, interpret and/or make specific the provisions of Sections 40000, 40001, 40702, and 42300 of the California Health & Safety Code;

WHEREAS, the Board of Directors of the Bay Area Air Quality Management District finds and intends that its determinations stated in the preceding paragraphs to constitute the findings the Board is required to make before adopting the Proposed Amendments pursuant to Health & Safety Code Section 40727;

WHEREAS, in accordance with the requirements of Health & Safety Code Section 40728 and other requirements of law, the Air District has maintained a file of the documents and other materials that constitute the record of proceedings on which this rulemaking project is based (including the Initial Study prepared for the project in accordance with the California Environmental Quality Act), which record documents and other materials are located at the Bay Area Air Quality Management District, 375 Beale Street, Suite 600, San Francisco, CA 94105, and the custodian for which is Marcy Hiratzka, Clerk of the Boards;

WHEREAS, in accordance with the requirements of Health & Safety Code Section 40728.5 to the extent that such requirements are applicable, and also as a matter of sound public policy notwithstanding whether or not such requirements are applicable, the Board of Directors of the Bay Area Air Quality Management District has actively considered the socioeconomic impacts of the Proposed Amendments and has reviewed and considered the Socioeconomic Impact Analysis for the Proposed Amendments prepared by BAE Urban Economics, and has determined that the Proposed Amendments will not have any significant adverse socioeconomic impacts;

WHEREAS, the Board of Directors of the Bay Area Air Quality Management District finds and determines that the Proposed Amendments are a "project" pursuant to the California Environmental Quality Act, Public Resources Code Sections 21000 *et seq*. (CEQA);

WHEREAS, the Air District is the CEQA lead agency for this project pursuant to Section 21067 of CEQA and Sections 15050 and 15051 of the State CEQA Guidelines (Title 14 of the California Code of Regulations);

WHEREAS, Air District staff have prepared an Initial Study for the Proposed Amendments pursuant to the requirements of CEQA, including but not limited to Sections 15063 and 15365 of the CEQA Guidelines, with assistance from and based on information and analysis developed by the Air District's CEQA Consultant Environmental Audit, Inc.;

WHEREAS, the Initial Study determined that the Proposed Amendments will not have any significant effect on the environment;

WHEREAS, based on the Initial Study and all of the information in the administrative record for the Proposed Amendments, Air District staff have prepared a proposed Negative Declaration for review and consideration by the Board of Directors, which finds that the Proposed Amendments will not have any significant effect on the environment;

WHEREAS, Air District staff published and provided notice of the Initial Study and proposed Negative Declaration on or before October 19, 2021, pursuant to all applicable requirements of CEQA, including but not limited to Section 15072 of the CEQA Guidelines, which included publication of notice in Bay Area newspapers, in County Clerks' offices, on the Air District's website, by email and United States mail;

WHEREAS, in connection with the notice of the Initial Study and proposed Negative Declaration, Air District staff invited interested members of the public to submit comments on the Initial Study and proposed Negative Declaration, and staff have prepared summaries of the comments received and staff's responses in the Response to Comments document referred to above, which has been considered by the Board of Directors and is incorporated herein by reference;

WHEREAS, the Board of Directors of the Bay Area Air Quality Management District has considered the entire record, including the Initial Study and the public comments received, and has determined using its own independent judgment and analysis that there is no substantial evidence that the Proposed Amendments could have a significant effect on the environment, and has therefore determined that it is appropriate to adopt the Negative Declaration as proposed by Air District staff pursuant to Section 15074 of the CEQA Guidelines; and

WHEREAS, the Board of Directors of the Bay Area Air Quality Management District finds that it is necessary and appropriate to adopt the Proposed Amendments with a future effective date of July 1, 2022, to allow time for Air District staff to develop, and the Board of Directors to consider, amendments to the District's fee schedule that may be necessitated as a result of the Proposed Amendments.

RESOLUTION

NOW, THEREFORE, BE IT RESOLVED that that the Board of Directors of the Bay Area Air Quality Management District does hereby adopt the Negative Declaration set forth in attachment B hereto and incorporated by reference as if fully set forth herein, finding that, in the Board's own independent judgment and analysis, and based on the whole record (including the Initial Study, the proposed Negative Declaration, and any and all public comments received), there is no substantial evidence that the Proposed Amendments will have a significant effect on the environment;

BE IT FURTHER RESOLVED that the Board of Directors of the Bay Area Air Quality Management District does hereby adopt the proposed amendments to Air District Regulation 2, Rule 1 (Permits – General Requirements), and Regulation 2, Rule 5 (Permits – New Source Review of Toxic Air Contaminants), as set forth in Attachment A hereto and incorporated by reference as if fully set forth herein, with an effective date of July 1, 2022, and with instructions to staff to correct any typographical or formatting errors before final publication;

BE IT FURTHER RESOLVED that the Board of Directors of the Bay Area Air Quality Management District does hereby approve the revisions to the Air District's Health Risk Assessment Guidelines, as set forth in Attachment A hereto and incorporated by reference as if fully set forth herein, with an effective date of July 1, 2022, and with instructions to staff to correct any typographical or formatting errors before final publication;

BE IT FURTHER RESOLVED that the Board of Directors of the Bay Area Air Quality Management District does hereby direct that the amendments to Air District Regulation 2, Rule 1 (Permits – General Requirements), Regulation 2, Rule 5 (Permits – New Source Review of Toxic Air Contaminants), and Health Risk Assessment Guidelines adopted herein shall not take effect until July 1, 2022, and that the pre-existing versions of those Rules and Guidelines in effect prior to the adoption of this Resolution shall remain in force and effect up until July 1, 2022;

BE IT FURTHER RESOLVED that the Board of Directors of the Bay Area Air Quality Management District directs Air District staff to continue to engage community advocates on methods to address the legal and policy concerns raised during the rulemaking process for the Proposed Amendments, including developing additional proposed amendments to Air District Rules and Regulations and including additional environmental justice considerations in the permitting process;

BE IT FURTHER RESOLVED that the Board of Directors of the Bay Area Air Quality Management District directs Air District staff to form a working group comprised of regional operators of publicly owned treatment works to help facilitate the implementation of the Proposed Amendments and address other concerns related to toxic air contaminant reduction at these facilities and future rule development; the working group will provide updates to this Board of Directors on a regular basis;

BE IT FURTHER RESOLVED that the record documents and other materials supporting this Resolution shall be maintained and made available for public review at the headquarters of the Bay Area Air Quality Management District at 375 Beale Street, Suite 600, San Francisco, CA 94105, and that the custodian for these documents and other materials shall be Marcy Hiratzka, Clerk of the Boards.

The foregoing Resolution was duly and regularly introduced, passed and adopted at a 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 _____, 2021, by the following vote of the Board:

AYES:

NOES:

ABSENT:

_____
Cindy Chavez
Chairperson of the Board of Directors

ATTEST:

_____
John J. Bauters
Secretary of the Board of Directors

ATTACHMENT A

AMENDMENTS TO:

Regulation 2, Rule 1 (Permits – General Requirements)

Regulation 2, Rule 5 (Permits – New Source Review of Toxic Air Contaminants)

Health Risk Assessment Guidelines

REGULATION 2
PERMITS
RULE 1
GENERAL REQUIREMENTS

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2-1-210 Start-Up Period
2-1-211 CEQA
2-1-212 EIR
2-1-213 Facility
2-1-214 Federally Enforceable
2-1-215 Hazardous Air Pollutant (HAP)
2-1-216 Deleted
2-1-217 Potential to Emit
2-1-218 Regulated Air Pollutant
2-1-219 Deleted
2-1-220 Deleted
2-1-221 Source
2-1-222 Toxic Air Contaminant (TAC)
2-1-223 Year
2-1-224 Responsible Laboratory Management Practices
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2-1-310 Applicability of CEQA

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2-1-601 Engineering Permitting Procedures
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REGULATION 2
PERMITS
RULE 1
GENERAL REQUIREMENTS

(Adopted January 1, 1980)

2-1-100 GENERAL

2-1-101 Description: The purpose of Regulation 2 is to provide an orderly procedure for the review of new sources of air pollution, and of the modification and operation of existing sources, and of associated air pollution control devices, through the issuance of authorities to construct and permits to operate. The applicability of Regulation 2, Rule 1 is illustrated by Figure 2-1-101, Permit/Exemption Flow Chart. An applicant may choose to obtain a permit to operate for a source that is exempt from permit requirements. In that case, the affected source is deemed to be subject to the requirements of Section 2-1-302 until such time as an application for return to exempt status is approved.

(Amended 7/17/91; 6/7/95; 5/17/00; 12/21/04)

2-1-102 Applicability to Other Rules in Regulation 2: The provisions of this Rule, including the definitions, shall apply to the other Rules of this Regulation, where applicable, unless superseded by specific provisions in those other Rules.

(Amended November 3, 1993)

2-1-103 Exemption, Source not Subject to any District Rule: Any source that is not already exempt from the requirements of Section 2-1-301 and 302 as set forth in Sections 2-1-105 to 2-1-128, is exempt from Section 2-1-301 and 302 if the source meets all of the following criteria:

103.1 The source is not in a source category subject to any of the provisions of Regulation 6[(1)], Regulation 8[(2)] excluding Rules 1 through 4, or Regulations 9 through 12; and

103.2 The source is not subject to any of the provisions of Sections 2-1-316 through 319; and

103.3 Actual emissions of precursor organic compounds (POC), non-precursor organic compounds (NPOC), nitrogen oxides (NOx), sulfur dioxide (SO_2), $PM_{2.5}$, PM_{10} and carbon monoxide (CO) from the source are each (i) less than 10 pounds per highest day; or (ii) if greater than 10 pounds per highest day, total emissions are less than 150 pounds per year, per pollutant; and

103.4 The source is not an ozone generator (a piece of equipment designed to generate ozone) emitting 1 lb/day or more of ozone.

Note 1: Typically, any source may be subject to Regulation 6, Particulate Matter and Visible Emissions. For the purposes of this section, Regulation 6 applicability shall be limited to the following types of sources that emit $PM_{2.5}$ and PM_{10}: combustion source; material handling/processing; sand, gravel or rock processing; cement, concrete and asphaltic concrete production; tub grinder; or similar $PM_{2.5}$ and PM_{10}-emitting sources, as deemed by the APCO.

Note 2: If an exemption in a Regulation 8 Rule indicates that the source is subject to Regulation 8, Rules 1 through 4, then the source must comply with all applicable provisions of Regulation 8, Rules 1 through 4, to qualify for this exemption.

(Adopted 6/7/95; Amended 5/17/00; 12/21/04)

2-1-104 Deleted October 7, 1998

2-1-105 Exemption, Registered Statewide Portable Equipment: Equipment that complies with all applicable requirements of and is registered under the Statewide Portable Equipment Registration Program (California Code of Regulations Title 13, Division 3, Chapter 3, Article 5) is exempt from the requirements of Sections 2-1-301 and 302. If the equipment ceases to qualify for this exemption for any reason (for example, if it remains at any fixed location for more than twelve months or otherwise ceases to be portable as defined by the Program), the equipment shall be subject to the requirements of Regulation 2 as if it were a new source.

(Adopted 6/7/95; Amended 10/7/98; 5/17/00)

2-1-106 Limited Exemption, Accelerated Permitting Program: Unless subject to any of the provisions of Sections 2-1-316 through 319, any new source or modification or alteration of an existing source is exempt from the Authority to Construct requirements of Section 2-1-301 if it has received a temporary Permit to Operate under the Accelerated Permitting Program set forth in Section 2-1-302.2.

(Adopted 6/7/95; Amended 10/7/98; 5/17/00; 6/15/05; 12/19/12)

2-1-109 Deleted June 7, 1995

2-1-110 Deleted June 7, 1995

2-1-111 Deleted June 7, 1995

2-1-112 Deleted June 7, 1995

2-1-113 Exemption, Sources and Operations:

113.1 The following sources and operations are exempt from the requirements of Sections 2-1-301 and 302, in accordance with the California Health and Safety Code:

1.1 Single and multiple family dwellings used solely for residential purposes.

1.2 Agricultural sources (as defined in Section 2-1-239) with actual emissions of each regulated air pollutant, excluding fugitive dust and greenhouse gases, less than 50 tons per year. Agricultural sources engaged in composing and other similar biomass processing that primarily process green materials or animal waste products derived from agricultural operations shall not become ineligible for this exemption for processing material from non-agricultural operations as long as the facility processes less than 500 tons per year of such material from non-agricultural operations.

1.3 Any vehicle. Equipment temporarily or permanently attached to a vehicle is not considered to be a part of that vehicle unless the combination is a vehicle as defined in the Vehicle Code. Specialty vehicles may include temporarily or permanently attached equipment including, but are not limited to, the following: oil well production service unit; special construction equipment; and special mobile equipment.

1.4 Tank vehicles with vapor recovery systems subject to state certification, in accordance with the Health and Safety Code.

113.2 The following sources and operations are exempt from the requirements of Sections 2-1-301 and 302:

2.1 Road construction, widening and rerouting.

2.2 Restaurants, cafeterias and other retail establishments for the purpose of preparing food for human consumption.

2.3 Structural changes which do not change the quality, nature or quantity of air contaminant emissions.

2.4 Any abatement device which is used solely to abate equipment that does not require an Authority to Construct or Permit to Operate.

2.5 Architectural and industrial maintenance coating operations that are exclusively subject to Regulation 8, Rules 3 or 48, because coatings are applied to stationary structures, their appurtenances, to mobile homes, to pavements, or to curbs. This does not apply to coatings applied by the manufacturer prior to installation, nor to the coating of components removed from such structures and equipment.

2.6 Portable abatement equipment exclusively used to comply with the tank degassing or vacuum truck control requirements of Regulation 8, Rules 5, 40 or 53.

2.7 Equipment that transports, holds or stores California Public Utilities Commission regulated natural gas, excluding drivers.

2.8 Deleted May 17, 2000

2.9 Deleted May 17, 2000

2.10 Deleted May 17, 2000

2.11 Teaching laboratories used exclusively for classroom experimentation and/or demonstration.

2.12 Laboratories located in a building where the total laboratory floor space within the building is less than 25,000 square feet, or the total number of fume hoods within the building is less than 50, provided that Responsible Laboratory Management Practices, as defined in Section 2-1-224, are used. Buildings connected by passageways and/or corridors shall be considered as separate buildings, provided that structural integrity could be maintained in the absence of the passageways and/or corridors and the buildings have their own separate and independently operating HVAC and fire suppression systems. For the purposes of this subsection, teaching laboratories that are exempt per Section 2-1-113.2.11 are not included in the floor space or fume hood totals. In addition, laboratory units for which the owner or operator of the source can demonstrate that toxic air contaminant emissions would not occur, except under accidental or upset conditions, are not included in the floor space or fume hood totals.

2.13 Maintenance operations on natural gas pipelines and associated equipment, provided that emissions from such operations consist solely of residual natural gas that is vented after the equipment is isolated or shut down.

2.14 [Deleted 12/19/2012]

2.15 Asbestos and asbestos containing material renovation or removal conducted in compliance with Regulation 11, Rule 2 and Regulation 3.

2.16 Closed landfills that have less than 1,000,000 tons of decomposable solid waste in place and that do not have an operating landfill gas collection system.

2.17 Closed landfills that have not accepted waste for at least 30 years and that never had a landfill gas collection system.

2.18 Construction of a building or structure that is not itself a source requiring a permit.

2.19 Vacuum trucks subject to Regulation 8, Rule 53 and processing regulated material as defined in that rule.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00; 11/15/00; 5/2/01; 7/19/06; 4/18/12; 12/06/17)

2-1-114 Exemption, Combustion Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, only if the source does not emit pollutants other than combustion products, and those combustion products are not caused by the combustion of a pollutant generated from another source, and the source does not require permitting pursuant to Section 2-1-319. However, for the purposes of this permit exemption determination, sources subject to Sections 2-1-114.1.2, 2-1-114.2.1, and 2-1-114.2.3 are not subject to Section 2-1-316.

114.1 Boilers, Heaters, Steam Generators, Duct Burners, and Similar Combustion Equipment:

1.1 Any of the above equipment with less than 1 million BTU per hour rated heat input.

1.2 Any of the above equipment with less than 10 million BTU per hour rated heat input if fired exclusively with natural gas (including compressed natural gas), liquefied petroleum gas (e.g. propane, butane, isobutane, propylene, butylenes, and their mixtures), or any combination thereof.

114.2 Internal Combustion Engines and Gas Turbines:

2.1 Internal combustion (IC) engines and gas turbines with a maximum output rating less than or equal to 50 bhp.

2.2 Internal combustion (IC) engines and gas turbines used solely for instructional purposes at research, teaching, or educational facilities.

2.3 Portable internal combustion engines which are at a location for less than 72 consecutive hours.

2.4 Any engine mounted on, within, or incorporated into any vehicle, train, ship, boat, or barge used to provide propulsion for the vehicle, train, ship, boat, or barge.

2.5 Any engine mounted on, within, or incorporated into any vehicle, train, ship, boat, or barge used to provide propulsion for the vehicle, train, ship, boat, or barge and which is also used to supply mechanical or electrical power to ancillary equipment (e.g., crane, drill, winch, etc.) which is affixed to or is a part of the vehicle, train, ship, boat, or barge.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00; 8/1/01, 12/06/17)

2-1-115 Exemption, Particulate Sources at Quarries, Mineral Processing and Biomass Facilities: The following potential $PM_{2.5}$ and PM_{10} sources are exempt from the requirements of sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

115.1 Sources located at quarrying; mineral or ore handling or processing; concrete production; asphaltic concrete production; marine bulk transfer stations; concrete or asphaltic concrete recycling; vehicle shredding; glass manufacturing; handling or processing of cement, coke, lime, flyash, fertilizer, or catalyst; or other similar facility which meets one of the following:

1.1 Mixer and other ancillary sources at concrete or aggregate product production facilities with a maximum rated production capacity less than 15 cubic yards (yd^3) per hour;

1.2 Other source at a facility with a maximum throughput less than 5000 tons per year;

1.3 Operating, loading and unloading a crusher or grinder which processes exclusively material with a moisture content greater than or equal to 20 percent by weight;

1.4 Operating, loading and unloading the following sources which process exclusively material with a moisture content greater than or equal to 5 percent by weight:

1.4.1 Screen or other size classification;

1.4.2 Conveyor, screw, auger, stacker or bucket elevator;

1.4.3 Grizzly, or other material loading or unloading;

1.4.4 Storage silos;

1.4.5 Storage or weigh hopper/bin system.

1.5 Haul or access roads;

1.6 Drilling or blasting.

115.2 Sources located at biomass recycling, composting, landfill, POTW, or related facilities, including, but not limited to, the following:

2.1 Tub grinder powered by a motor with a maximum output rating less than 10 horsepower;

2.2 Hogger, shredder or similar source powered by a motor with a maximum output rating less than 25 horsepower;

2.3 Other biomass processing/handling sources at a facility with a total throughput less than 500 tons per year.

(Amended 6/7/95; 5/17/00)

2-1-116 Exemption, Furnaces, Ovens and Kilns: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

116.1 Porcelain enameling furnaces, porcelain enameling drying ovens, vitreous enameling furnaces or vitreous enameling drying ovens.

116.2 Crucible furnaces, pot furnaces, induction furnaces, cupolas, electric arc furnaces, reverbatories, or blast furnaces with a capacity of 1000 lbs or less each.

116.3 Crucible furnaces, pot furnaces, or induction furnaces for sweating or distilling that process 100 tons per year of all metals or less.

116.4 Drying or heat-treating ovens with less than 10 million BTU per hour capacity provided that a) the oven does not emit pollutants other than combustion products and b) the oven is fired exclusively with natural gas (including compressed natural gas), liquefied petroleum gas (e.g. propane, butane, isobutane, propylene, butylenes, and their mixtures), or any combination thereof.

116.5 Ovens used exclusively for the curing of plastics which are concurrently being vacuum held to a mold, or for the softening and annealing of plastics.

116.6 Ovens used exclusively for the curing of vinyl plastisols by the closed mold curing process.

116.7 Ovens used exclusively for curing potting materials or castings made with epoxy resins.

116.8 Kilns used for firing ceramic ware, heated exclusively by natural gas, liquefied petroleum gas, electricity or any combination thereof.

116.9 Parts cleaning, bake-off, and similar ovens that meet both of the following:

9.1 Oven is equipped with a secondary combustion chamber or abated by a fume incinerator; and

9.2 Internal oven volume is 1 cubic yard or less.

116.10 Electric ovens used exclusively for curing or heat-treating where no significant off-gassing or evaporation of any air contaminants occurs.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00)

2-1-117 Exemption, Food and Agricultural Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

117.1 Smokehouses or barbecue units in which the maximum horizontal inside cross sectional area does not exceed 20 square feet.

117.2 Equipment at facilities other than restaurants, cafeterias or other retail operations, which is used to dry, cook, fry, bake, or grill less than 1000 tons per year of food products.

117.3 Any oven with a total production of yeast leavened bakery products of less than 10,000 pounds per operating day, averaged over any period of seven consecutive days, and which is heated either electrically or exclusively by natural gas firing with a maximum capacity of less than 10 million BTU per hour.

117.4 Equipment used exclusively to grind, blend, package, or store tea, cocoa, spices, or coffee.

117.5 Equipment used to dry, mill, grind, blend, or package less than 1000 tons per year of dry food products such as seeds, grains, corn, meal, flour, sugar, and starch.

117.6 Equipment used to convey, transfer, clean, or separate less than 1000 tons per year of dry food products or waste from food production operations.

117.7 Storage equipment or facilities containing dry food products; which are not vented to the outside atmosphere, or which handle less than 1000 tons per year.

117. 8 Coffee, cocoa and nut roasters with a roasting capacity of less than 15 pounds of beans or nuts per hour; and any stoners or coolers operated in conjunction with these roasters.

117.9 Containers, reservoirs, tanks, or loading equipment used exclusively for the storage or loading of beer, wine or other alcoholic beverages.

117.10 Fermentation tanks for beer or wine. Fermentation tanks used for the commercial production of yeast for sale are not exempt.

117.11 Brewing operations at facilities producing less than 3 million gallons per year of beer.

117.12 Fruit sulfuring operations at facilities producing less than 10 tons per year of sulfured fruits and vegetables.

(Adopted 10/19/83; Amended 4/16/86; 7/1791; 6/7/95; 5/17/00)

2-1-118 Exemption, Surface Preparation and Cleaning Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

118.1 Permanent abrasive blasting source, as defined by Regulation 12, Rule 4, that has a confined volume less than 100 cubic feet (ft^3) and is abated by a particulate filter.

118.2 Blast cleaning equipment using a suspension of abrasive in water.

118.3 Portable abrasive blasting equipment used on a temporary basis within the District.

118.4 Equipment, including solvent cold cleaners using an unheated solvent mixture for surface preparation, cleaning, wipe cleaning, fluxing or stripping by use of solutions with a VOC content less than or equal to 50 grams per liter (0.42 lb/gal).

118.5 Equipment using a heated solvent mixture for steam cleaning, surface preparation, fluxing, stripping, wipe cleaning, washing or drying products, provided that a) only solutions containing less than 2.5 percent VOC (wt) are used; and b) any combustion sources used in the process are exempt under Section 2-1-114.

118.6 Equipment or operations which use unheated solvent and which contain less than 1 gallon of solvent or have a liquid surface area of less than 1 ft^2. This exemption does not apply to solvent stations at semiconductor manufacturing operation fabrication areas or aerospace stripping operations.

118.7 Deleted December 21, 2004

118.8 Batch solvent recycling equipment where all of the following apply:

8.1 Recovered solvent is used primarily on site (more than 50% by volume); and

8.2 Maximum heat input (HHV) is less than 1 million BTU per hour; and

8.3 Batch capacity is less than 150 gallons.

118.9 Wipe cleaning at a facility that meets one of the following:

9.1 net cleanup solvent usage less than 20 gallons per year from all wipe cleaning operations; or

9.2 emission to the atmosphere of less than 150 pounds per year of uncontrolled VOC from all wipe cleaning operations.

At a facility with total wipe cleaning emissions greater than 150 lb/yr, wipe cleaning operations may be grouped per Section 2-1-401.4.

118.10 Any solvent cleaning or surface preparation source which employs only non-refillable hand held aerosol cans.

118.11 Spray gun cleaning performed in compliance with Regulation 8, provided the cleaning is associated with a source, such as a spray booth, subject to the requirements of Section 2-1-301 and 302.

(Adopted 10/19/83; Amended 4/16/86; 8/2/89; 7/17/91; 6/7/95; 5/17/00; 12/21/04)

2-1-119 Exemption, Surface Coating and Printing Equipment: The following equipment and operations are exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

119.1 Any powder coating operation, or radiation cured coating operation where ultraviolet or electron beam energy is used to initiate a reaction to form a polymer network.

119.2 Any coating, adhesive, dipping, laminating, screening, masking, electrodeposition, resist application, or similar source or operation at any facility that is not operated or conducted as part of a graphic arts operation, which:

2.1 Consumes a total of less than 30 gallons of coating, adhesive, laminate or resist per year on a facility wide basis, or emits less than 150 pounds per year of uncontrolled VOC on a facility wide basis, resulting from the application of these materials; or

2.2 Uses exclusively materials that contain less than one percent VOC (wt).

At a facility with emissions from these sources or operations of greater than 150 lb/yr, these sources or operations may be grouped per Section 2-1-401.3.

119.3 Any coating source which employs only non-refillable hand held aerosol cans.

119.4 An oven associated with an exempt coating source, provided that the oven is electrically heated, or the oven is fired exclusively with natural gas, liquefied petroleum gas (e.g. propane, butane, isobutane, propylene, butylenes, and their mixtures) and the maximum firing rate is less than 10 million BTU per hour.

119.5 Any graphic arts operation that emits less than 400 pounds of uncontrolled VOC emissions per month on a facility-wide basis.

(Adopted 10/19/83; Amended 4/16/86; 7/17/91; 6/7/95; 5/17/00; 12/21/04; 11/19/08)

2-1-120 Exemption, Dry Cleaning Equipment: Any dry cleaning facility which uses (gross consumption) less than 200 gallons of petroleum solvent or any other non-halogenated solvent in any single year is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319; the facility is in compliance with the registration requirement in Regulation 8, Rule 17, Section 404; and the equipment does not use solvent that contains perchloroethylene or more than 1% by weight of any other halogenated compound.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00; 3/4/09)

2-1-121 Exemption, Material Working and Handling Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

121.1 Equipment used for buffing, carving, cutting, drilling, grinding, machining, planing, routing, sanding, sawing, shredding, stamping or turning of wood, ceramic artwork, ceramic precision parts, leather, metals, plastics, rubber, fiberboard, masonry, glass, silicon, semiconductor wafers, carbon or graphite, provided that organic emissions from the use of coolant, lubricant, or cutting oil are 5 ton/yr or less.

121.2 Equipment used for pressing or storing sawdust, wood chips or wood shavings.

121.3 Equipment used exclusively to mill or grind coatings and molding compounds in a paste form provided the solution contains less than one percent VOC (wt).

121.4 Tumblers used for the cleaning or deburring of metal products without abrasive blasting.

121.5 Batch mixers with a rated working capacity of 55 gallons or less.

121.6 Mixing equipment provided no material in powder form is added and mixture contains less than one percent VOC (wt).

121.7 Equipment used exclusively for the mixing and blending of materials at ambient temperature to make water based adhesives.

121.8 Equipment used exclusively for the mixing and packaging of lubricants or greases.

121.9 Presses used exclusively for extruding metals, minerals, plastics or wood.

121.10 Presses used for the curing of rubber products and plastic products. The use of mold release products or lubricants is not exempt unless the VOC content of these materials is less than or equal to 1 percent, by weight, or unless the total facility-wide uncontrolled VOC emissions from the use of these materials are less than 150 lb/yr.

121.11 Platen presses used for laminating.

121.12 Roll mills or calendars for rubber or plastics.

121.13 Equipment used exclusively for forging, pressing, rolling, stamping or drawing metals or for heating metals immediately prior to forging, pressing, rolling, stamping or drawing, provided that: (1) maximum fuel use rate is less than 10 million BTU/hr; (2) no lubricant with an initial boiling point less than 400°F is used; and (3) organic emissions are 5 ton/yr or less.

121.14 Atmosphere generators used in connection with metal heat treating processes.

121.15 Equipment used exclusively for the sintering of glass or metals.

121.16 Equipment used exclusively for the melting or applying of wax containing less than one percent VOC (wt).

121.17 Equipment used exclusively for conveying and storing plastic pellets.

121.18 Solid waste transfer stations that receive or load out a total of all material less than 50 tons/day.

121.19 Inactive solid waste disposal sites which do not have an operating landfill gas collection system.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00)

2-1-122 Exemption, Casting and Molding Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

122.1 Molds used for the casting of metals.

122.2 Foundry sand mold forming equipment to which no heat is applied, except processes utilizing organic binders yielding in excess of 0.25% free phenol by weight of sand.

122.3 Shell core and shell-mold manufacturing machines.

122.4 Equipment used for extrusion, compression molding and injection molding of plastics. The use of mold release products or lubricants is not exempt unless the VOC content of these materials is less than or equal to 1 percent, by weight, or unless the total facility-wide uncontrolled VOC emissions from the use of these materials are less than 150 lb/yr.

122.5 Die casting machines.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00)

2-1-123 Exemption, Liquid Storage and Loading Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

123.1 Storage tanks and storage vessels having a capacity of less than 260 gallons.

123.2 Tanks, vessels and pumping equipment used exclusively for the storage or dispensing of any aqueous solution which contains less than 1 percent (wt) organic compounds. Tanks and vessels storing the following materials are not exempt.

2.1 Sulfuric acid with an acid strength of more than 99.0% by weight.

2.2 Phosphoric acid with an acid strength of more than 99.0% by weight.

2.3 Nitric acid with an acid strength of more than 70.0% by weight.
2.4 Hydrochloric acid with an acid strength of more than 30.0% by weight.
2.5 Hydrofluoric acid with an acid strength of more than 30.0% by weight.
2.6 More than one liquid phase, where the top phase contains more than one percent VOC (wt).

123.3 Containers, reservoirs, tanks or loading equipment used exclusively for:
3.1 Storage or loading of liquefied gases.
3.2 Storage or loading of organic liquids or mixtures containing organic liquids; where the initial boiling point of the organics is greater than 302°F and exceeds the actual storage temperature by at least 180°F. This exemption does not apply to the storage or loading of asphalt or asphalt emulsion with a sulfur content equal to or greater than 0.5 wt%.
3.3 The storage or loading of petroleum oils with an ASTM D-93 (PMCC) flash point of 130°F or higher, when stored or loaded at a temperature at least 36°F below the flash point.
3.4 The storage or loading of lubricating oils.
3.5 The storage of fuel oils with a gravity of 40 API or lower and having a capacity of 10,000 gallons or less.
3.6 The storage or loading of liquid soaps, liquid detergents, tallow, or vegetable oils, waxes or wax emulsions.
3.7 The storage of asphalt or asphalt emulsion with a sulfur content of less than 0.5 wt%. This does not include the storage of asphalt cutback with hydrocarbons having an initial boiling point of less than 302°F.
3.8 The storage of wine, beer or other alcoholic beverages.
3.9 The storage of organic salts or solids in an aqueous solution or suspension, provided that no liquid hydrocarbon layer forms on top of the aqueous phase.
3.10 The storage or loading of fuel oils with a gravity of 25 API or lower.
3.11 The storage and/or transfer of an asphalt-water emulsion heated to 150°F or less.

123.4 Tank seal replacement. For any tank subject to Regulation 8, Rule 5, any new seal must comply with the applicable provisions of Regulation 8, Rule 5, and the District must receive written notification of the tank source number and seal type at least three days prior to the installation.

(Adopted 10/19/83; Amended 7/11/84; 7/17/91; 6/7/95; 5/17/00)

2-1-124 Exemption, Semiconductor Manufacturing: Semiconductor fabrication area(s) at a facility which complies with all of the following are exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

124.1 Net solvent usage is less than 20 gallons of VOC per year on a facility wide basis; or uncontrolled VOC emissions to the atmosphere resulting from the usage of solvent are less than 150 pounds per year of VOC on a facility wide basis, and

124.2 Maskant and/or coating usage is less than 30 gallons per year, on a facility wide basis; or uncontrolled VOC emissions from the application of maskant and coatings are less than 150 pounds per year on a facility wide basis.

(Adopted 10/19/83; Amended 1/9/85; 4/16/86; 7/17/91; 6/7/95; 10/20/99; 5/17/00)

2-1-125 Exemption, Printed Circuit Board Manufacturing Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

125.1 Equipment used exclusively for:

1.1 Plating of printed circuit boards.

1.2 Buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding or turning of printed circuit boards.

1.3 Soldering. This section does not exempt fluxing and finger cleaning (see Section 2-1-118.4).

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00)

2-1-126 Exemption, Testing Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

126.1 Equipment used for hydraulic or hydrostatic testing.

126.2 Bench scale laboratory equipment or processes used exclusively for chemical or physical analyses or experimentation, quality assurance and quality control testing, research and development, or similar bench scale equipment, excluding pilot plants.

126.3 Equipment used for inspection of metal products.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00)

2-1-127 Exemption, Chemical Processing Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

127.1 Equipment used exclusively for the dyeing or stripping (bleaching) of textiles provided that only solutions containing less than one percent VOC (wt) are used.

127.2 Photographic process equipment by which an image is reproduced upon material sensitized to radiant energy.

127.3 Containers, reservoirs, or tanks used exclusively for electrolytic plating with, or electrolytic polishing of, or electrolytic stripping of the following metals: aluminum, brass, bronze, cadmium, copper, iron, nickel, tin, zinc and precious metals.

127.4 Containers, reservoirs, or tanks used exclusively for etching (not chemical milling), except where ammonia or ammonium-based etchants are used.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00)

2-1-128 Exemption, Miscellaneous Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

128.1 Comfort air conditioning or comfort ventilating systems which are not designed to remove air contaminants generated by or released from specific units of equipment.

128.2 Refrigeration units except those used as, or in conjunction with, air pollution control equipment.

128.3 Vacuum producing devices in laboratory operations which are used exclusively in connection with other equipment which is exempted by this Rule, and vacuum producing devices which do not remove or convey air contaminants from another source.

128.4 Water cooling towers and water cooling ponds not used for evaporative cooling of process water, or not used for evaporative cooling of water from barometric jets or from barometric condensers.

128.5 Natural draft hoods, natural draft stacks or natural draft ventilators.

128.6 Vacuum cleaning system used exclusively for industrial commercial or residential housekeeping purposes.

128.7 Equipment used to liquefy or separate oxygen, nitrogen or the rare gases from the air.

128.8 Equipment used exclusively to compress or hold dry natural gas, excluding drivers.

128.9 Equipment used exclusively for bonding lining to brake shoes.

128.10 Equipment used exclusively for the manufacture of water emulsions of waxes, greases or oils.

128.11 Brazing, soldering or welding equipment.

128.12 Pharmaceutical manufacturing equipment with annual VOC emissions less than 150 pounds per source. Material working and handling equipment such as mills, grinders, blenders, granulators, tablet presses, capsule fillers, packagers, and conveyors are only exempt if the source also processes less than 100 tons per year of pharmaceutical products.

128.13 Equipment used exclusively to blend or package cosmetics.

128.14 Any wastewater (oil-water) separator, as defined in Regulation 8, Rule 8, which processes less than 200 gallons per day of waste water containing organic liquids.

128.15 Exploratory drilling activities for methane recovery at waste disposal sites, for natural gas or for oil. Production wells for the above operations are not exempt.

128.16 Passive aeration of soil, only if:

16.1 The duration of the passive aeration operation will not exceed three months, and

16.2 The soil is not being used as a cover material at a landfill.

128.17 Ozone generators which produce less than 1 pound per day of ozone.

128.18 Any source or operation which exclusively uses consumer products regulated by the California Air Resources Board (California Code of Regulations Title 17, Article 2, Sections 94507-94517).

128.19 Any source or operation deemed by the APCO to be equivalent to a source or operation which is expressly exempted by Sections 2-1-113 through 128.

128.20 Wastewater pumping stations where no treatment is performed, excluding any drivers.

128.21 Modification, replacement, or addition of components that have only fugitive emissions during routine operation (e.g. valves, flanges, pumps, compressors, relief valves, process drains) at existing permitted equipment at petroleum refineries, chemical plants, bulk terminals or bulk plants, provided that:

21.1 the modification, replacement or addition of the components will not result in any increase in emissions of any source at the facility (other than the fugitive emissions from the components being modified, replaced or added) in such a manner as to result in a modification of such source as defined in Section 2-1-234 (e.g., through debottlenecking of a source);

21.2 the total allowable fugitive emissions from all additional components installed pursuant to this exemption at a given process unit during any consecutive twelve month period do not exceed 10 lb/day (or, for

components that are not associated with a process unit, the total allowable fugitive emissions from all additional components installed at the facility that are not associated with a process unit during any twelve-month period do not exceed 10 lb/day), based on the maximum fugitive emissions rate allowed under District regulations;

21.3 the components installed satisfy the "typical control technology" listed in the BACT/TBACT Workbook;

21.4 the components meet applicable requirements of Regulation 8 rules; and

21.5 fugitive emissions from the components are included when calculating emissions from the equipment on which the components are installed for purposes of applying District regulations to that equipment (e.g., BACT and offsets requirements).

128.22 Fuel cells that use phosphoric acid, molten carbonate, proton exchange membrane, solid oxide or equivalent technologies.

128.23 Structure demolition that does not involve asbestos or asbestos containing materials.

(Adopted 10/19/83; Amended 7/16/86; 7/17/91; 6/7/95; 5/17/00; 11/15/00; 12/21/04)

2-1-129 **Major Facility Review:** Notwithstanding the exemptions listed in this section, every source exempted by this Rule shall be included in any application for a synthetic minor or major facility review permit required by Regulation 2, Rule 6.

(Adopted 12/3/93; Amended 2/1/95; 5/17/00)

2-1-130 **Effect of Explanatory Notes:** The explanatory notes that are included in italics following certain provisions in Regulation 2 are intended to help readers better understand the regulatory context of these provisions. They are not intended to be binding as regulatory requirements. Where such notes are provided, it is the text of the regulatory provision itself, and not the text of the notes, that establishes the binding legal requirements of the provision.

2-1-200 **DEFINITIONS**

2-1-201 [Deleted December 19, 2012]

2-1-202 **Complete Application:** An application that contains all of the information required under Regulation 2-1-402.

(Amended 7/17/91; 11/20/91; 5/17/00; 12/21/04)

2-1-203 **Fugitive Emissions:** Fugitive emissions are all emissions from unintended openings in process equipment, emissions occurring from miscellaneous activities relating to the operation of a facility, and those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening.

(Adopted October 19, 1983)

2-1-204 [Deleted December 19, 2012]

2-1-205 [Deleted December 19, 2012]

2-1-206 [Deleted December 19, 2012]

2-1-207 **Organic Compound, Non-Precursor (NPOC):** The following are considered non-precursor organic compounds:

methane; ethane; methylene chloride (dichloromethane); 1,1,1-trichloroethane (methyl chloroform); 1,1,2-trichloro-1,2,2-trifluoroethane (CFC–113); trichlorofluoromethane (CFC–11); dichlorodifluoromethane (CFC–12); chlorodifluoromethane (HCFC–22); trifluoromethane (HFC–23); 1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC–114); chloropentafluoroethane

(CFC–115); 1,1,1-trifluoro 2,2-dichloroethane (HFC–123); 1,1,1,2-tetrafluoroethane (HFC–134a); 1,1-dichloro 1-fluoroethane (HCFC–141b); 1-chloro 1,1-difluoroethane (HCFC–142b); 2-chloro-1,1,1,2-tetrafluoroethane (HCFC–124); pentafluoroethane (HFC–125); 1,1,2,2-tetrafluoroethane (HFC–134); 1,1,1-trifluoroethane (HFC–143a); 1,1-difluoroethane (HFC–152a); parachlorobenzotrifluoride (PCBTF); cyclic, branched, or linear completely methylated siloxanes; acetone; perchloroethylene (tetrachloroethylene); 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC–225ca); 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC–225cb); 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43–10mee); difluoromethane (HFC–32); ethylfluoride (HFC–161); 1,1,1,3,3,3-hexafluoropropane (HFC–236fa); 1,1,2,2,3-pentafluoropropane (HFC–245ca); 1,1,2,3,3-pentafluoropropane (HFC–245ea); 1,1,1,2,3-pentafluoropropane (HFC–245eb); 1,1,1,3,3-pentafluoropropane (HFC–245fa); 1,1,1,2,3,3-hexafluoropropane (HFC–236ea); 1,1,1,3,3-pentafluorobutane (HFC–365mfc); chlorofluoromethane (HCFC–31); 1 chloro-1-fluoroethane (HCFC–151a); 1,2-dichloro-1,1,2-trifluoroethane (HCFC–123a); 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane ($C_4F_9OCH_3$ or HFE–7100); 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ($(CF_3)_2CFCF_2OCH_3$); 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane ($C_4F_9OC_2H_5$ or HFE–7200); 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ($(CF_3)_2CFCF_2OC_2H_5$); methyl acetate, 1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane (n-$C_3F_7OCH_3$, HFE–7000), 3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl) hexane (HFE–7500), 1,1,1,2,3,3,3-heptafluoropropane (HFC 227ea), methyl formate ($HCOOCH_3$), (1) 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE–7300); propylene carbonate; dimethyl carbonate; and perfluorocarbon compounds which fall into these classes:

(i) Cyclic, branched, or linear, completely fluorinated alkanes;

(ii) Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;

(iii) Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and

(iv) Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

In addition, any compound designated as having a negligible contribution to photochemical reactivity by the U.S. Environmental Protection Agency as published in the Federal Register shall be considered a Non-Precursor Organic Compound.

(Amended 7/17/91; 6/15/94)

2-1-208 **Organic Compound, Precursor (POC):** Any organic compound as defined in Regulation 1-233, excepting the non-precursor organic compounds as defined in Section 2-1-207.

(Adopted 3/17/82; Amended 7/17/91)

2-1-209 [Deleted December 19, 2012]

2-1-210 **Start-Up Period:** The period of time between initial operation and the issuance or denial of a permit to operate of a source or facility.

(Adopted October 19, 1983)

2-1-211 **CEQA:** The California Environmental Quality Act, Public Resources Code Section 21000 *et seq*.

(Adopted July 17, 1991)

2-1-212 **EIR:** Environmental Impact Report, as defined in Public Resources Code Section 21061.

(Adopted 7/17/91; Amended 5/17/00)

2-1-213 **Facility:** Any source, building, structure or installation that emits or may emit any air pollutant; or any aggregation of such sources, buildings, structures or installations that are (i) located on one or more contiguous or adjacent properties; (ii) are under common ownership or control; and (iii) are considered to be in the same major industrial grouping (identified by the first two digits of the applicable code in *The Standard Industrial Classification Manual*). For purposes of this definition:

213.1 A Support Facility as defined in Section 2-1-242 is considered to be in the same major industrial grouping as the facility it supports, regardless of what code may nominally apply under *The Standard Industrial Classification Manual*.

213.2 A source is considered to be under control of the owner or operator of a facility if it is owned, operated or maintained by an agent or contractor acting on behalf of the facility owner or operator, unless it remains at the facility for less than 12 consecutive months (or, in the case of multiple temporary sources that are used in succession at the facility to serve the same function at the same facility source, the total time period that all such temporary sources remain at the facility is less than 12 consecutive months).

(Adopted 11/3/93; Amended 12/21/04; 12/06/17)

2-1-214 **Federally Enforceable:** All limitations and conditions that are enforceable by the Administrator of the U. S. EPA, including but not limited to (i) requirements developed pursuant to 40 CFR Parts 60 (NSPS), 61 (NESHAPS), 63 (HAP), 70 (State Operating Permit Programs) and 72 (Permits Regulation, Acid Rain); (ii) requirements contained in the State Implementation Plan (SIP) that are applicable to the District; (iii) District regulations approved pursuant to 40 CFR Part 51, Subpart I (NSR); (iv) requirements in any operating permit issued under an EPA-approved program that is a part of the SIP and expressly requires adherence to any permit issued under such program, including requirements of any District permit condition (excluding conditions that are not enforceable by the Administrator of the U.S. EPA); and (v) requirements in federal consent decrees that are enforceable by the Administrator of the U.S. EPA.

(Adopted November 3, 1993)

2-1-215 **Hazardous Air Pollutant (HAP):** Any pollutant that is listed pursuant to Section 112(b) of the federal Clean Air Act.

(Adopted 11/3/93; Amended 5/17/00)

2-1-216 [Deleted December 19, 2012]

2-1-217 **Potential to Emit:** The maximum capacity of a source or facility to emit a pollutant based on its physical and operational design. Any physical or operational limitation on the capacity of the source or facility to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as a part of its design only if the limitation, or the effect it would have on emissions, is enforceable by the District or EPA (or both). A source or facility that exceeds an enforceable limitation is considered to have a potential to emit that is unconstrained by any such exceeded limit.

(Adopted 11/3/93; Amended 5/17/00)

2-1-218 **Regulated Air Pollutant:** Except for purposes of major facility review in connection with Regulation 2, Rule 6, for which the definition in Section 2-6-222 applies, a regulated air pollutant is any air pollutant that is subject to a regulation.

(Adopted 11/3/93; Amended 5/17/00)

2-1-219 [Deleted December 19, 2012]

2-1-220 [Deleted December 19, 2012]

2-1-221 **Source:** Any article, machine, equipment, operation, contrivance or related groupings of such which may produce and/or emit air pollutants.

(Adopted June 7, 1995)

2-1-222 **Toxic Air Contaminant (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 6/7/95; Amended 5/17/00; 6/15/05)

2-1-223 **Year, Month and Day:** Unless otherwise specified by regulation or by permit condition, a year shall be any rolling 12-month period, a month shall be a calendar month, and a day shall be a calendar day.

(Adopted June 7, 1995)

2-1-224 **Responsible Laboratory Management Practices:** For the purposes of meeting the laboratory exemption of Section 2-1-113.2.12, Responsible Laboratory Management Practices include all of the following measures for minimizing the emissions of toxic air contaminants:

224.1 Open container procedures involving materials that contain volatile toxic air contaminants (TACs) shall be avoided where feasible.

224.2 Open container storage of volatile hazardous chemical wastes shall be avoided.

224.3 Training for laboratory employees handling hazardous materials shall include information about minimizing the emissions of volatile TACs. These employees shall be directed to avoid open container procedures involving volatile TACs where feasible, and to avoid open container storage of hazardous chemical waste.

224.4 Fume hoods shall be posted with notices reminding employees to avoid open container procedures using volatile TACs where feasible. Laboratories shall be inspected periodically, but not less than annually, to confirm that these notices are present.

224.5 Laboratory fume hoods shall be monitored periodically to assure proper face velocity.

224.6 Evaporation of any hazardous chemical waste containing TACs as a means of disposal shall be expressly forbidden.

(Adopted June 7, 1995)

2-1-225 [Deleted December 19, 2012]

2-1-226 **Statewide Portable Equipment Registration Program**: A uniform system for statewide registration and regulation of portable internal combustion and associated equipment, implemented by the Air Resources Board pursuant to Section 41750 et seq. of the Health and Safety Code.

(Adopted October 7, 1998)

2-1-227 **Substantial Use**: Substantial use of an Authority to Construct consists of one or more of the following: purchase or acquisition of the equipment that constitutes the source; ongoing construction activities other than grading or installation of utilities or foundations; a contract or commitment to complete construction of the source within two years.

(Adopted October 7, 1998)

2-1-228 **Particulate Matter (PM):** Any airborne finely divided solid or liquid material with an aerodynamic diameter smaller than 100 microns.

(Adopted October 7, 1998)

2-1-229 **PM_{10}:** Particulate matter with aerodynamic diameter smaller than or equal to a nominal 10 microns. PM_{10} emissions shall include gaseous emissions from a source or activity that condense to form particulate matter at ambient temperatures.

(Adopted October 7, 1998)

2-1-230 **Functionally Equivalent:** Performing the same, or equivalent, function as the object of comparison. A functionally equivalent replacement source performs the same function for the process as the source being replaced, although emissions and other characteristics may differ. A replacement that performs additional functions is not considered to be functionally equivalent.

(Adopted October 7, 1998)

2-1-231 **Semiconductor Fabrication Area:** A physically identifiable area in a semiconductor manufacturing facility where one or more specific operations in the fabrication of semiconductors or related solid state devices occurs and the equipment used to perform those operations. The semiconductor fabrication area shall not include crystal growth, circuit separation, or encapsulation. All semiconductor fabrication equipment may be grouped into a single fabrication area, or multiple fabrication areas may be established to correspond to product lines or clean room environments.

(Adopted October 20, 1999)

2-1-232 **New Source:** Any source that has not been in existence before, including any source that meets at least one of the following criteria (except sources that lose a permit exemption or exclusion in accordance with Regulation 2-1-424):

232.1 Any source constructed or proposed to be constructed after March 7, 1979, but which never had a valid District authority to construct or permit to operate.

232.2 Any source which was not in operation for a period of one year or more and did not hold a valid District permit to operate during this period of non-operation, occurring after March 7, 1979.

232.3 Any relocation of an existing source to a non-contiguous property, unless such relocation is authorized under a permit to operate at multiple locations pursuant to Section 2-1-413.

232.4 Any replacement of a source, including an identical replacement of a source, occurring after March 7, 1979, regardless of when the original source was constructed.

232.5 Any replacement of an identifiable source within a group of sources permitted together under a single source number for the purpose of District permitting convenience.

232.6 “Rebricking” of a glass furnace where changes to the furnace design result in a change in heat generation or absorption.

(Adopted May 17, 2000; Amended 12/06/17)

2-1-233 **Alter:** To make any physical change, change in the method of operation, or other similar change at an existing source that may affect air pollutant emissions and that does not qualify as a modification under the criteria set forth in Section 2-1-234. The APCO may impose permit conditions in an authority to construct or permit to operate for an alteration to ensure that the change authorized by the authority to construct or permit to operate will not result in a modification under Section 2-1-234. Other forms of the word alter, including altered and alteration, shall be defined based on the meaning of the root word “alter”.

2-1-234 **Modify:** To make any physical change, change in method of operation, change in throughput or production, or other similar change at an existing source, that results in an increase in emissions that is either of the following:

234.1 Increase in Potential To Emit: An increase in the source's daily or annual potential to emit, determined according to the definition in Section 2-1-217 and the following requirements.

1.1 Any legally enforceable limitation on a source's operations that has the effect of limiting emissions may be taken into account in determining a source's potential to emit, as provided for in Section 2-2-217. Such limits may include direct limitations on the source's emissions and surrogate limits on operating conditions such as production rate or capacity that have the effect of limiting emissions. An hourly emissions limit may be multiplied by 24 to determine daily potential to emit and a daily emissions limit may be multiplied by 365 to determine annual potential to emit, unless the source cannot operate at its full permitted limit for 24 hours per day or 365 days per year or there is some other reason why short-term permit limits do not accurately represent longer-term potential to emit. A permit limit that applies to combined emissions from multiple sources does not establish an individual source's potential to emit, unless the limit imposes an effective, legally enforceable limitation specifically on the emissions from the individual source.

1.2 For sources whose emissions are not limited by any legally enforceable limitation (or that cannot physically operate to the full extent of such limitation), the source's potential to emit shall be determined by the source's actual physical ability to emit air pollution. A source's potential to emit shall be determined by the most relevant and reliable technical information available regarding the source's operation, which may include design information, engineering specifications, or other information. A source's potential to emit shall take into account any limitation on the effective capacity of the source as a result of the capacity of any upstream or downstream process that acts as a "bottleneck" (i.e., a limit on the ability of the source to operate at maximum capacity).

1.3 For emissions toxic air contaminants and hazardous air pollutants, a change is not a modification unless the increase in the source's potential to emit results in an increase in cancer risk (as defined in Regulation 2-5-206) greater than 1.0 in a million (10^{-6}) or an increase in chronic hazard index (as defined in Regulation 2-5-208) greater than 0.20. An increase in emissions of less than the trigger levels specified in Table 2-5-1 in Regulation 2, Rule 5 shall be presumed not to cause an increase in cancer risk of greater than 1.0 in a million or an increase in chronic hazard index of greater than 0.20.

234.2 Increase Over Actual Emissions Baseline: An increase that is a "major modification" under either of the following definitions:

2.1 Non-Attainment NSR Pollutants: For NOx, VOC, $PM_{2.5}$, and SO_2, a "major modification" as defined in 40 C.F.R. section 51.165(a)(1)(v);

2.2 Other Federal NSR Pollutants: For other pollutants, a "major modification" as defined in 40 C.F.R. section 52.21(b)(2)(i).

The following provisions shall apply for purposes of implementing and applying this Subsection 234.2:

2.3 For purposes of determining whether an increase in emissions constitutes a "major modification" under Subsections 234.2.1 and/or 234.2.2, the definitions in 40 C.F.R. sections 51.165(a)(1)(i)-(xlii) and 52.21(b)(1)-(52), and the applicability provisions in 40 C.F.R. sections 51.165(a)(2)(ii)(A)-(F) and 52.21(a)(2)(ii)-(iv), are incorporated by reference and shall be used in implementing and applying this Subsection 234.2. The term "Administrator" as used in these provisions shall be interpreted to mean the Administrator of the U.S. Environmental Protection Agency in 40 C.F.R. sections 52.21(b)(3), (b)(17), (b)(37)(i), (b)(43), (b)(48)(ii)(*c*), and (b)(49)-(51), and in all referenced provisions in 40 C.F.R. section 51.165; and it shall be interpreted to mean the APCO in all other provisions.

2.4 For any project at a "major stationary source" as defined in 40 C.F.R. sections 51.165(a)(1)(iv) or 52.21(b)(1) that (i) does not result in an increase in potential to emit as specified in subsections 234.1.1 through 234.1.3, and (ii) does not constitute a "major modification" under the definitions in subsections 234.2.1 and 234.2.2 above based on the calculation methods specified in 40 C.F.R. sections 51.165(a)(1)(xxviii)(B)(*1*)-(*3)* and 52.21(b)(41)(ii)(*a*)-(*c*), the owner/operator of such project shall comply with the documentation, monitoring, recordkeeping, and reporting requirements set forth in 40 C.F.R. sections 51.165(a)(6)(i)-(vi) and 52.21(r)(6)(i)-(vi) for each pollutant for which there is a reasonable possibility that the project may result in a significant emissions increase within the meaning of 40 C.F.R. sections 51.165(a)(6)(vi) and 52.21(r)(6)(vi).

2.5 The owner/operator of any project that is required to maintain any documentation pursuant to Subsection 234.2.4 above shall make such documentation available for review upon request by the APCO, EPA, or any member of the public on the same terms as applicable under the requirements contained in 40 C.F.R. section 70.4(b)(3)(viii).

Other forms of the word modify, including modified and modification, shall be defined based on the meaning of the root word "modify".

(Adopted 5/17/00; Amended 11/15/00; 6/15/05; 12/06/17)

2-1-235 [Deleted, December 19, 2012]

2-1-236 [Deleted, December 19, 2012]

2-1-237 **BACT/TBACT Workbook:** District guidelines setting forth emission limitations and/or control technologies constituting BACT and TBACT for a number of source types or categories.

(Adopted June 15, 2005)

2-1-238 **Clean Air Act:** The federal Clean Air Act, as amended in 1990, including the implementing regulations.

(Adopted June 15, 2005)

2-1-239 **Agricultural Source:** A source of air pollution, or group of such sources located on the same property or on contiguous properties under common ownership or control, used in the production of crops or the raising of fowl or animals; but excluding any

source or group of sources at a facility that maintains domesticated animals in corrals, pens, or other restricted areas for commercial purposes, and feeds them by means other than grazing, in numbers equal to or exceeding any of the following thresholds on any day: 1,000 milk-producing dairy cows; 3,500 beef cattle; 7,500 calves, heifers, or other cattle; 100,000 turkeys; 650,000 chickens other than laying hens; 650,000 laying hens; 3,000 swine; 15,000 sheep, lambs, or goats; 2,500 horses; 650,000 ducks; or 30,000 rabbits or other animals.

(Adopted July 19, 2006; Amended 12/06/17)

2-1-240 **Graphic Arts Operation:** Any gravure, flexographic printing, digital printing, screen printing, letterpress, and lithographic printing operation; any associated coating laminating, and adhesive operation to produce a printed product; and the use of solvents for any surface preparation and cleanup for any operation stated above.

(Adopted November 19, 2008)

2-1-241 **$PM_{2.5}$:** Particulate matter with aerodynamic diameter smaller than or equal to a nominal 2.5 microns. $PM_{2.5}$ emissions shall include gaseous emissions from a source or activity that condense to form particulate matter at ambient temperatures.

2-1-242 **Support Facility:** A facility that conveys, stores, or otherwise significantly assists in the production of the principal product of another facility. Per Section 2-1-213, a support facility is considered part of the principal facility that it supports for permitting purposes under Regulation 2.

2-1-243 **Overburdened Community:** An area located (i) within a census tract identified by the California Communities Environmental Health Screening Tool (CalEnviroScreen), Version 4.0, as having an overall CalEnviroScreen score at or above the 70th percentile, or (ii) within 1,000 feet of any such census tract.

2-1-300 STANDARDS

2-1-301 **Authority to Construct:** Any person who, after July, 1972, puts in place, builds, erects, installs, modifies, modernizes, alters or replaces any article, machine, equipment or other contrivance, the use of which may cause, reduce or control the emission of air contaminants, shall first secure written authorization from the APCO in the form of an authority to construct. Routine repairs, maintenance, or cyclic maintenance that includes replacement of components with identical components is not considered to be an alteration, modification or replacement for the purpose of this Section unless the APCO determines the changes to be non-routine. The use or operation of the source shall initiate the start-up period in accordance with Section 2-1-411.

(Amended 3/17/82; 10/19/83; 7/17/91; 5/17/00)

2-1-302 **Permit to Operate:** Before any person, as described in Section 2-1-401, uses or operates any article, machine, equipment or other contrivance, the use of which may cause, reduce or control the emission of air contaminants, such person shall first secure written authorization from the APCO in the form of a permit to operate.

302.1 Permit to Operate, MFR: Any facility subject to the requirements of Regulation 2, Rule 6, Major Facility Review, shall comply with the permitting requirements included in that Rule in addition to securing a permit to operate under this Rule.

302.2 Permit to Operate, Accelerated Permitting Program: Unless subject to any of the provisions of Sections 2-1-316 through 319, a temporary permit to operate may be obtained to authorize operation of a new source or a modification or alteration of an existing source under this Section pending full review for the following categories of operation:

2.1 A new source or a modification of an existing source if the following conditions are satisfied:

1.1 The source will not have the potential to emit POC, NPOC, NOx, SO_2, $PM_{2.5}$, PM_{10}, or CO in an amount of 10 pounds or more on any day, determined without taking into account the effect of any abatement device or equipment; or the source has been pre-certified under Section 2-1-415; and

1.2 The source will not have the potential to emit toxic air contaminants in an amount that exceeds any of the trigger levels set forth in Table 2-5-1 of Regulation 2, Rule 5, determined without taking into account the effect of any abatement device or equipment; and

1.3 The source is not subject to the public notice requirements of Section 2-1-412.

2.2 An abatement device that is a replacement for an existing abatement device, provided that the replacement will not increase the potential to emit any regulated air pollutant from the abatement device and the source(s) whose emissions it abates.

2.3 An alteration of an existing source, as defined in Section 2-1-233.

An applicant seeking a permit for a new, modified or altered source that is in any of the preceding categories may apply for a temporary permit to operate under the Accelerated Permitting Program by submitting (i) a permit application form and source data form(s) properly filled out with all required information; (ii) payment of applicable fees (the minimum permit fee required to install and operate each source); (iii) a statement explaining which of the categories in subsections 2.1 through 2.3 above the source is in; (iv) a certification that the source meets all of the requirements of that category; (v) a certification that the source is not subject to Sections 2-1-316 through 2-1-319; and (vi) a certification that the applicant has reviewed all applicable New Source Performance Standards and has determined that the application will comply. The APCO shall issue a temporary Permit to Operate promptly upon determining that the application contains all of the elements required by (i)-(vi) of the preceding sentence. The owner or operator of the source may begin construction or operation of the source, or of the modification or alteration of the source, immediately upon receipt of the temporary Permit to Operate. The APCO shall complete a full review of the application and take final action in accordance with Section 2-1-408 within the time period provided for in that section. Any applicable offset requirements under Regulation 2, Rule 2, Sections 302 and 303 shall be satisfied before final permit issuance. The temporary Permit to Operate shall cease to be effective upon final action by the APCO under Section 2-1-408 (or if the permit application is canceled or withdrawn prior to such final action). During periods that the source is operating under the temporary Permit to Operate, the operator shall keep records sufficient to demonstrate that emissions do

not exceed applicable qualifying levels for the Accelerated Permitting Program as set forth in subsections 2.1 through 2.3 above.

302.3 Permit to Operate, Temporary Operation: A temporary permit may be obtained to allow an operator to test equipment, processes, or new formulations. A temporary permit may also be obtained for a temporary source which replaces critical equipment during scheduled maintenance. The APCO may issue a non-renewable temporary Permit to Operate a temporary operation at any source, subject to the following:

3.1 The proposed operation will comply with all requirements of Regulation 1 and Regulations 5 through 12.

3.2 The permit shall expire 3 months after issuance.

3.3 The operator shall provide offsets, at a ratio of 1.15 to 1, for all increased emissions of NO_x, POC, SO_2, $PM_{2.5}$, and PM_{10} resulting from the use of the temporary permit.

3.4 The operator shall certify that the temporary operation is for one of the following purposes:

4.1 Equipment testing

4.2 Process testing, including new formulations

4.3 Temporary replacement of an existing permitted source with an identical or functionally equivalent source

3.5 The operator shall comply with the provisions of Regulation 2-2-301, except that the cost-effectiveness analysis shall consider the short duration of the operation.

(Amended 11/3/93; 6/7/95; 10/7/98; 11/15/00)

2-1-303 Fees: Persons subject to this Regulation shall pay the fees required, as set forth in Regulation 3.

2-1-304 Denial, Failure to Comply With Applicable Requirements: The APCO shall deny an authority to construct or a permit to operate if the APCO finds that the subject of the application would not or does not comply with any emission limitations or other regulations of the District (including but not limited to the BACT and offsets requirements in Regulations 2-2-301 through 2-2-303), or with applicable permit conditions or federal or California laws or regulations, or if any required fees have not been paid. Such denial shall not be based solely on the type of construction or design of equipment.

(Amended March 17, 1982)

2-1-305 Conformance with Authority to Construct: A person shall not put in place, build, erect, install, modify, modernize, alter or replace any article, machine, equipment, or other contrivance for which an authority to construct has been issued except in a manner substantially in conformance with the authority to construct. If the APCO finds, prior to the issuance of a permit to operate, that the subject of the application was not built substantially in conformance with the authority to construct, the APCO shall deny the permit to operate.

(Amended December 21, 2004)

2-1-306 Mandated Reductions Not Applicable: Emission reductions resulting from requirements of federal, state or District laws, rules or regulations shall not be banked or allowed as emission offsets or emission reduction credits unless a complete application for such banking or emission reduction credits was filed with the District at least 90 days prior to the adoption date of such laws, rules or regulations. Only emission reduction credits exceeding the emission reductions required by measures described in the Air Quality Management Plan or required by permits or orders; and

reductions achieved by measures not specified in the Air Quality Management Plan shall be banked or allowed as emission offsets or emission reduction credits.

(Amended 10/7/81; 7/17/91; 6/15/94)

2-1-307 Failure to Meet Permit Conditions: A person shall not operate any article, machine, equipment or other contrivance, for which an authority to construct or permit to operate has been issued, in violation of any permit condition imposed pursuant to Section 2-1-403.

(Adopted 3/17/82; Amended 7/17/91)

2-1-308 Fugitive Emissions: Fugitive emissions shall be included as emissions from a source or facility except as required under this Regulation.

(Adopted 10/19/83; Amended 7/17/91)

2-1-309 Canceled Application: The APCO may cancel an application for an authority to construct and a permit to operate if, within 90 days after the application was deemed incomplete, the applicant fails to furnish the requested information or pay all appropriate fees. The 90 day period may be extended for an additional 90 days upon receipt of a written request from the applicant and written approval thereof by the APCO. The APCO shall notify the applicant in writing of a cancellation, and the reasons therefore. A cancellation shall become effective 10 days after the applicant has been notified. The cancellation shall be without prejudice to any future applications.

(Adopted April 6, 1988)

2-1-310 Applicability of CEQA: Except for permit applications which will be reviewed as ministerial projects under Section 2-1-311 or which are exempt from CEQA pursuant to Section 2-1-312, all proposed new and modified sources for which an authority to construct must be obtained from the District shall be reviewed in accordance with the requirements of CEQA.

310.1 For those District permit applications which must be reviewed in accordance with the requirements of CEQA, the District will not normally be a Lead Agency under CEQA. Rather, pursuant to CEQA, the Lead Agency will normally be an agency with general governmental powers, such as a city or county, rather than a special purpose agency such as the District.

310.2 The issuance of an authority to construct and of a permit to operate for the same new or modified source or stationary source are considered to be parts of the same project for the purposes of CEQA.

310.3 The APCO shall not authorize, on an interim basis or otherwise, the installation or operation of any proposed new or modified source, the permitting of which is subject to the requirements of CEQA, until all of the requirements of CEQA have been satisfied.

(Adopted 7/17/91; Amended 10/21/92)

2-1-311 Ministerial Projects: An application for a proposed new or modified source or stationary source will be classified as ministerial and will accordingly be exempt from the CEQA requirement of Section 2-1-310 if the District's engineering evaluation and basis for approval or denial of the permit application for the project is limited to the criteria set forth in Section 2-1-428 of this rule and to the specific procedures, fixed standards and objective measurements set forth in the District's Permit Handbook and BACT/TBACT Workbook. The method for determining whether a given permit application will be classified as ministerial is set forth in Section 2-1-427.

(Adopted 7/17/91; Amended 10/7/98)

2-1-312 Other Categories of Exempt Projects: In addition to ministerial projects, the following categories of projects subject to permit review by the District will be exempt

from the CEQA review, either because the category is exempted by the express terms of CEQA (subsections 2-1-312.1 through 312.9) or because the project has no potential for causing a significant adverse environmental impact (subsections 2-1-312.10 and 312.11). Any permit applicant wishing to qualify under any of the specific exemptions set forth in this Section 2-1-312 must include in its permit application CEQA-related information in accordance with subsection 2-1-426.1. In addition, the CEQA-related information submitted by any permit applicant wishing to qualify under subsection 2-1-312.11 must demonstrate to the satisfaction of the APCO that the proposed project has no potential for resulting in a significant environmental effect in connection with any of the environmental media or resources listed in Section II of Appendix I of the State CEQA Guidelines.

312.1 Applications to modify permit conditions for existing or permitted sources or facilities that do not involve any increases in emissions or physical modifications.

312.2 Permit applications to install air pollution control or abatement equipment.

312.3 Permit applications for projects undertaken for the sole purpose of bringing an existing facility into compliance with newly adopted regulatory requirements of the District or of any other local, state or federal agency.

312.4 Permit applications submitted by existing sources or facilities pursuant to a loss of a previously valid exemption from the District's permitting requirements.

312.5 Permit applications submitted pursuant to the requirements of an order for abatement issued by the District's Hearing Board or of a judicial enforcement order.

312.6 Permit applications relating exclusively to the repair, maintenance or minor alteration of existing facilities, equipment or sources involving negligible or no expansion of use beyond that previously existing.

312.7 Permit applications for the replacement or reconstruction of existing sources or facilities where the new source or facility will be located on the same site as the source or facility replaced and will have substantially the same purpose and capacity as the source or facility replaced.

312.8 Permit applications for cogeneration facilities which meet the criteria of Section 15329 of the State CEQA Guidelines.

312.9 Any other project which is exempt from CEQA review pursuant to the State CEQA Guidelines.

312.10 Applications to deposit emission reductions in the emissions bank pursuant to Regulation 2, Rule 4 or Regulation 2, Rule 9.

312.11 Permit applications for a proposed new or modified source or sources or for process changes which will satisfy the “No Net Emission Increase" provisions of District Regulation 2, Rule 2, and for which there is no possibility that the project may have any significant environmental effect in connection with any environmental media or resources other than air quality. Examples of such projects include, but are not necessarily limited to, the following:

11.1 Projects at an existing stationary source for which there will be no net increase in the emissions of air contaminants from the stationary source and for which there will be no other significant environmental effect;

11.2 A proposed new source or stationary source for which full offsets are provided in accordance with Regulation 2, Rule 2, and for which there will be no other significant environmental effect;

11.3 A proposed new source or stationary source at a small facility for which full offsets are provided from a small facility bank established by the APCO pursuant to Regulation 2-4-414, and for which there will be no other significant environmental effect;

11.4 Projects satisfying the "no net emission increase" provisions of District Regulation 2, Rule 2 for which there will be some increase in the emissions of any toxic air contaminant, but for which the District staff's health risk screening analysis shows that the project will not result in a cancer risk (as defined in Regulation 2-5-206) greater than 1.0 in a million (10^{-6}) and will not result in a chronic hazard index (as defined in Regulation 2-5-208) greater than 0.20, and for which there will be no other significant environmental effect.

(Adopted 7/17/91; Amended 5/17/00; 12/21/04; 6/15/05)

2-1-313 Projects Not Exempt From CEQA Review: Notwithstanding the exemptions from CEQA review set forth in Section 2-1-312, such exemptions shall not apply to any project covered by the categories set forth in subsections 2-1-312.1 through 312.9 where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances, or due to cumulative impacts of successive projects of the same type in the same place over time. Such projects shall be reviewed in accordance with the requirements of CEQA.

(Adopted 7/17/91; Amended 6/15/05)

2-1-314 Case-by-Case CEQA Determinations: Notwithstanding the requirement of Section 2-1-311, the District shall, for any permit applications which were deemed complete by the District on or before July 17, 1991, review said permit applications on a case-by-case basis in order to determine whether the District's evaluation of the permit application will involve any element of discretion. If as a result of this case-by-case-review, the District determines that the evaluation of the permit application will not involve any element of discretion on its part, then the application may be treated as a ministerial project so long as all of the following conditions are met:

314.1 The District makes a specific written finding to this effect as part of its determination that the permit application is complete;

314.2 The District will merely apply the law to the facts as presented in the permit application; and

314.3 The District's evaluation of the permit application and its decision regarding whether to issue the permit will be limited to the criteria set forth in Section 2-1-428.

(Adopted July 17, 1991)

2-1-315 Denial, Failure to Mitigate Significant Adverse Environmental Impacts: For any application for which the District is a Lead Agency under CEQA, where significant adverse environmental impacts have been identified in the District's review of, or in the course of the public comment period on, said application, the APCO shall deny an authority to construct to such new or modified stationary source, as proposed, unless:

315.1 The applicant agrees to implement or carry out such available alternatives or mitigation measures which would, to the extent feasible, avoid or substantially lessen any such significant adverse environmental impacts as a condition for issuance of an authority to construct; or

315.2 The APCO finds that any such available, feasible alternatives or mitigation measures are within the responsibility and jurisdiction of another public agency, and such measures have been adopted by such other agency, or can and should be adopted by such other agency; or

315.3 The APCO finds that there are no feasible alternatives or measures to substantially mitigate the unavoidable adverse environmental effects associated with the project, but that the benefits of the project outweigh such unavoidable adverse environmental effects, and the APCO states in writing the reasons and overriding considerations to support the issuance of the authority to construct based on the Final EIR and other information in the record notwithstanding the unavoidable adverse environmental effects associated with the project.

(Adopted November 20, 1991)

2-1-316 New or Modified Sources of Toxic Air Contaminants or Hazardous Air Pollutants: Notwithstanding any exemption contained in Section 2-1-103 or Section 114 through 128, any new or modified source meeting any of the following criteria shall be subject to the requirements of Regulation 2, Rule 1, Section 301 and/or 302.

316.1 If a new or modified source emits one or more toxic air contaminants in quantities that exceed the trigger levels listed in Table 2-5-1 of Regulation 2-5 and the source did not have a valid exemption from Regulation 2-1-302 when the source was constructed or modified, then the source shall be subject to the requirements of Sections 2-1-301 and 302, unless the owner or operator of the source can demonstrate to the satisfaction of the APCO that the source:

1.1 Will comply with the TBACT requirement of Regulation 2-5-301 (if applicable); and

1.2 Will comply with the project risk limits of Regulation 2-5-302 (if applicable).

316.2 If a new or modified source, or group of related sources in a proposed construction or modification will emit 2.5 or more tons per year of any single hazardous air pollutant or 6.25 or more tons per year of any combination of hazardous air pollutants, then the source or group of sources shall be subject to the requirements of Sections 2-1-301 and 302.

(Adopted 4/16/86; Amended 7/17/91;Renumbered and Amended 6/7/95; Amended 5/17/00; 6/15/05)

2-1-317 Public Nuisance Sources: Notwithstanding any exemption contained in Section 2-1-103 or Section 114 through 128, any new or modified source meeting any of the following criteria shall be subject to the requirements of Regulation 2, Rule 1, Section 301 and/or 302. If any exempt source receives two or more public nuisance violations, under Regulation 1, Section 301 or Section 41700 of the California Health & Safety Code, within any consecutive 180-day period, then the source shall be subject to the requirements of Section 2-1-301 and 302. Such a source will be treated as loss of exemption source under Section 2-1-414, and will be subject to the annual permit to operate fee specified in Regulation 3. This section does not apply to a source that is exempt per section 2-1-113.

(Adopted 6/7/95; Amended 5/17/00)

2-1-318 Hazardous Substances: Notwithstanding any exemption contained in Section 2-1-103 or Section 114 through 128, any new or modified source meeting any of the following criteria shall be subject to the requirements of Regulation 2, Rule 1, Section 301 and/or 302. If a new or modified source at a facility in one of the 28 categories listed in Section 169(1) of the Clean Air Act that emits 100 tons per year of any PSD

Pollutant as defined in Section 2-2-223, or at a facility not listed in any such category that emits 250 tons per year or more of any PSD Pollutant as defined in Section 2-2-223, emits any of the following air contaminants in excess of the quantities listed below, then it is subject to the requirements of Sections 2-1-301 and 302.

318.1 0.6 ton per year of lead,

318.2 0.007 ton per year of asbestos (excepting demolition, renovation, and waste disposal),

318.3 0.0004 ton per year of beryllium,

318.4 0.1 ton per year of mercury,

318.5 1 ton per year of vinyl chloride,

318.6 3 tons per year of fluorides,

318.7 7 tons per year of sulfuric acid mist, and

318.8 10 tons per year of reduced sulfur compounds (including hydrogen sulfide).

(Adopted 10/19/83; Renumbered and Amended 6/7/95; Amended 5/17/00)

2-1-319 Source Expressly Subject to Permitting Requirements: Notwithstanding any exemption contained in Section 2-1-103 or Sections 2-1-114 through 2-1-128, any source meeting any of the following criteria shall be subject to the requirements of Section 2-1-302:

319.1 The emission rate of any regulated air pollutant (except greenhouse gases) from the source is greater than 5 tons per year, after abatement.

319.2 The source is subject to the requirements of Section 2-1-316, 317, or 318.

(Adopted May 17, 2000)

2-1-320 Compliance With Material Representations Made In Connection With Permit Applications: In addition to the explicit conditions contained in an authority to construct and/or permit to operate, the owner and operator of a source of air pollutant emissions shall construct and operate the source in conformance with any representations made or information submitted to the APCO in connection with the application for such authority to construct and/or permit to operate, provided such representations or information were material to the APCO's decision to issue the authority to construct and/or permit to operate. Construction or operation of the source not in conformance with such material representations or information shall be a violation of this Regulation.

2-1-321 Compliance With Provisions of State Implementation Plan and Other Requirements of Local, California and Federal Law: Issuance of an authority to construct and/or permit to operate for a facility under this Rule shall not relieve the owner and operator of the facility from the responsibility to comply fully with all applicable provisions of the state implementation plan for California and all other requirements under local, California and federal law.

2-1-400 ADMINISTRATIVE REQUIREMENTS

2-1-401 Persons Affected: Any person who has been granted or requires an authority to construct shall secure a permit to operate. Any person who is not required to obtain an authority to construct and who is required to obtain a permit to operate shall secure a permit to operate. In addition, the following shall apply for a permit to operate for any source which is not subject to an exemption per Sections 2-1-103, 105, or 113 through 2-1-129:

401.1 On or before July 1, 1980, persons who operate a facility causing emissions of 2.5 tons per year or more of a regulated air pollutant.

401.2 On or before July 1, 1980, persons who operate gasoline terminals, bulk plants and facilities that dispense gasoline for sale or dispense more than 60,000 gallons of gasoline per year.

401.3 Persons who operate coating, adhesive, dipping, laminating, printing, screening, masking, electrodeposition, resist application, or similar source or equipment at any facility whose coating, adhesive, dipping, laminating, printing, screening, masking, electrodeposition, resist application, or similar source or equipment consume greater than 30 gallons of coating and emit 150 pounds of VOC per year or more on a facility wide basis, resulting from the applications of coatings. Upon request of the applicant, the APCO may group coating operations which individually emit less than 150 lb/yr into a single facility-wide source, or other convenient grouping.

401.4 Persons who operate surface preparation and cleaning equipment or operations which use unheated solvent solutions containing more than 10 percent VOC and which contain more than 1 gallon of solvent or have a liquid surface area of more than 1 $ft.^2$, including wipe cleaning operations with a net solvent usage greater than 20 gallons per year, and that emit 150 pounds of VOC per year or more, on a facility-wide basis. Upon request of the applicant, the APCO may group wipe cleaning operations into a single facility-wide source, or other convenient groupings.

401.5 Persons who plan to modify an existing source or install a new source which qualifies for the Accelerated Permitting Program in Section 2-1-106 shall first submit a complete permit application, in accordance with Section 2-1-302.2.

401.6 Persons who operate a source that is subject to either loss of exemption or exclusion per section 2-1-414 or 2-1-424.

401.7 Persons who operate a source constructed after July 1, 1972.

401.8 On or before July 1, 2005, any person who operates a crematorium for the cremation of human remains.

(Amended 4/16/86; 1/7/87; 7/17/91; 6/7/95; 10/7/98; 5/17/00; 12/21/04)

2-1-402 Applications: Every application for an authority to construct or a permit to operate shall be submitted to the APCO on the forms specified, and shall contain all of the following information:

402.1 Sufficient information for the APCO to determine the emissions from the sources that are the subject of the application, and to quantify emissions from the sources of any emission reduction credits that will be relied upon as part of the application.

402.2 Any information requested by the APCO in order to determine the air quality impact from sources that are the subject of the application.

402.3 All applicable fees, as described in Regulation 3.

402.4 If the application is subject to the New Source Review requirements of Regulation 2, Rule 2, all information required under Section 2-2-401.

402.5 CEQA-related information that satisfies the requirements of Section 2-1-426.

402.6 A certification stating whether the source triggers the requirements of Section 2-1-412.

402.7 A specific designation of any information contained in the application that the applicant asserts is trade secret pursuant to Section 6254.7 of the Government Code. The applicant shall submit two copies of each page containing trade secret information. One copy shall be clearly labeled “Trade Secret,” and each trade secret item shall be clearly marked. The second

copy shall be clearly labeled “Public Copy,” and each trade secret item shall be redacted. The applicant shall include, for each item which it asserts to be a trade secret, a statement signed by a responsible representative of the applicant identifying that portion of Government Code Section 6254.7(d) upon which the assertion is based and a brief statement setting forth the basis for this assertion.

402.8 Any other information requested by the APCO as necessary to determine whether the new, modified or altered source will comply with applicable regulatory requirements.

The application must contain sufficient information to enable the APCO to make a decision or a preliminary decision on the application and/or on any exemptions authorized by this Regulation. The APCO may consult with appropriate local and regional agencies to determine whether the application conforms with adopted plans and with local permit requirements.

2-1-403 **Permit Conditions:** Except as to permit applications reviewed in accordance with Section 2-1-311, the APCO may impose any permit condition that ~~he~~ the APCO deems reasonably necessary to insure compliance with federal or California law or District regulations. For any permit application which was reviewed as a ministerial project in accordance with Section 2-1-311, the APCO shall only impose permit conditions as set forth in the District's Permit Handbook for the type of source being permitted. The APCO may require the installation of devices for measurement or analysis of source emissions or ground-level concentrations of air contaminants.

(Amended 7/17/91; 10/7/98)

2-1-404 **Changes in Throughput and Hours of Operation:** After a permit to operate has been issued, in accordance with subsections 2-1-401.1 through 401.4, changes in hours of operation, fuels, process materials or throughput are allowed only if emissions resulting from such changes are not of such quantity as would cause denial of an authority to construct after an air quality permit analysis made pursuant to the provisions of Rule 2 of this Regulation. "Change" is the use of a process or fuel not used in the prior 12 months, or a throughput level higher than the highest level in the prior 12 months or total monthly operating hours higher than any month in the prior 12 months.

404.1 The holder of a permit to operate shall advise the APCO not more than 30 days after any changes in hours of operation, fuels, process materials or throughput which might increase emissions.

404.2 The APCO shall act to revoke the permit to operate of any person who fails to comply with the requirements of this Section.

(Amended July 17, 1991)

2-1-405 **Posting of Permit to Operate:** A copy of the permit to operate, including all relevant permit conditions, shall be accessible to personnel who operate the equipment for which the permit has been issued. These documents shall be included on site in the operator’s manual, or shall be accessible to the operators electronically.

(Amended 5/17/00; 11/15/00)

2-1-406 **Transfer:** An authority to construct or a permit to operate shall not be transferable from one facility to another. An authority to construct or a permit to operate shall not be transferable from one person to another without obtaining written permission of the APCO.

2-1-407 **Authority to Construct Expiration:** An authority to construct shall expire two years after the date of issuance, unless the authority to construct has been renewed. Upon receipt of a written request and any required fees prior to the expiration of the

authority to construct, the APCO shall renew the authority to construct in writing if the APCO determines that the renewal complies with this section and that the holder of the authority to construct is not violating any provision or condition of the authority. If the APCO does not act on such a request prior to expiration of the authority to construct, the authority shall remain in effect until the APCO has acted to approve or deny the renewal request (up to a maximum of an additional 12 months).

407.1 The following requirements shall apply to renewals:

1.1 Except as provided in Sections 2-1-407.2 and 407.3, an authority to construct may be renewed one time for an additional two years.

1.2 Except for renewals pursuant to Section 2-1-407.3, renewal is contingent upon meeting the current BACT and offset requirements of Regulation 2-2-301, 302 and 303.

1.3 Except as provided in Sections 2-1-407.2 and 407.3, an authority to construct that has been renewed shall expire four years after the date of original issuance.

407.2 If the authority to construct was issued pursuant to an environmental impact report (EIR) that explicitly covered a construction period longer than four years, the authority to construct shall, upon request by the applicant, be renewed for additional two-year terms throughout the construction period covered by the EIR.

407.3 If substantial use of the authority to construct has begun, either during the initial term or during a renewal term, the authority to construct shall, upon request by the applicant, be renewed for additional two-year terms until the permit to operate is issued, or, if a term of less than two years is requested, for such term as is requested.

(Amended 7/17/91; Amended 10/7/98; 6/1/05)

2-1-408 Final Action on Applications: The APCO shall take final action on an application as follows. ~~Except for applications subject to Section 2-1-412, the publication and public notice requirements of Section 2-2-404 or Section 2-10-402, or to the provisions of Rule 6 of this Regulation, the APCO shall notify the applicant in writing of approval, approval with conditions, or denial of the application within 35 working days of receipt of a completed application, unless the time is extended with the written consent of the applicant.~~

408.1 The APCO shall approve, approve with conditions, or deny the application: (i) within 90 days after the Date of Completion; or (ii) if the application is subject to a public notice and comment requirement under Regulation 2 and/or if the application involves a facility subject to Regulation 2, Rule 6 (Major Facility Review) within 180 days after the Date of Completion.

~~Notwithstanding this 35-working-day limit, the APCO shall not take final action for any project for which an Environmental Impact Report or a Negative Declaration has been prepared until a Final EIR for that project has been certified or a Negative Declaration for that project has been approved, and the APCO has considered the information in that Final EIR or Negative Declaration. For cases in which the 35-working-day time period has elapsed, the APCO shall take final action on the application within 30 days after the certification of the Final EIR or approval of the Negative Declaration, or after final resolution of any appeals from such certification or approval. This subsection shall not apply to any project that is exempt from the District's CEQA requirements pursuant to Section 2-1-311 or 2-1-312. Any substantive~~

~~change to an application which occurs after the evaluation period has begun shall allow the APCO to start a new completeness review period, and to reset the 35 working day limit after the application has been deemed complete.~~

408.2 If the application is subject to the environmental review requirements of CEQA, the deadlines in Section 2-1-408.1 shall be extended until 60 days after an environmental review document satisfying the CEQA environmental review requirements has been certified, adopted, or otherwise finalized.

408.3 The APCO shall notify the applicant in writing of the final action.

408.4 Any of the deadlines specified in this Section may be extended by written consent of the applicant.

408.5 Any substantive change to an application shall require submittal of a new application, which shall reset the deadlines specified in this Section.

(Amended 11/1/89; 7/17/91; 11/20/91; 11/3/93; 6/7/95; 10/7/98; 12/21/04; 7/19/06)

2-1-409 Regulations in Force Govern: The decision as to whether an authority to construct shall be granted or denied shall be based on federal, state and District BACT, offset, TBACT, and project risk regulations or standards in force on the date the application is declared by the APCO to be complete.

(Amended June 15, 2005)

2-1-410 Appeal: The following actions of the APCO may be appealed:

410.1 In accordance with Section 42302 of the Health and Safety Code an applicant for an authority to construct which has been denied may request, within 30 days after receipt of the written notice to deny, the Hearing Board of the District to hold a hearing on whether or not the authority to construct was properly denied.

410.2 In accordance with Section 42302.1 of the Health and Safety Code, within 30 days of any decision of the APCO, pertaining to the issuance of an authority to construct, any aggrieved person who, in person or through a representative, appeared, submitted written testimony, or otherwise participated in the action before the District may request the Hearing Board of the District to hold a public hearing to determine whether the authority to construct was properly issued or for an order modifying or reversing that decision. Such appeals shall be filed in writing and contain a summary of the issues to be raised. The Hearing Board shall consider the appeal at a public hearing within 30 days of the filing of the appeal. The Hearing Board may reverse or modify the decision of the APCO if it determines that the decision was erroneous.

410.3 In accordance with Section 40724.6(g) of the Health and Safety Code, a permitholder of a large confined animal facility may appeal any District determination or decision made under Regulation 2, Rule 10, in accordance with Section 2-1-410.2.

(Amended 7/17/91; 11/20/91; 5/17/00; 7/19/06)

2-1-411 Permit to Operate, Final Action: The APCO shall take final action to approve, approve with conditions, or disapprove a permit to operate a source subject to this rule within 90 days after the initial date of the start-up period of the new or modified source, unless such time period is extended with the written concurrence of the APCO and the applicant. An authority to construct authorizes operation of the source during the start-up period. All conditions, specific or implied, of the authority to construct are in effect during the entire start-up period.

411.1 Notwithstanding the above, final action taken on permits issued pursuant to Rule 6 of this Regulation shall be in accordance with the provisions of Section 2-6-410.

411.2 A permit approved under this section must be signed by the permit holder or by a person authorized to sign on behalf of the permit holder.

(Adopted 10/19/83; Amended 7/17/91; 11/3/93; 10/7/98; 12/21/04)

2-1-412 Public Notice, Schools & Overburdened Communities: Prior to approving an application for an authority to construct or permit to operate for (i) a new or modified source located within 1000 feet of the outer boundary of a K-12 schoolsite and which results in the increase in emissions of any substance into the ambient air which has been identified by the California Air Resources Board or the APCO as a toxic air contaminant or a hazardous air contaminant or which is on the list required to be prepared pursuant to subdivision (a) of Section 25532 or Section 44321 subsections (a) to (f) inclusive of the Health and Safety Code, or (ii) a new or modified source located within an Overburdened Community as defined in Section 2-1-243 and for which a Health Risk Assessment is required pursuant to Section 2-5-401, the APCO shall:

412.1 Prepare a public notice in which the proposed new or modified source, and the proposed emissions, are fully described.

412.2 Distribute the notice, prepared in accordance with subsection 2-1-412.1 at the expense of the applicant, to the parents or guardians of children enrolled in any school within one-quarter mile of the source and to each address within a radius of 1000 feet of the source. ~~This notice shall be distributed at least 30 days prior to the date final action on the application is to be taken by the APCO.~~ The APCO shall review and consider all comments received during the 30 days after the notice is distributed, and shall include written responses to the comments in the permit application file prior to taking final action on the application.

412.3 Failure of any person to receive the notice shall not affect the validity of the authority to construct or permit to operate issued by the APCO, if the APCO or applicant responsible for giving the notice has made a good faith effort to follow the procedures for giving the notice prescribed by law.

(Adopted 11/1/89; Amended 10/7/98; 5/17/00)

2-1-413 Permits for Operation of Equipment at Multiple Locations Within the District: Any person required to obtain an authority to construct and/or permit to operate under Sections 2-1-301 and/or 302 for a source that may be operated at multiple locations within the District can apply for a single multiple-location permit that will allow the source to operate at more than one location in the District. The APCO shall issue the permit, upon payment of standard filing, initial and permit to operate fees as set forth in Regulation 3, if the source satisfies all of the following requirements:

413.1 The source will not emit more than 10 tons per year of any regulated air pollutant, including POC, CO, NOx, $PM_{2.5}$, PM_{10}, NPOC or SO_2, but excluding greenhouse gases. For $PM_{2.5}$ and PM_{10}, fugitive particulate emissions from haul road traffic shall not be counted toward the annual limit.

413.2 The source will comply with all applicable provisions of Regulation 2, Rule 5.

413.3 The source will not be operated within 1000 feet of the outer boundary of any K-12 school site, unless the applicable notice requirements of Health and Safety Code Section 42301.6 have been met.

413.4 Operation of the source will not cause a public nuisance per Regulation 1-301.

413.5 The operation must be exempt from CEQA, or must be covered by a chapter in the District's Permit Handbook.

413.6 The equipment will not cause a Synthetic Minor Facility to exceed a federally enforceable emission limit.

413.7 The source will not remain at the same facility for more than 12 consecutive months following initial operation (or, in the case a source that is used in seasonal operations that last less than 12 months, for more than the full length of a normal operating season). If multiple temporary sources are used in succession at the facility to serve the same function at the same facility source, the total time period that all such temporary sources remain at the facility is counted towards the 12-month (or operating season) limit.

If the source no longer satisfies any of these requirements, it shall be subject to the requirements of Regulation 2, Rules 1, 2, and 5, as if it were a new source.

(Adopted June 7, 1995; Amended 12/06/17)

2-1-414 Loss of Exemption, Public Nuisance: Any source subject to Section 2-1-317 shall be subject to permit conditions deemed necessary by the District to minimize the potential for future violations. If the owner/operator can demonstrate that the source has neither received a public nuisance violation nor received a confirmed complaint for a two year period after the permit was issued, then the owner/operator may submit a written petition to the APCO to remove the permit requirement. Such a petition is subject to APCO approval.

(Adopted June 7, 1995)

2-1-415 Source Pre-Certification Procedure: Any person may submit a written request to pre-certify a source as complying with applicable BACT requirements, for the purposes of qualifying the source for the Accelerated Permitting Program under Section 2-1-302.2.1.1. Such a request will be evaluated within 60 days of receipt of the information listed below. The APCO may also independently pre-certify a source. The APCO shall maintain a list of pre-certified equipment, and shall make this list available to industry through the Public Information & Education Division. A pre-certification request shall include all of the following:

415.1 A complete description of the source, including make, model number, rated capacity and emission calculations at maximum operating rate;

415.2 Applicable BACT requirements;

415.3 Proposed permit conditions governing operation of the source; and

415.4 Applicable fees, as described in Regulation 3, Section 323.

(Adopted June 7, 1995)

2-1-416 Temporary Amnesty for Unpermitted Sources: The APCO has the authority to declare an amnesty period, during which the District may waive all or part of the penalty fees, including late fees and retroactive permit fees, for sources that are currently operating without valid Permits to Operate.

(Adopted 6/7/95; 12/21/04)

2-1-420 Suspension: The APCO may suspend a permit if, within a reasonable time, the holder of the permit willfully fails or refuses to furnish requested information, analyses, plans or specifications relating to emissions from the source for which the permit was issued. The APCO shall serve notice in writing of a suspension, and the reasons therefor, on the holder of the permit. A suspension shall become effective 5 days after notice has been served.

2-1-421 **Appeal from Suspension:** Within 10 days after the receipt of the notice of suspension, the permit holder may request the Hearing Board to hold a hearing to determine whether or not the permit was properly suspended.

2-1-422 **Revocation:** The APCO may request the Hearing Board to hold a hearing to determine whether an authority to construct and/or permit to operate should be revoked if it is found that the holder of an authority to construct or permit to operate is violating any applicable order, rule or regulation of the District, or is violating any provision or condition of the authority to construct or permit to operate.

(Amended May 17, 2000)

2-1-423 **Hearings:** Within 30 days after receipt of requests submitted pursuant to Sections 2-1-421 and 422, the Hearing Board shall hold a hearing as provided by Section 42308 of the California Health and Safety Code and may take action as authorized by Section 42309 of the California Health and Safety Code.

(Amended July 17, 1991)

2-1-424 **Loss of Exemption or Exclusion:** Any person who operates a source that does not require a District permit because of a regulatory exemption or exclusion, but which becomes subject to a District permit requirement because it loses its exemption or exclusion as a result of changes in federal, California or District laws or regulations, shall submit a complete permit application, as defined Section 2-1-202, for the subject source within 90 days of written notification by the APCO of the need for a permit. A person who holds a valid permit to operate for the subject source need not reapply.

(Adopted 4/16/86; Amended 6/7/95; 10/7/98; 7/19/06; 12/06/17)

2-1-425 **Sources of Toxic Air Contaminants:** Any person who does not hold a valid permit to operate in accordance with Section 2-1-401 and emits, in quantities determined to be appropriate by the APCO, any toxic air contaminant, shall within 90 days of written notice by the APCO of the need for a permit to operate, complete a permit application for the subject source, in accordance with the applicable requirements of Section 2-1-202 or Section 2-1-302.2.

(Amended June 7, 1995)

2-1-426 **CEQA-Related Information Requirements:** Unless a project for which an authority to construct is sought is exempt from the District's CEQA requirements pursuant to Section 2-1-311 or 2-1-312 of this Rule, applicants for authorities to construct shall provide, as part of a complete application, the following CEQA-related information:

426.1 A preliminary environmental study which shall describe the proposed project and discuss any potential significant adverse environmental impacts, alternatives to the project, and any necessary mitigation measures to minimize adverse impacts. The preliminary environmental study shall include all activities involved in the project and shall not be limited to those activities affecting air quality. In preparing the preliminary environmental study, the applicant may utilize the Environmental Information Form in Appendix H of the State CEQA Guidelines or an equivalent format specified by the APCO. (see also Appendix G, Significant Effects.) The preliminary environmental study shall list all other local, state and federal governmental agencies that require permits for the project and indicate any environmental documentation required by such agencies; or

426.2 When an agency other than the District is to be the Lead Agency under CEQA, either:

2.1 A Draft or Final Environmental Impact Report prepared by or under the supervision of the Lead Agency; or

2.2 A contract for the preparation of a Draft Environmental Impact Report executed by the Lead Agency together with the Initial Study prepared by the Lead Agency; or

2.3 A Negative Declaration prepared by the Lead Agency; or

2.4 A Notice of Preparation of a Draft EIR prepared by the Lead Agency;

2.5 A copy of the Initial Study prepared by the Lead Agency, or

2.6 A commitment in writing from another agency indicating that it has assumed the role of Lead Agency for the project in question.

(Adopted 11/20/91; Amended 10/7/98)

2-1-427 Procedure for Ministerial Evaluations: The District shall review each permit application prior to finding that it is complete in order to determine whether its evaluation of the permit application is covered by the specific procedures, fixed standards and objective measurements set forth in the District's Permit Handbook and BACT/TBACT Workbook. If the District determines that its evaluation of the permit application is covered by specific procedures, fixed standards and objective measurements set forth in the District's Permit Handbook and BACT/TBACT Workbook, the District's evaluation of that permit application will be classified as ministerial and the engineering evaluation of the permit application by the District will be limited to the use of said specific procedures, fixed standards and objective measurements. For such projects, the District will merely apply the law to the facts as presented in the permit application, and the District's decision regarding whether to issue the permit will be based only on the criteria set forth in Section 2-1-428 and in the District's Permit Handbook and BACT/TBACT Workbook.

(Adopted 11/20/91; Amended 10/7/98)

2-1-428 Criteria for Approval of Ministerial Permit Applications: If the District classifies a permit application as ministerial pursuant to Section 2-1-427, and as a result of its evaluation of that permit application, the District determines that all of the following criteria are met, the issuance by the District of an Authority to Construct for the proposed new or modified source will be a mandatory ministerial duty.

428.1 The proposed new or modified source will comply with all applicable provisions of the District's Rules and Regulations and with all applicable provisions of state and federal law and regulations which the District has the duty to enforce;

428.2 The emissions from the proposed project can be calculated using standardized emission factors from published governmental sources, District source test results, established formulas from published engineering and scientific handbooks, material safety data sheets or other similar published literature, manufacturer's warranties or other fixed standards as set forth in the District's Permit Handbook and BACT/TBACT Workbook;

428.3 Where Best Available Control Technology is required, BACT for the proposed new or modified source can be determined based on the latest edition of the ARB's BACT/LAER Clearinghouse, on the District's own compilations of BACT levels for specific types of sources as set forth in the District's Permit Handbook and BACT/TBACT Workbook or on a more stringent BACT level proposed by the project proponent; and

428.4 If the proposed new or modified source involves the shutdown of an existing source, the Reasonably Available Control Technology applicable to the source to be shut down can be determined from existing provisions of the District's Rules and Regulations or from the District's own compilations of

BACT levels for specific types of sources as set forth in District's Permit Handbook and BACT/TBACT Workbook.

428.5 For proposed new and modified sources that are subject to Regulation 2, Rule 5, the project meets the project risk requirement of Regulation 2-5-302.

428-6 Where Best Available Control Technology for Toxics (TBACT) is required pursuant to Regulation 2-5-301, TBACT for the proposed new or modified source can be determined based on TBACT determinations in the District's BACT/TBACT Workbook, an EPA MACT standard, a CARB ATCM, or a more stringent TBACT level proposed by the applicant that is applicable to the specific source type or source category being evaluated.

In addition, when the District has issued an authority to construct for a proposed new or modified source as a ministerial project, the issuance of the permit to operate for that source will also be a mandatory ministerial duty if the source will meet all the conditions imposed in connection with the issuance of the authority to construct and all applicable laws, rules and regulations enforced by the District.

(Adopted 11/20/91; Amended 10/7/98; 6/15/05)

2-1-429 Federal Emissions Statement: The owner or operator of any facility that emits or may emit oxides of nitrogen or volatile organic compounds shall provide the APCO with a written statement, in such form as the APCO prescribes, showing actual emissions of oxides of nitrogen and volatile organic compounds from that facility. At a minimum the emission statement shall contain all of the information contained in the Air Resources Board's Emission Inventory Turn Around Document as described in Instructions for the Emission Data System Review and Update Report. The statement shall also contain a certification by a responsible official of the company or facility that the information contained in the statement is accurate to the best knowledge of the individual certifying the statement. Effective November 1, 1994, the statement shall be submitted to the District each year with the annual permit renewal. The APCO may waive this requirement for any class or category of facilities that emit less that 25 tons per year of oxides of nitrogen and volatile organic compounds, each taken separately, if the District provides the Air Resources Board with emission inventories of facilities emitting greater than 10 tons per year of either oxides of nitrogen or volatile organic compounds based on the use of emission factors acceptable to the Air Resources Board and the U.S. Environmental Protection Agency (EPA). A current list of classes and categories of facilities for which this requirement has been waived by the APCO will be kept by the District and made available upon request. Also, for purposes of reporting emission data to the Air Resources Board and to the EPA, the District will provide calendar year and peak ambient ozone season data determined through weighted averaging of current and prior year (if available) company/facility reported certified information. This Section is required by the provisions of Section 182(a)(3)(B) of the Clean Air Act.

(Adopted 11/4/92; Amended 6/15/94; 6/7/95; 12/21/04)

2-1-430 Maintenance of the Permit Handbook and BACT/TBACT Workbook: The APCO shall publish and maintain the Permit Handbook and BACT/TBACT Workbook as needed to reflect the current procedure for review and issuance of permits, and the most recent determination of BACT/TBACT for a given source category.

(Adopted October 7, 1998)

2-1-431 Date of Completion: The APCO shall deem an application to be complete on the date that the information and fees required to complete the application were received by the District.

(Adopted May 17, 2000)

2-1-432 **Determination of Complete Application:** Except for an application which is subject to the publication and public comment requirements of Section 2-2-404, the APCO shall determine whether an application for an authority to construct is complete not later than 3015 working days following receipt of the application, or after a longer time period agreed upon by both the applicant and the APCO. If the APCO determines that the application is not complete, the applicant shall be notified in writing of the decision, specifying the information that is required. Upon receipt of any resubmittal of the application a new 30-15 working day period to determine completeness shall begin. For an application which is subject to the publication and public comment requirements of Section 2-2-404 or Section 2-10-402, the completeness review period(s) shall be 6030 days. The application shall be deemed complete on the date of receipt of all information required for completeness. Upon determination that the application is complete, the APCO shall notify the applicant in writing. If applicable, such written notification shall include the District's determination that its evaluation of the application will be covered by the specific procedures, fixed standards and objective measurements set forth in the District's Permit Handbook and that the District's evaluation of that permit application will be classified as ministerial and will accordingly be exempt from CEQA review. Thereafter only information regarding offsets, or information to clarify, correct or otherwise supplement the information submitted in the application may be requested.

(Adopted 12/ 21/04; Amended 6/19/06)

2-1-500 **MONITORING AND RECORDS**

2-1-501 **Monitors:** Continuous emission monitors required pursuant to Section 2-1-403 shall comply with the provisions of Volume V of the Manual of Procedures.

(Adopted March 17, 1982)

2-1-502 **Burden of Proof:** Any person asserting that a source is exempt from the requirements of Regulation 2, Rule 1, Section 301 and/or 302, shall, upon the request of the APCO, provide substantial credible evidence proving to the APCO that the source meets all requirements necessary to qualify for the exemption.

(Adopted May 17, 2000)

2-1-600 **MANUAL OF PROCEDURES**

2-1-601 **Engineering Permitting Procedures:** The specific procedures for the engineering evaluation of particular types of sources as well as specific fixed standards and objective measurements upon which the District will rely in its evaluation of ministerial permit applications are set forth in the District's Permit Handbook and BACT/TBACT Workbook.

(Adopted 7/17/91; Amended 10/7/98)

2-1-602 **CEQA Guidelines:** The District's Guidelines for Environmental Processes under CEQA for those cases in which the District assumes the role of Lead Agency are set forth in Volume VII to the District's Manual of Procedures and in the Permit Handbook.

(Adopted 11/20/91; Amended 6/7/95)

2-1-603 **Particulate Matter Measurements:** $PM_{2.5}$ and PM_{10} shall be measured as prescribed in EPA Methods 201A and 202 (for measurements of emissions from specific sources) and in 40 C.F.R. Parts 50, 53 and 58 (for measurements of ambient concentrations). If such test methods cannot be used because the physical

characteristics of the emissions being measured render such methods inappropriate (e.g., because of the emissions' high moisture content or high temperature), then another appropriate test method may be used upon prior written approval of the APCO and EPA.

(Adopted December 19, 2012)

2-1-604 Determining Compliance With Historical PM_{10} and $PM_{2.5}$ Emission Limits: For purposes of determining a source's compliance with any PM_{10} or $PM_{2.5}$ emission limit established as a permit condition pursuant to Regulation 2 prior to August 31, 2016, the condensable portion of the source's PM_{10} or $PM_{2.5}$ emissions shall not be included, unless there is an affirmative indication that such condensable portion was intended to be included at the time the permit condition was adopted.

(Adopted December 19, 2012)

2-1-605 Finality of Historical PM_{10} and $PM_{2.5}$ Regulatory Determinations: Regulatory determinations regarding the applicability of or compliance with any of the requirements of Regulation 2 made before August 31, 2016, shall be final and shall not be invalid because they did not take into account the condensable portion of a source's $PM_{2.5}$ or PM_{10} emissions. Such historical determinations include (but are not limited to) prior determinations whether BACT and offsets requirements apply, prior determinations of the amount of a facility's cumulative increase, and prior determinations whether Title V permit requirements applied to a facility's operation. All such determinations made on or after August 31, 2016, shall include the condensable portion per the requirements of Sections 2-1-229 and 2-1-241, including (but not limited to) determinations regarding whether an existing facility's ongoing operations are subject to any applicable operating requirements such as Title V Major Facility Review requirements.

(Adopted December 19, 2012)

Regulation 2, Rule 1
Permit / Exemption Flow Chart

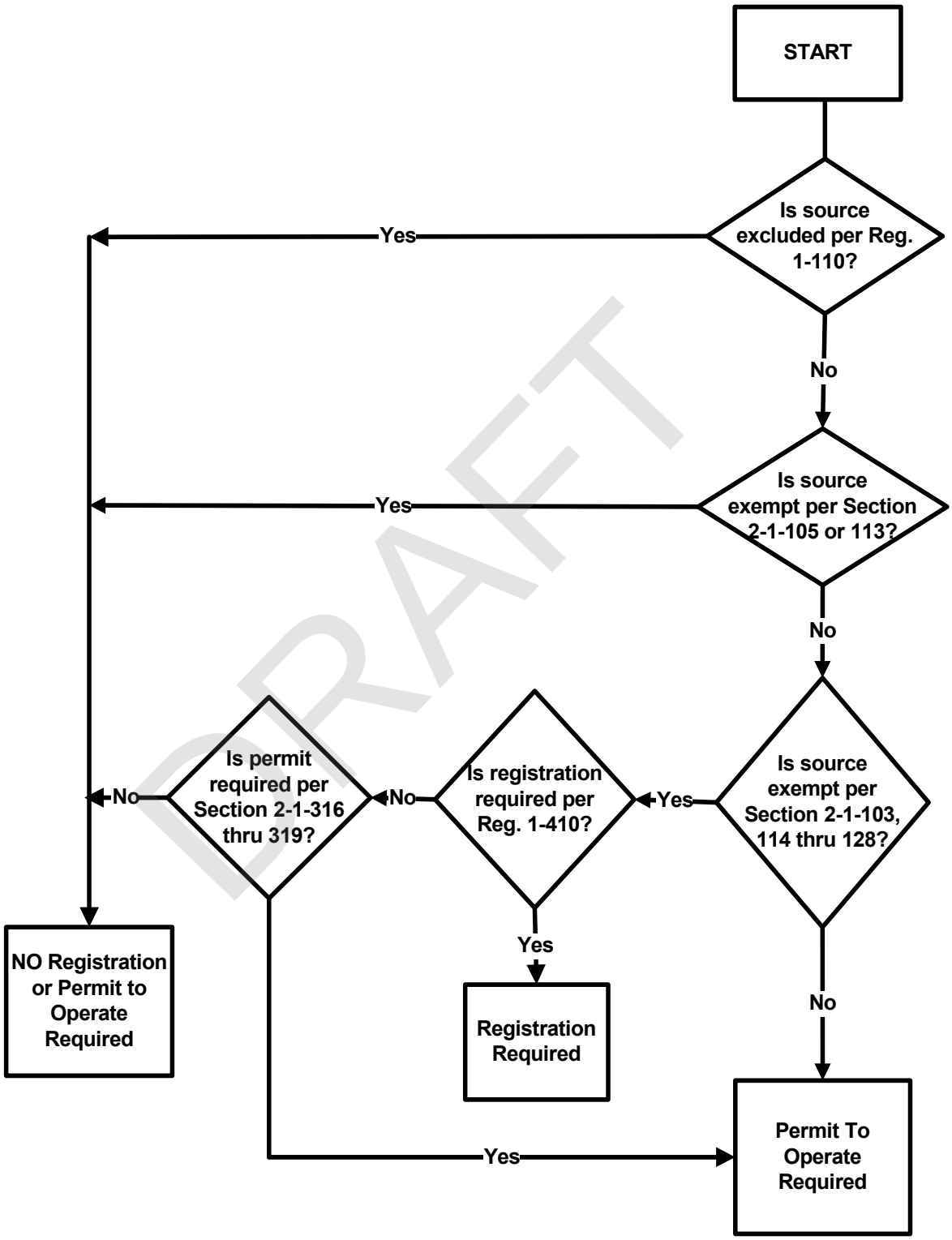

Figure 2-1-101

REGULATION 2
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REGULATION 2
PERMITS
RULE 5
NEW SOURCE REVIEW OF TOXIC AIR CONTAMINANTS

(Adopted June 15, 2005)

2-5-100 GENERAL

2-5-101 Description: The purpose of this rule is to provide for the review of new and modified sources of toxic air contaminant (TAC) emissions in order to evaluate potential public exposure and health risk, to mitigate potentially significant health risks resulting from these exposures, and to provide net health risk benefits by improving the level of control when existing sources are modified or replaced. The rule applies to a new or modified source of toxic air contaminants that is required to have an authority to construct or permit to operate pursuant to Regulation 2, Rule 1. New and modified sources with Hazardous Air Pollutant emissions may also be subject to the Maximum Achievable Control Technology (MACT) requirement of Regulation 2, Rule 2, Section 317.

2-5-102 Applicability and Circumvention: This rule applies to the following:

102.1 A new or modified source of toxic air contaminants for which an application is submitted on or after July 1, 2005;

102.2 A source of toxic air contaminants constructed or modified after January 1, 1987 for which no authority to construct or permit to operate has been issued by the District and for which the District Rules and Regulations and Risk Management Policy in effect at the time of construction or modification required an authority to construct or permit to operate.

(Renumbered December 7, 2016)

2-5-110 Exemption, Low Emission Levels: A project (and each new or modified source included in this project) shall not be subject to this rule if, for each toxic air contaminant, total project emissions are below the acute and chronic trigger levels listed in Table 2-5-1 Toxic Air Contaminant Trigger Levels. For the purposes of Regulation 2-1-316, a source shall not be subject to the Section 2-5-401 HRA requirements of this rule if, for each toxic air contaminant, the emissions from the source are below the acute and chronic trigger levels listed in Table 2-5-1.

(Adopted 6/15/05, Amended 12/7/16)

2-5-111 Limited Exemption, Emergency Standby Engines: This rule shall not apply to toxic air contaminant emissions occurring from emergency use of emergency standby engines (as defined in Regulation 9, Rule 8, Section 231 or the applicable CARB ATCM); or from initial start-up testing; or from emission testing of emergency standby engines required by the APCO.

(Amended January 6, 2010)

2-5-112 Deleted

(Renumbered December 7, 2016)

2-5-113 Deleted~~Exemption, Small Internal Combustion Engines and Gas Turbines:~~ ~~Internal combustion engines and gas turbines with a maximum output rating less than or equal to 50 horsepower shall not be subject to this rule.~~

(Adopted December 7, 2016)

2-5-114 Limited Exemption, Modified Source with No Increase in Toxicity Weighted Emissions: The provisions of Section 2-5-401 shall not apply to a modified source, if the post-modification toxicity weighted emissions are less than or equal to the pre-modification toxicity weighted emissions. Emissions from modified sources shall be calculated in accordance with Section 2-5-601.3.

(Adopted December 7, 2016)

2-5-115 Limited Exemption, Contemporaneous Health Risk Reduction Projects: Contemporaneous Health Risk Reduction Projects are exempt from the provisions of Section 2-5-302, provided such projects comply with the requirements of Sections 2-5-303 and 2-5-406.

2-5-200 DEFINITIONS

2-5-201 Acute Hazard Index, or Acute HI: Acute hazard index is the sum of the individual acute hazard quotients for toxic air contaminants identified as affecting the same target organ or organ system.

2-5-202 Acute Hazard Quotient, or Acute HQ: Acute hazard quotient is the ratio of the estimated short-term average concentration of the toxic air contaminant to its acute reference exposure level (estimated for inhalation exposure).

2-5-203 Airborne Toxic Control Measure, or ATCM: A recommended method and, where appropriate, a range of methods, established by the California Air Resources Board (CARB) pursuant to the Tanner Act, California Health and Safety Code beginning at Section 39650, that reduces, avoids, or eliminates the emissions of a toxic air contaminant.

2-5-204 Air Toxics Hot Spots Program: The Air Toxics "Hot Spots" Information and Assessment Act of 1987, California Health and Safety Code beginning at Section 44300.

2-5-205 Best Available Control Technology for Toxics, or TBACT: For any new or modified source of toxic air contaminants, except cargo carriers, the most stringent of the following emission controls, provided that under no circumstances shall the controls be less stringent than the emission control required by any applicable provision of federal, State or District laws, rules, regulations or requirements:

205.1 The most effective emission control device or technique which has been successfully utilized for the type of equipment comprising such a source; or

205.2 The most stringent emission limitation achieved by an emission control device or technique for the type of equipment comprising such a source; or

205.3 Any control device or technique or any emission limitation that the APCO has determined to be technologically feasible for the type of equipment comprising such a source, while taking into consideration the cost of achieving emission reductions, any non-air quality health and environmental impacts, and energy requirements; or

205.4 The most stringent emission control for a source type or category specified as MACT by U.S. EPA, or specified in an ATCM by CARB.

2-5-206 Cancer Risk: An estimate of the chance that an individual may develop cancer as a result of exposure to emitted carcinogens at a given receptor location, and considering, where appropriate, Age Sensitivity Factors to account for inherent increased susceptibility to carcinogens during infancy and childhood.

(Amended 1/6/10; 12/7/16)

2-5-207 Carcinogen: For the purpose of this rule, a carcinogen is any compound for which Cal/EPA's Office of Environmental Health Hazard Assessment (OEHHA) has established a cancer potency factor for use in the Air Toxics Hot Spots Program.

2-5-208 Chronic Hazard Index, or Chronic HI: Chronic hazard index is the sum of the individual chronic hazard quotients for toxic air contaminants identified as affecting the same target organ or organ system.

2-5-209 Chronic Hazard Quotient, or Chronic HQ: Chronic hazard quotient is the ratio of the estimated annual average exposure of the toxic air contaminant to its chronic reference exposure level (estimated for inhalation and non-inhalation exposures).

2-5-210 Health Risk: The potential for adverse human health effects resulting from exposure to emissions of toxic air contaminants and ranging from relatively mild temporary conditions, such as eye or throat irritation, shortness of breath, or headaches, to permanent and serious conditions, such as birth defects, cancer or damage to lungs, nerves, liver, heart, or other organs. Measures of health risk include cancer risk, chronic hazard index, and acute hazard index.

2-5-211 Health Risk Assessment, or HRA: An analysis that estimates the potential for increased likelihood of health risk for individuals in the affected population that may be exposed to emissions of one or more toxic air contaminants, determined in accordance with Section 2-5-603.

(Amended December 7, 2016)

2-5-212 **Maximally Exposed Individual, or MEI:** A person that may be located at the receptor location where the highest exposure to toxic air contaminants emitted from a given source or project is predicted, as shown by an APCO-approved HRA. MEI locations are typically determined for maximum cancer risk, chronic hazard index and acute hazard index based on exposure to residential, worker, and student receptors.

(Amended 1/6/10; 12/7/16)

2-5-213 **Maximum Achievable Control Technology, or MACT:** An emission standard promulgated by U.S. EPA pursuant to Section 112(d) of the Clean Air Act.

2-5-214 **Modified Source of Toxic Air Contaminants:** An existing source that undergoes a physical change, change in method of operation, or increase in throughput or production that results or may result in any of the following:

214.1 An increase in the daily or annual emission level of any toxic air contaminant, or the production rate or capacity that is used to estimate toxic air contaminant emission levels, above emission or production levels approved by the District in any authority to construct.

214.2 An increase in the daily or annual emission level of any toxic air contaminant, or the production rate or capacity that is used to estimate toxic air contaminant emission levels, above levels contained in a permit condition in any current permit to operate or major facility review permit.

214.3 For a source that has never been issued a District authority to construct and that does not have conditions limiting daily or annual toxic air contaminant emissions, an increase in the daily or annual emission level of any toxic air contaminant, or the production rate or capacity that is used to estimate the emission level, above the lower of the authorized capacity as established pursuant to Section 2-5-214.3.1 or the functional capacity as established pursuant to 2-5-214.3.2:

3.1 The authorized capacity is the highest of the following:

3.1.1 The highest attainable design capacity, as shown in pre-construction design drawings, including process design drawings and vendor specifications.

3.1.2 The capacity listed in the District permit to operate.

3.1.3 The highest documented actual levels attained by the source prior to July 1, 2005.

3.2 The functional capacity is the capacity of the source as limited by the capacity of any upstream or downstream process that acts as a bottleneck (a grandfathered source with an emission increase due to debottlenecking is considered to be modified).

For the purposes of applying Section 2-5-214.3, only increases in annual emission levels shall be considered for storage vessels.

214.4 The emission of any toxic air contaminant not previously emitted in a quantity that would result in a cancer risk greater than 1.0 in a million (10^{-6}) or a chronic hazard index greater than 0.20.

For the purposes of applying this definition, a daily capacity may be converted to an annual capacity or limit by multiplication by 365 days/year.

2-5-215 **New Source of Toxic Air Contaminants:** A source of toxic air contaminant emissions, except a source that loses a permit exemption or exclusion in accordance with Regulations 2-1-424 or 2-1-425, that is one or more of the following:

215.1 A source constructed or proposed to be constructed that never had a valid District authority to construct or permit to operate.

215.2 A source that has not been in operation for a period of one year or more and that has not held a valid District permit to operate during this period of non-operation.

215.3 A relocation of an existing source, except for a portable source, to a non-contiguous property.

215.4 A replacement of a source, including an identical replacement of a source, regardless when the original source was constructed.

215.5 A replacement of an identifiable source within a group of sources permitted together under a single source number for the purpose of District permitting convenience.

215.6 A "rebricking" of a glass furnace where changes to the furnace design result in a change in heat generation or absorption.

2-5-216 **Project:** Any source, or group of sources, at a facility that: (a) is part of a proposed construction or modification, (b) is subject to the requirements of Regulation 2-1-301 or 302, and (c) emits one or more toxic air contaminants. All new or modified sources of TACs included in a single permit application will be considered as a project, except that a modified source that meets the requirements of Section 2-5-114 may be excluded from the project. In addition, in order to discourage circumvention that might be achieved by breaking a project into smaller pieces and submitting more than one permit application over a period of time, a project shall include those new or modified sources of TACs at a facility that have been permitted within the five~~three~~-year period immediately preceding the date a complete application is received, and any projects at that facility where an Authority to Construct has been issued and has not expired, unless the applicant demonstrates to the satisfaction of the APCO that construction or modification of the sources included in the current application was neither (1) a reasonably foreseeable consequence of the previous project, nor (2) a critical element or integral part of the previous project.

(Amended 1/6/10; 12/7/16)

2-5-217 **Project Risk:** The health risk resulting from the emissions of toxic air contaminants from a given project, as indicated by an HRA for the MEI.

(Amended December 7, 2016)

2-5-218 **Receptor Location:** A location where an individual may live (residential receptor) or work (worker receptor) or otherwise reasonably be expected to be exposed (e.g., student receptor) to toxic air contaminants for the particular chronic or acute exposures being evaluated in an HRA. Locations include (a) locations outside of the property boundary of the facility being evaluated and (b) locations inside the property boundary where a person may reside (e.g., at military base housing, prisons, or universities). The APCO shall consider the potential for public exposure in determining appropriate receptor locations.

(Amended 1/6/10; 12/7/16)

2-5-219 **Reference Exposure Level, or REL:** The air concentration or exposure level for a specified exposure duration at or below which adverse non-cancer health effects are not anticipated to occur in the general human population.

2-5-220 **Residential Receptor:** Any receptor location where an individual may reside for a period of six months or more out of a year.

2-5-221 **Source Risk:** The health risk resulting from the emissions of all toxic air contaminants from a new or modified source of toxic air contaminants, as indicated by an HRA for the MEI.

(Amended December 7, 2016)

2-5-222 **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 Toxic Air Contaminant Trigger Levels.

(Amended December 7, 2016)

2-5-223 **Trigger Level:** The emission threshold level for each TAC, as identified in Table 2-5-1 Toxic Air Contaminant Trigger Levels, below which the resulting health risks are not expected to cause, or contribute significantly to, adverse health effects.

(Amended December 7, 2016)

2-5-224 **Worker Receptor:** Any receptor location that is an occupational setting or place where an individual may work and that is located outside of the boundary of the facility being evaluated.

2-5-225 **K-12 School:** Any public or private school used for purposes of the education of more than 12 children at the school in kindergarten or any of grades 1 to 12, inclusive, but does not include any private school in which education is primarily conducted in private homes. The term may include any building or structure, playground, athletic field, or other area of school property, but does not include unimproved school property.

(Adopted January 6, 2010)

2-5-226 **Student Receptor:** A location of a child at a K-12 school.

(Adopted January 6, 2010)

2-5-227 **Deleted.** ~~**Priority Community:** An area, designated by the APCO, where levels of toxic air contaminants are higher than other areas and where people may be particularly vulnerable and may bear disproportionately higher adverse health effects.~~

(Adopted January 6, 2010)

2-5-228 **Contemporaneous Health Risk Reduction Project:** A project that includes new or modified sources of toxic air contaminants and that also includes contemporaneous shut-downs or alterations of other existing permitted sources at the same facility that result in contemporaneous reductions of toxic air contaminant emissions.

(Adopted December 7, 2016)

2-5-229 **Net Project Risk:** The net change in health risk at a receptor location resulting from the emissions of toxic air contaminants from new or modified sources and the reductions in emissions of toxic air contaminants due to contemporaneous shut-downs or alterations of existing permitted equipment.

(Adopted December 7, 2016)

2-5-230 **Essential Public Service:** A police or firefighting facility, a hospital or other medical emergency facility, or a building designated as an emergency shelter location.

2-5-300 STANDARDS

2-5-301 **Best Available Control Technology for Toxics (TBACT) Requirement:** The applicant shall apply TBACT to any new or modified source of TACs where the source risk is a cancer risk greater than 1.0 in one million (10^{-6} or 1.0E-6), and/or a chronic hazard index greater than 0.20.

(Amended December 7, 2016)

2-5-302 **Project Risk Requirement:** The APCO shall deny an Authority to Construct or Permit to Operate for any new or modified source of TACs if the project risk exceeds any of the following project risk limits:

302.1 A~~a~~ cancer risk of 10.0 in one million (10 x 10^{-6} or 10E-6~~10^{-5} or 1.0E-5~~); or for a project located within an Overburdened Community as defined in Regulation 2-1-243 (other than a project at an Essential Public Service), a cancer risk of 6.0 in one million (6.0 x 10^{-6} or 6.0E-6);

302.2 A~~a~~ chronic hazard index of 1.0;

302.3 A~~a~~n acute hazard index of 1.0.

(Amended December 7, 2016)

2-5-303 **Net Project Risk Requirement:** The APCO shall deny an Authority to Construct or Permit to Operate for any new or modified source of TACs if the net project risk at any receptor exceeds any of the following net project risk limits:

302.1 A~~a~~ cancer risk of 10.0 in one million (10 x 10^{-6} or 10E-6~~10^{-5} or 1.0E-5~~); or for a project located within an Overburdened Community as defined in Regulation 2-1-243 (other than a project at an Essential Public Service), a cancer risk of 6.0 in one million (6.0 x 10^{-6} or 6.0E-6);

302.2 A~~a~~ chronic hazard index of 1.0;

302.3 A~~a~~n acute hazard index of 1.0.

(Adopted December 7, 2016)

2-5-400 ADMINISTRATIVE REQUIREMENTS

2-5-401 **Health Risk Assessment (HRA) Requirements:** An application for an Authority to Construct or Permit to Operate for any project subject to this rule shall contain an HRA conducted in accordance with Section 2-5-603 or the information necessary for the APCO to conduct an HRA. The APCO shall prepare an HRA where the applicant submits none. The APCO shall notify the applicant if the results of an HRA completed by the APCO indicate that the project, as proposed, would not meet the requirements of this rule. The applicant shall be given the opportunity to perform a more refined HRA, modify the project, or submit any required plans or information, as necessary to comply with the requirements of this rule.

(Amended December 7, 2016)

2-5-402 **Health Risk Assessment Guidelines:** The APCO shall publish Health Risk Assessment Guidelines that specify the procedures to be followed for estimating health risks including acute hazard index, chronic hazard index, and cancer risk. These guidelines will generally conform to the Health Risk Assessment Guidelines adopted by Cal/EPA's Office of Environmental Health Hazard Assessment (OEHHA) for use in the Air Toxics Hot Spots Program. The Health Risk Assessment Guidelines and Table 2-5-1 will be periodically updated, typically within one year of any significant revision to OEHHA's Health Risk Assessment Guidelines, including any new or revised health effects value.

(Amended December 7, 2016)

2-5-403 **BACT/TBACT Workbook:** The APCO shall publish and periodically update a BACT/TBACT Workbook specifying the requirements for commonly permitted sources. TBACT will be determined for a source by using the workbook as a guidance document or, on a case-by-case basis, using the most stringent definition of Section 2-5-205.

2-5-404 **Deleted.** ~~**Designation of Priority Communities:** The APCO shall publish and periodically update a list of the areas that have been designated as priority communities along with the selection criteria and analyses used in designating these communities.~~

(Adopted January 6, 2010)

2-5-405 **Deleted.** ~~**Cumulative Impact Summary for Priority Communities:** The APCO shall publish and periodically update a cumulative impact summary report that describes the cumulative impacts of toxicity weighted emission increases and reductions in each priority community occurring after January 1, 2010.~~

(Adopted January 6, 2010)

2-5-406 **Applicability Criteria and Administrative Procedures for Contemporaneous Health Risk Reduction Projects:** An applicant that is requesting to use the Section 2-5-115 Limited Exemption for Contemporaneous Health Risk Reduction Projects shall demonstrate to the satisfaction of the APCO that the project meets all of the applicability criteria in Section 2-5-406.1. The applicant shall also comply with all of the procedural requirements in Section 2-5-406.2.

406.1 Contemporaneous health risk reduction projects are limited to projects that include a modified source of toxic air contaminants that meets the following criteria:

1.1 The modified source was installed and operating at the facility prior to January 1, 1987.

1.2 The modified source currently has a valid District operating permit and has maintained a valid District operating permit since the source was first permitted by the District.

1.3 The modified source does not qualify for the Regulation 2-5-114 Limited Exemption for sources with no increases in toxicity weighted emissions.

1.4 The modified source is causing the project to exceed the project risk limits of Section 2-5-302 due to the elimination of the January 1, 1987 baseline for modified sources.

406.2 An application for a contemporaneous health risk reduction project shall contain the following:

2.1 A written request to use the Regulation 2-5-115 Limited Exemption for Contemporaneous Health Risk Reduction Projects.

2.2 A demonstration that the project includes a modified source of toxic air contaminants that meets all of the Section 2-5-406.1 applicability criteria.

2.3 Identification of all sources, source locations, stack parameters or other air dispersion modeling input information for the sources that will be shut-down or altered to reduce toxic air contaminant emissions.

2.4 Throughput rates, sources test data, emission factors, and any other information necessary to characterize the current actual baseline TAC emission rates for each source that will be shut-down or altered to

generate TAC emission reductions with emission reductions calculated in accordance with Section 2-5-602.

2.5 A certification that the TAC emission reductions calculated above will be contemporaneous because the emission reductions will be completed within no later than 90 days after the initial start-up date for any new or modified sources in the project.

2.6 A post-project health risk assessment for the project that includes an HRA for the new and modified sources in the project and that demonstrates that the modified source has met Section 2-5-406.1.4, and identification of each receptor location that is resulting in a project risk above the Section 2-5-302 thresholds.

2.7 A pre-project health risk assessment for the sources that will shut-down or altered based on the baseline TAC emissions calculated pursuant to section 2-5-602 that includes each receptor location with project risk excesses.

2.8 A comparison of the post-project and pre-project health risks for each receptor location, which did not comply with the Section 2-5-302 project risk limits, that demonstrates compliance with the net project risk limits in Section 2-5-303 for each of these receptor locations.

(Adopted December 7, 2016)

2-5-500 MONITORING AND RECORDS

2-5-501 Monitoring Requirements: The APCO may impose any reasonable monitoring or record keeping requirements deemed necessary to ensure compliance with this rule.

2-5-600 MANUAL OF PROCEDURES

2-5-601 Emission Calculation Procedures: The APCO shall determine annual TAC emissions (expressed as pounds per year), to be used for comparison with chronic trigger levels and in estimating cancer risk and chronic hazard index, and one-hour TAC emissions (expressed as pounds per hour), to be used for comparison with acute trigger levels and in estimating acute hazard index as follows:

601.1 Emission calculations shall include emissions resulting from routine operation of a source or emissions that are reasonably predictable, including, but not limited to continuous and intermittent releases and predictable process upsets or leaks, subject to enforceable limiting conditions.

601.2 Emission calculations for a new source shall be based on the maximum emitting potential of the new source or the maximum permitted emission level of the new source, approved by the APCO, subject to enforceable limiting conditions.

601.3 Emission calculations for a modified source shall be based on:

3.1 For post-modification emissions, the maximum emitting potential of the modified source or the maximum permitted emission level of the modified source, approved by the APCO, subject to enforceable limiting conditions.

3.2 For pre-modification emissions, the adjusted baseline emission rate for each TAC, as calculated using the methodology in Section 2-5-602.

3.3 For the purposes of Section 2-5-114, toxicity weighted emissions shall be calculated for each case, post-modification and pre-modification, in accordance with Section 2-5-604.

601.4 Emission calculations for a project shall be performed by summing the emissions from all new sources of TACs and the post-modification emissions from all modified sources of TACs that are considered part of the project pursuant to Section 2-5-216.

(Amended 1/6/10; 12/7/16)

2-5-602 Baseline Emission Calculation Procedures: The following methodology shall be used to calculate baseline emissions for modified sources of TACs:

602.1 For a source that has, contained in a permit condition, an emission cap or emission rate limit, the baseline throughput and baseline emission rate (expressed in the units of mass of emissions per unit of throughput) shall be based on the levels allowed by the permit condition.

602.2 For sources without an emission cap or emission rate limit, baseline throughput and emission rate shall be determined as follows:

2.1 The baseline period consists of the 3-year period immediately preceding the date that the application is complete (or shorter period if the source is less than 3 years old or longer period if the applicant demonstrates to the District's satisfaction that a longer period is appropriate when considering such factors as operational problems and economic conditions). The applicant must have sufficient verifiable records of the source's operation or credible engineering analyses that substantiate to the District's satisfaction the emission rate and throughput during the entire baseline period.

2.2 Baseline throughput is ~~either~~ the lowest of:

2.2.1 Actual average throughput during the baseline period~~, if throughput is not limited by permit condition~~; or

2.2.2 Authorized capacity as defined in Regulation 2-5-214.3.1; or ~~Maximum throughput as allowed by permit conditions on the date the application is complete.~~

2.2.3 Functional capacity as defined in Regulation 2-5-214.3.2.

2.3 Baseline emission rate (expressed in the units of mass of emissions per unit of throughput) is the average actual emission rate during the baseline period. Periods where the actual emission rate exceeded regulatory or permitted limits shall be excluded from the average.

602.3 The adjusted baseline emission rate shall be determined by adjusting the baseline emission rate downward, if necessary, to comply with the most stringent emission rate or emission limit from a MACT, ATCM, or District rule or regulation that is applicable to the type of source being evaluated and that is in effect, has been adopted by U.S. EPA, CARB, or the District, or is contained in the most recently adopted Clean Air Plan for the District.

602.4 The adjusted baseline emissions shall be the adjusted baseline emission rate multiplied by the baseline throughput.

2-5-603 Health Risk Assessment Procedures: Each HRA shall be prepared following the District's Health Risk Assessment Guidelines.

(Amended December 7, 2016)

2-5-604 Calculation Procedures for Toxicity Weighted Emissions: Emission increases and reductions shall be determined on a toxicity weighted basis for carcinogens and noncarcinogens. The annual-average emission rate of each carcinogen shall be multiplied by its Cancer Potency **(**CP) Weighting Factor; the products shall be summed to calculate the total weighted carcinogenic emission rate. The annual-average emission rate of each noncarcinogen shall be divided by its Chronic Reference Exposure Level (CREL) Weighting Factor; the quotients shall be summed to calculate the total weighted noncarcinogenic emission rate. CP and CREL Weighting Factors are identified in Table 2-5-1.

(Adopted 1/6/10; Amended 12/7/16)

Table 2-5-1 Toxic Air Contaminant Trigger Levels

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m³)	Chronic Inhalation REL [10] (µg/m³)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)⁻¹	Oral Cancer Potency Factor [10] (mg/kg-day)⁻¹
Acetaldehyde	75-07-0	~~1.0E+00~~ 2.1E-01	2.9E+01	1.4E+02	1.0E-02	4.7E+02	1.4E+02 3.0E+02 (8-Hour)		1.0E-02	
Acetamide	60-35-5		4.1E+00		7.0E-02				7.0E-02	
Acrolein	107-02-8	~~5.5E-03~~ 1.1E-03	1.4E+01	3.5E-01		2.5E+00	3.5E-01 7.0E-01 (8-Hour)			
Acrylamide	79-06-1		6.4E-02		4.5E+00				4.5E+00	
Acrylic acid	79-10-7	~~1.3E+01~~ 2.7E+00				6.0E+03				
Acrylonitrile	107-13-1		2.9E-01	5.0E+00	1.0E+00		5.0E+00		1.0E+00	
Allyl chloride	107-05-1		1.4E+01		2.1E-02				2.1E-02	
Aminoanthraquinone, 2-	117-79-3		8.7E+00		3.3E-02				3.3E-02	
Ammonia	7664-41-7	~~7.1E+00~~ 1.4E+00	7.7E+03	2.0E+02		3.2E+03	2.0E+02			
Aniline	62-53-3		5.0E+01		5.7E-03				5.7E-03	
Arsenic and compounds (inorganic) [4]	7440-38-2	~~4.4E-04~~ 8.8E-05	1.6E-03	1.4E-04	1.8E+02	2.0E-01	1.5E-02 1.5E-02 (8-Hour)	3.5E-06	1.2E+01	1.5E+00
arsine	7784-42-1	~~4.6E-04~~	~~6.0E-01~~	1.4E-02		2.0E-01	1.5E-02			

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m³)	Chronic Inhalation REL [10] (µg/m³)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
		~~6.0E-02~~ 1.2E-02	5.8E-01				1.5E-02 (8-Hour)			
Asbestos [5]	1332-21-4		1.3E-03		2.2E+02				2.2E+02	
Benzene	71-43-2	~~6.0E-02~~ 1.2E-02	2.9E+00	3.0E+00	1.0E-01	2.7E+01	~~3.0E+00~~ 3.0E+00 (8-Hour)		1.0E-01	
Benzidine (and its salts)	92-87-5		5.7E-04		5.0E+02				5.0E+02	
benzidine based dyes			5.7E-04		5.0E+02				5.0E+02	
direct black 38	1937-37-7		5.7E-04		5.0E+02				5.0E+02	
direct blue 6	2602-46-2		5.7E-04		5.0E+02				5.0E+02	
direct brown 95 (technical grade)	16071-86-6		5.7E-04		5.0E+02				5.0E+02	
Benzyl chloride	100-44-7	~~5.3E-01~~ 1.1E-01	1.7E+00		1.7E-01	2.4E+02			1.7E-01	
Beryllium and compounds [4]	7440-41-7		3.4E-02	7.0E-03	8.4E+00		7.0E-03	2.0E-03	8.4E+00	
Bis (2-chloroethyl) ether (Dichloroethyl ether)	111-44-4		1.1E-01		2.5E+00				2.5E+00	
Bis (chloromethyl) ether	542-88-1		6.2E-03		4.6E+01				4.6E+01	
Butadiene, 1,3-	106-99-0	~~1.5E+00~~ 2.9E-01	4.8E-01	2.0E+00	6.0E-01	6.6E+02	~~2.0E+00~~ 9.0E+00 (8-Hour)		6.0E-01	

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m³)	Chronic Inhalation REL [10] (µg/m³)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Cadmium and compounds [4]	7440-43-9		1.9E-02	1.0E-02	1.5E+01		2.0E-02	5.0E-04	1.5E+01	
Caprolactam	105-60-2	~~1.1E-01~~ 2.2E-02	8.5E+01	2.2E+00		5.0E+01	2.2E+00 7.0E+00 (8-Hour)			
Carbon disulfide	75-15-0	~~1.4E+01~~ 2.7E+00	3.1E+04	8.0E+02		6.2E+03	8.0E+02			
Carbon tetrachloride (Tetrachloromethane)	56-23-5	~~4.2E+00~~ 8.4E-01	1.9E+00	4.0E+01	1.5E-01	1.9E+03	4.0E+01		1.5E-01	
Carbonyl sulfide	463-58-1	2.9E-01	3.9E+02			6.6E+02	1.0E+01 1.0E+01 (8-Hour)			
Chlorinated paraffins	108171-26-2		3.2E+00		8.9E-02				8.9E-02	
Chlorine	7782-50-5	~~4.6E-01~~ 9.3E-02	7.7E+00	2.0E-01		2.1E+02	2.0E-01			
Chlorine dioxide	10049-04-4		2.3E+01	6.0E-01			6.0E-01			
Chloro-o-phenylenediamine, 4-	95-83-0		1.8E+01		1.6E-02				1.6E-02	
Chlorobenzene	108-90-7		3.9E+04	1.0E+03			1.0E+03			
Chloroform	67-66-3	~~3.3E-01~~ 6.6E-02	1.5E+01	3.0E+02	1.9E-02	1.5E+02	3.0E+02		1.9E-02	
Chloropicrin	76-06-2	~~6.4E-02~~ 1.3E-02	1.5E+01	4.0E-01		2.9E+01	4.0E-01			

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m³)	Chronic Inhalation REL [10] (µg/m³)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Chloro-o-toluidine, p-	95-69-2		1.1E+00		2.7E-01				2.7E-01	
Chromium, (hexavalent, 6+) [4]	18540-29-9		5.1E-04	2.0E-01	5.6E+02		2.0E-01	2.0E-02	5.1E+02	5.0E-01
barium chromate [4]	10294-40-3		2.5E-03	4.1E-02	1.2E+02		2.0E-01	2.0E-02	5.1E+02	5.0E-01
calcium chromate [4]	13765-19-0		1.5E-03	6.7E-02	1.9E+02		2.0E-01	2.0E-02	5.1E+02	5.0E-01
lead chromate [4]	7758-97-6		3.2E-03	3.2E-02	9.1E+01		2.0E-01	2.0E-02	5.1E+02	5.0E-01
sodium dichromate [4]	10588-01-9		1.3E-03	7.9E-02	2.2E+02		2.0E-01	2.0E-02	5.1E+02	5.0E-01
strontium chromate [4]	7789-06-2		2.0E-03	5.1E-02	1.4E+02		2.0E-01	2.0E-02	5.1E+02	5.0E-01
Zinc chromate	13530-65-9		1.8E-03	5.7E-02	1.6E+02		2.0E-01	2.0E-02	5.1E+02	5.0E-01
Chromium trioxide (as chromic acid mist) [4]	1333-82-0		9.7E-04	1.0E-03	2.9E+02		2.0E-03	2.0E-02	5.1E+02	5.0E-01
Cobalt	7440-48-4		1.1E-02		2.7E+01				2.7E+01	
Copper and compounds	7440-50-8	~~2.2E-01~~ 4.4E-02				1.0E+02				
Cresidine, p-	120-71-8		1.9E+00		1.5E-01				1.5E-01	
Cresols (m-, o-, p-)	1319-77-3		2.3E+04	6.0E+02			6.0E+02			
Cupferron	135-20-6		1.3E+00		2.2E-01				2.2E-01	
Cyanide and compounds (inorganic)	57-12-5	~~7.5E-01~~ 1.5E-01	3.5E+02	9.0E+00		3.4E+02	9.0E+00			
hydrogen cyanide (hydrocyanic acid)	74-90-8	~~7.5E-01~~ 1.5E-01	3.5E+02	9.0E+00		3.4E+02	9.0E+00			
Diaminoanisole, 2,4-	615-05-4		1.2E+01		2.3E-02				2.3E-02	

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m^3)	Chronic Inhalation REL [10] (µg/m^3)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Diaminotoluene, 2,4-	95-80-7		7.2E-02		4.0E+00				4.0E+00	
Dibromo-3-chloropropane, 1,2- (DBCP)	96-12-8		4.1E-02		7.0E+00				7.0E+00	
Dichlorobenzene, 1,4-	106-46-7		7.2E+00	8.0E+02	4.0E-02		8.0E+02		4.0E-02	
Dichlorobenzidine, 3,3-	91-94-1		2.4E-01		1.2E+00				1.2E+00	
Dichloroethane, 1,1- (Ethylidene dichloride)	75-34-3		5.0E+01		5.7E-03				5.7E-03	
Dichloroethylene, 1,1- [see vinylidene chloride]										
Diesel exhaust particulate matter [6]			2.6E-01	5.0E+00	1.1E+00		5.0E+00		1.1E+00	
Diethanolamine	111-42-2		1.2E+02	3.0E+00			3.0E+00			
Di(2-ethylhexyl)phthalate (DEHP) [4]	117-81-7		2.9E+01		1.0E-02				8.4E-03	8.4E-03
Dimethylaminoazobenzene, p-	60-11-7		6.2E-02		4.6E+00				4.6E+00	
Dimethyl formamide, N,N-	68-12-2		3.1E+03	8.0E+01			8.0E+01			
Dinitrotoluene, 2,4-	121-14-2		9.2E-01		3.1E-01				3.1E-01	
Dioxane, 1,4- (1,4-diethylene dioxide)	123-91-1	~~6.6E+00~~ 1.3E+00	1.1E+01	3.0E+03	2.7E-02	3.0E+03	3.0E+03		2.7E-02	
Epichlorohydrin (1-chloro-2,3-epoxypropane)	106-89-8	~~2.9E+00~~ 5.8E-01	3.6E+00	3.0E+00	8.0E-02	1.3E+03	3.0E+00		8.0E-02	

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m^3)	Chronic Inhalation REL [10] (µg/m^3)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Epoxybutane, 1,2-	106-88-7		7.7E+02	2.0E+01			2.0E+01			
Ethyl benzene	100-41-4		3.3E+01	2.0E+03	8.7E-03		2.0E+03		8.7E-03	
Ethyl chloride (chloroethane)	75-00-3		1.2E+06	3.0E+04			3.0E+04			
Ethylene dibromide (1,2-dibromoethane)	106-93-4		1.1E+00	8.0E-01	2.5E-01		8.0E-01		2.5E-01	
Ethylene dichloride (1,2-dichloroethane)	107-06-2		4.0E+00	4.0E+02	7.2E-02		4.0E+02		7.2E-02	
Ethylene glycol	107-21-1		1.5E+04	4.0E+02			4.0E+02			
Ethylene glycol butyl ether – EGBE [see Glycol ethers]										
Ethylene oxide (1,2-epoxyethane)	75-21-8		9.2E-01	3.0E+01	3.1E-01		3.0E+01		3.1E-01	
Ethylene thiourea	96-45-7		6.4E+00		4.5E-02				4.5E-02	
Fluorides [4]		~~5.3E-01~~ 1.1E-01	5.7E+01	1.5E+00		2.4E+02	1.3E+01	4.0E-02		
hydrogen fluoride (hydrofluoric acid) [4]	7664-39-3	~~5.3E-01~~ 1.1E-01	5.8E+01	1.5E+00		2.4E+02	1.4E+01	4.0E-02		
Formaldehyde	50-00-0	~~1.2E-01~~ 2.4E-02	1.4E+01	9.0E+00	2.1E-02	5.5E+01	9.0E+00 9.0E+00 (8-Hour)		2.1E-02	
Glutaraldehyde	111-30-8		3.1E+00	8.0E-02			8.0E-02			

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m³)	Chronic Inhalation REL [10] (µg/m³)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Glycol ethers										
ethylene glycol butyl ether – EGBE (2-butoxy ethanol; butyl cellosolve)	111-76-2	~~3.1E+01~~ 2.1E+00	3.2E+3	8.2E+01		~~1.4E+04~~ 4.7E+03	8.2E+01 1.6E+02 (8-Hour)			
ethylene glycol ethyl ether – EGEE (2-ethoxy ethanol; cellosolve)	110-80-5	~~8.2E-01~~ 1.6E-01	2.7E+03	7.0E+01		3.7E+02	7.0E+01			
ethylene glycol ethyl ether acetate – EGEEA (2-ethoxyethyl acetate; cellosolve acetate)	111-15-9	~~3.1E-01~~ 6.2E-02	1.2E+04	3.0E+02		1.4E+02	3.0E+02			
ethylene glycol methyl ether – EGME (2-methoxy ethanol; methyl cellosolve)	109-86-4	~~2.1E-01~~ 4.1E-02	2.3E+03	6.0E+01		9.3E+01	6.0E+01			
ethylene glycol methyl ether acetate – EGMEA (2-methoxyethyl acetate; methyl cellosolve acetate)	110-49-6		3.5E+03	9.0E+01			9.0E+01			
Hexachlorobenzene	118-74-1		1.6E-01		1.8E+00				1.8E+00	
Hexachlorocyclohexanes (mixed or technical grade) [4]	608-73-1		3.3E-02		8.6E+00				4.0E+00	4.0E+00

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m³)	Chronic Inhalation REL [10] (µg/m³)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Hexachlorocyclohexane, alpha- [4]	319-84-6		3.3E-02		8.6E+00				4.0E+00	4.0E+00
Hexachlorocyclohexane, beta- [4]	319-85-7		3.3E-02		8.6E+00				4.0E+00	4.0E+00
Hexachlorocyclohexane, gamma- (lindane) [4]	58-89-9		1.2E-01		2.4E+00				1.1E+00	1.1E+00
1,6-Hexamethylene Diisocyanate (monomer)	822-06-0	1.3E-04	1.2E+00	3.0E-02		3.0E-01	3.0E-02 6.0E-02 (8-Hour)			
Hexane, n-	110-54-3		2.7E+05	7.0E+03			7.0E+03			
Hydrazine	302-01-2		1.7E-02	2.0E-01	1.7E+01		2.0E-01		1.7E+01	
Hydrochloric acid (hydrogen chloride)	7647-01-0	~~4.6E+00~~ 9.3E-01	3.5E+02	9.0E+00		2.1E+03	9.0E+00			
Hydrogen cyanide (hydrocyanic acid) [see cyanide & compounds]										
Hydrogen fluoride (hydrofluoric acid) [see fluorides & compounds]										
Hydrogen selenide [see selenium compounds]										
Hydrogen sulfide	7783-06-4	~~9.3E-02~~ 1.9E-02	3.9E+02	1.0E+01		4.2E+01	1.0E+01			

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m³)	Chronic Inhalation REL [10] (µg/m³)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Isophorone	78-59-1		7.7E+04	2.0E+03			2.0E+03			
Isopropyl alcohol (isopropanol)	67-63-0	~~7.1E+00~~ 1.4E+00	2.7E+05	7.0E+03		3.2E+03	7.0E+03			
Lead and compounds (inorganic) [4]	7439-92-1		2.9E-01		9.8E-01				4.2E-02	8.5E-03
lead acetate [4]	301-04-2		4.6E-01		6.2E-01				4.2E-02	8.5E-03
lead phosphate [4]	7446-27-7		3.8E-01		7.5E-01				4.2E-02	8.5E-03
lead subacetate [4]	1335-32-6		3.8E-01		7.5E-01				4.2E-02	8.5E-03
Lindane [see hexachlorocyclohexane, gamma]										
Maleic anhydride	108-31-6		2.7E+01	7.0E-01			7.0E-01			
Manganese and compounds	7439-96-5		3.5E+00	9.0E-02			9.0E-02 1.7E-01 (8-Hour)			
Mercury and compounds (inorganic) [4]	7439-97-6	~~1.3E-03~~ 2.7E-04	2.1E-01	5.4E-03		6.0E-01	3.0E-02 6.0E-02 (8-Hour)	1.6E-04		
mercuric chloride [4]	7487-94-7	~~1.8E-03~~ 2.7E-04	~~2.8E-01~~ 2.1E-01	4.0E-03		6.0E-01	3.0E-02 6.0E-02 (8-Hour)	1.6E-04		

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m³)	Chronic Inhalation REL [10] (µg/m³)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Methanol (methyl alcohol)	67-56-1	~~6.2E+01~~ 1.2E+01	1.5E+05	4.0E+03		2.8E+04	4.0E+03			
Methyl bromide (bromomethane)	74-83-9	~~8.6E+00~~ 1.7E+00	1.9E+02	5.0E+00		3.9E+03	5.0E+00			
Methyl chloroform (1,1,1-trichloroethane)	71-55-6	~~1.5E+02~~ 3.0E+01	3.9E+04	1.0E+03		6.8E+04	1.0E+03			
Methyl ethyl ketone (MEK) (2-butanone)	78-93-3	~~2.9E+01~~ 5.8E+00				1.3E+04				
Methyl isocyanate	624-83-9		3.9E+01	1.0E+00			1.0E+00			
Methyl tertiary-butyl ether (MTBE)	1634-04-4		1.6E+02	8.0E+03	1.8E-03		8.0E+03		1.8E-03	
Methylene bis (2-chloroaniline), 4,4'- (MOCA)	101-14-4		1.9E-01		1.5E+00				1.5E+00	
Methylene chloride (dichloromethane)	75-09-2	~~3.1E+01~~ 6.2E+00	8.2E+01	4.0E+02	3.5E-03	1.4E+04	4.0E+02		3.5E-03	
Methylene dianiline, 4,4'- (and its dichloride) [4]	101-77-9		2.6E-02	2.0E+01	1.1E+01		2.0E+01		1.6E+00	1.6E+00
Methylene diphenyl isocyanate	101-68-8	5.3E-03	~~2.7E+01~~ 3.1E+00	~~7.0E-01~~ 8.0E-02		1.2E+01	~~7.0E-01~~ 8.0E-02 1.6E-01 (8-Hour)			

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m³)	Chronic Inhalation REL [10] (µg/m³)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Michler's ketone (4,4 bis (dimethylamino) benzophenone)	90-94-8		3.3E-01		8.6E-01				8.6E-01	
Naphthalene [see polycyclic aromatic hydrocarbons]										
Nickel and compounds [4] *(values also apply to:)*	7440-02-0	~~3.1E-05~~ 8.8E-05	3.1E-01	1.4E-02	9.1E-01	2.0E-01	1.4E-02 6.0E-02 (8-Hour)	1.1E-02	9.1E-01	
nickel acetate [4]	373-02-4	~~9.3E-05~~ 2.7E-04	9.5E-01	4.7E-03	9.1E-01	2.0E-01	1.4E-02 6.0E-02 (8-Hour)	1.1E-02	9.1E-01	
nickel carbonate [4]	3333-39-3	~~6.3E-05~~ 1.8E-04	6.4E-01	6.9E-03	9.1E-01	2.0E-01	1.4E-02 6.0E-02 (8-Hour)	1.1E-02	9.1E-01	
nickel carbonyl [4]	13463-39-3	~~9.0E-05~~ 2.6E-04	9.1E-01	4.8E-03	9.1E-01	2.0E-01	1.4E-02 6.0E-02 (8-Hour)	1.1E-02	9.1E-01	
nickel hydroxide [4]	12054-48-7	~~4.9E-05~~ 1.4E-04	5.0E-01	8.9E-03	9.1E-01	2.0E-01	1.4E-02 6.0E-02 (8-Hour)	1.1E-02	9.1E-01	

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m³)	Chronic Inhalation REL [10] (µg/m³)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
nickelocene [4]	1271-28-9	~~6.3E-05~~ 1.8E-04	6.4E-01	6.9E-03	9.1E-01	2.0E-01	1.4E-02 6.0E-02 (8-Hour)	1.1E-02	9.1E-01	
nickel oxide [4]	1313-99-1	~~5.6E-05~~ 1.1E-04	4.0E-01	7.9E-02	9.1E-01	2.0E-01	1.4E-02 6.0E-02 (8-Hour)	1.1E-02	9.1E-01	
nickel refinery dust from the pyrometallurgical process [4]		~~3.1E-05~~ 8.8E-05	3.1E-01	1.4E-02	9.1E-01	2.0E-01	1.4E-02 6.0E-02 (8-Hour)	1.1E-02	9.1E-01	
nickel subsulfide [4]	12035-72-2	~~1.3E-04~~ 3.6E-04	1.3E+00	3.4E-03	9.1E-01	2.0E-01	1.4E-02 6.0E-02 (8-Hour)	1.1E-02	9.1E-01	
Nitric acid	7697-37-2	~~1.9E-01~~ 3.8E-02				8.6E+01				
Nitrosodi-n-butylamine, N-	924-16-3		2.6E-02		1.1E+01				1.1E+01	
Nitrosodi-n-propylamine, N-	621-64-7		4.1E-02		7.0E+00				7.0E+00	
Nitrosodiethylamine, N-	55-18-5		8.0E-03		3.6E+01				3.6E+01	
Nitrosodimethylamine, N-	62-75-9		1.8E-02		1.6E+01				1.6E+01	
Nitrosodiphenylamine, N-	86-30-6		3.2E+01		9.0E-03				9.0E-03	
Nitroso-n-methylethylamine, N-	10595-95-6		1.3E-02		2.2E+01				2.2E+01	

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m^3)	Chronic Inhalation REL [10] (µg/m^3)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Nitrosomorpholine, N-	59-89-2		4.3E-02		6.7E+00				6.7E+00	
Nitrosopiperidine, N-	100-75-4		3.0E-02		9.4E+00				9.4E+00	
Nitrosopyrrolidine, N-	930-55-2		1.4E-01		2.1E+00				2.1E+00	
Nitrosodiphenylamine, p-	156-10-5		1.3E+01		2.2E-02				2.2E-02	
Ozone	10028-15-6	~~4.0E-01~~ 8.0E-02				1.8E+02				
Pentachlorophenol	87-86-5		1.6E+01		1.8E-02				1.8E-02	
Perchloroethylene (tetrachloroethylene)	127-18-4	~~4.4E+01~~ 8.8E+00	1.4E+01	3.5E+01	2.1E-02	2.0E+04	3.5E+01		2.1E-02	
Phenol	108-95-2	~~1.3E+01~~ 2.6E+00	7.7E+03	2.0E+02		5.8E+03	2.0E+02			
Phosgene	75-44-5	~~8.8E-03~~ 1.8E-03				4.0E+00				
Phosphine	7803-51-2		3.1E+01	8.0E-01			8.0E-01			
Phosphoric acid	7664-38-2		2.7E+02	7.0E+00			7.0E+00			
Phthalic anhydride	85-44-9		7.7E+02	2.0E+01			2.0E+01			
PCBs (polychlorinated biphenyls) [4]	1336-36-3		3.9E-03		7.4E+01				2.0E+00	2.0E+00

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m^3)	Chronic Inhalation REL [10] (µg/m^3)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Polychlorinated dibenzo-p-dioxins (PCDDs), poly-chlorinated dibenzofurans (PCDFs), and dioxin-like polychlorinated biphenyls (PCBs) (as 2,3,7,8-PCDD equivalent) [4, 7]	See Footnote 7		4.4E-08	7.6E-08	6.5E+06		4.0E-05	1.0E-08	1.3E+05	1.3E+05
Polycyclic aromatic hydrocarbons (PAH) (as B(a)P-equivalent) [4, 8]	See Footnote 8		3.3E-03		8.6E+01				3.9E+00	1.2E+01
Naphthalene	91-20-3		2.4E+00	9.0E+00	1.2E-01		9.0E+00		1.2E-01	
Potassium bromate	7758-01-2		5.8E-01	1.7E+00	4.9E-01		1.7E+00		4.9E-01	
Propane sultone, 1,3-	1120-71-4		1.2E-01		2.4E+00				2.4E+00	
Propylene (propene)	115-07-1		1.2E+05	3.0E+03			3.0E+03			
Propylene glycol monomethyl ether	107-98-2		2.7E+05	7.0E+03			7.0E+03			
Propylene oxide	75-56-9	~~6.8E+00~~ 1.4E+00	2.2E+01	3.0E+01	1.3E-02	3.1E+03	3.0E+01		1.3E-02	
Selenium and compounds [4]	7782-49-2		8.0E+00	2.1E-01			2.0E+01	5.0E-03		
hydrogen selenide	7783-07-5	~~1.1E-02~~ 2.2E-03				5.0E+00				
selenium sulfide [4]	7446-34-6		~~1.5E+01~~ 8.0E+00	1.1E-01			2.0E+01	5.0E-03		

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m³)	Chronic Inhalation REL [10] (µg/m³)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Silica (crystalline, respirable)	7631-86-9		1.2E+02	3.0E+00			3.0E+00			
Sodium hydroxide	1310-73-2	~~1.8E-02~~ 3.5E-03				8.0E+00				
Styrene	100-42-5	~~4.6E+01~~ 9.3E+00	3.5E+04	9.0E+02		2.1E+04	9.0E+02			
Sulfates		~~2.6E-01~~ 5.3E-02				1.2E+02				
~~Sulfuric acid and oleum~~	~~7664-93-9~~	~~2.6E-01~~	~~3.9E+01~~	~~1.0E+00~~		~~1.2E+02~~	~~1.0E+00~~			
Sulfuric acid	7664-93-9	~~2.6E-01~~ 5.3E-02	3.9E+01	1.0E+00		1.2E+02	1.0E+00			
sulfur trioxide	7446-11-9	~~2.6E-01~~ 5.3E-02	3.9E+01	1.0E+00		1.2E+02	1.0E+00			
Oleum	8014-95-7	~~2.6E-01~~ 5.3E-02	~~3.9E+01~~	~~1.0E+00~~		1.2E+02	~~1.0E+00~~			
Tertiary Butyl Acetate (TBAc)	540-88-5		6.1E+01		4.7E-03				4.7E-03	5.0E-03
Tetrachloroethane, 1,1,2,2-	79-34-5		1.4E+00		2.0E-01				2.0E-01	
Thioacetamide	62-55-5		4.7E-02		6.1E+00				6.1E+00	
Toluene	108-88-3	~~8.2E+01~~ 2.2E+00	~~1.2E+04~~ 1.6E+04	~~3.0E+02~~ 4.2E+02		~~3.7E+04~~ 5.0E+03	~~3.0E+02~~ 4.2E+02 8.3E+02 (8-Hour)			

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m³)	Chronic Inhalation REL [10] (µg/m³)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Toluene diisocyantates	26471-62-5	8.8E-04	~~2.7E+00~~ 3.1E-01	~~7.0E-02~~ 8.0E-03	3.9E-02	2.0E+00	~~7.0E-02~~ 8.0E-03 1.5E-02 (8-Hour)		3.9E-02	
toluene-2,4-diisocyanate	584-84-9	8.8E-04	2.7E+00 3.1E-01	~~7.0E-02~~ 8.0E-03	3.9E-02	2.0E+00	~~7.0E-02~~ 8.0E-03 1.5E-02 (8-Hour)		3.9E-02	
toluene-2,6-diisocyanate	91-08-7	8.8E-04	~~2.7E+00~~ 3.1E-01	~~7.0E-02~~ 8.0E-03	3.9E-02	2.0E+00	~~7.0E-02~~ 8.0E-03 1.5E-02 (8-Hour)		3.9E-02	
Trichloroethane, 1,1,1 (see methyl chloroform)										
Trichloroethane, 1,1,2- (vinyl trichloride)	79-00-5		5.0E+00		5.7E-02				5.7E-02	
Trichloroethylene	79-01-6		4.1E+01	6.0E+02	7.0E-03		6.0E+02		7.0E-03	
Trichlorophenol, 2,4,6-	88-06-2		4.1E+00		7.0E-02				7.0E-02	
Triethylamine	121-44-8	~~6.2E+00~~ 1.2E+00	7.7E+03	2.0E+02		2.8E+03	2.0E+02			
Urethane (ethyl carbamate)	51-79-6		2.9E-01		1.0E+00				1.0E+00	
Vanadium Compounds										

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m³)	Chronic Inhalation REL [10] (µg/m³)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
vanadium (fume or dust)	7440-62-2	~~6.6E-02~~ 1.3E-02				3.0E+01				
vanadium pentoxide	1314-62-1	~~6.6E-02~~ 1.3E-02				3.0E+01				
Vinyl acetate	108-05-4		7.7E+03	2.0E+02			2.0E+02			
Vinyl chloride (chloroethylene)	75-01-4	~~4.0E+02~~ 8.0E+01	1.1E+00		2.7E-01	1.8E+05			2.7E-01	
Vinylidene chloride (1,1-dichloroethylene)	75-35-4		2.7E+03	7.0E+01			7.0E+01			
Xylenes (mixed isomers)	1330-20-7	~~4.9E+01~~ 9.7E+00	2.7E+04	7.0E+02		2.2E+04	7.0E+02			
m-xylene	108-38-3	~~4.9E+01~~ 9.7E+00	2.7E+04	7.0E+02		2.2E+04	7.0E+02			
o-xylene	95-47-6	~~4.9E+01~~ 9.7E+00	2.7E+04	7.0E+02		2.2E+04	7.0E+02			
p-xylene	106-42-3	~~4.9E+01~~ 9.7E+00	2.7E+04	7.0E+02		2.2E+04	7.0E+02			

(Adopted 6/15/05; Amended 1/6/10, 12/7/16

1 Chemical Abstract Number (CAS):
CAS numbers are not available for many chemical groupings and mixtures.

2 Trigger Levels:

All trigger levels are presented in scientific notation (i.e., exponential form based on powers of the based number 10.) For example: 4.9E+01 is equivalent to $4.9X10^{1}$, or 49; 6.6E-02 is equivalent to $6.6X10^{-2}$, or 0.066; and 5.8E+00 is equivalent to $5.8X10^{0}$, or 5.8.

3 Averaging Period for Non-Cancer Acute Trigger Levels:
The averaging period for non-cancer acute trigger levels is a one-hour exposure.

4 Chemicals for Which Multi-Pathway Risks are Assessed:
Trigger levels are adjusted to include the impact from default non-inhalation pathways.

5 Asbestos:
The units for the inhalation cancer potency factor for asbestos are $(100\ PCM\ fibers/m^3)^{-1}$. A conversion factor of 100 fibers/0.003 μg can be multiplied by a receptor concentration of asbestos expressed in $\mu g/m^3$. Unless other information necessary to estimate the concentration ($fibers/m^3$) of asbestos at receptors of interest is available, an inhalation cancer potency factor of $220\ (mg/kg\text{-}day)^{-1}$ is available.

6 Diesel Exhaust Particulate Matter:
Diesel exhaust particulate matter should be used as a surrogate for all TAC emissions from diesel-fueled compression-ignition internal combustion engines. However, diesel exhaust particulate matter should not be used for other types of diesel-fueled combustion equipment, such as boilers or turbines. For equipment other than diesel-fueled compression-ignition internal combustion engines, emissions should be determined for individual TACs and compared to the appropriate trigger level for each TAC.

7 Polychlorinated Dibenzo-p-Dioxins (PCDDs), Polychlorinated Dibenzofurans (PCDFs), and Dioxin-like Polychlorinated Biphenyls (PCBs):
These substances are PCDDs, PCDFs, and dioxin-like PCBs for which OEHHA has adopted the World Health Organization (WHO_{97}) Toxicity Equivalency Factor (TEF) scheme for evaluating cancer risk due to exposure to samples containing mixtures of PCDDs, PCDFs, and dioxin-like PCBs. PCDDs, PCDFs, and dioxin-like PCBs should be evaluated as PCDD-equivalent. This evaluation process consists of multiplying individual PCDD-, PCDF-, and dioxin-like PCB-specific emission levels with their corresponding TEFs listed below. The sum of these products is the PCDD-equivalent and should be compared to the PCDD-equivalent trigger level.

PCDD	CAS Number	TEF
2,3,7,8-tetrachlorodibenzo-p-dioxin	1746-01-6	1.0
1,2,3,7,8-pentachlorodibenzo-p-dioxin	40321-76-4	1.0
1,2,3,4,7,8-hexachlorodibenzo-p-dioxin	39227-28-6	0.1
1,2,3,6,7,8-hexachlorodibenzo-p-dioxin	57653-85-7	0.1
1,2,3,7,8,9-hexachlorodibenzo-p-dioxin	19408-74-3	0.1
1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin	35822-46-9	0.01
1,2,3,4,6,7,8,9-octachlorodibenzo-p-dioxin	3268-87-9	0.0003

PCDF	CAS Number	TEF
2,3,7,8-tetrachlorodibenzofuran	5120-73-19	0.1
1,2,3,7,8-pentachlorodibenzofuran	57117-41-6	0.03

2,3,4,7,8-pentachlorodibenzofuran	57117-31-4	0.3
1,2,3,4,7,8-hexachlorodibenzofuran	70648-26-9	0.1
1,2,3,6,7,8-hexachlorodibenzofuran	57117-44-9	0.1
1,2,3,7,8,9-hexachlorodibenzofuran	72918-21-9	0.1
2,3,4,6,7,8-hexachlorodibenzofuran	60851-34-5	0.1
1,2,3,4,6,7,8-heptachlorodibenzofuran	67562-39-4	0.01
1,2,3,4,7,8,9-heptachlorodibenzofuran	55673-89-7	0.01
1,2,3,4,6,7,8,9-octachlorodibenzofuran	39001-02-0	0.0003

Dioxin-like PCBs (coplanar PCBs)	CAS Number	TEF
PCB 77 (3,3'4,4'-tetrachlorobiphenyl)	32598-13-3	0.0001
PCB 81 (3,4,4',5-tetrachlorobiphenyl)	70362-50-4	0.0003
PCB 105 (2,3,3'4,4'-pentachlorobiphenyl)	32598-14-4	0.00003
PCB 114 (2,3,4,4'5-pentachlorobiphenyl)	74472-37-0	0.00003
PCB 118 (2,3',4,4',5-pentachlorobiphenyl)	31508-00-6	0.00003
PCB 123 (2',3,4,4',5-pentachlorobiphenyl)	65510-44-3	0.00003
PCB 126 (3,3',4,4',5-pentachlorobiphenyl)	57465-28-8	0.1
PCB 156 (2,3,3',4,4',5-hexachlorobiphenyl)	38380-08-4	0.00003
PCB 157 (2,3,3',4,4',5'-hexachlorobiphenyl)	69782-90-7	0.00003
PCB 167 (2,3',4,4',5,5'-hexachlorobiphenyl)	52663-72-6	0.00003
PCB 169 (3,3',4,4',5,5'-hexachlorobiphenyl)	32774-16-6	0.03
PCB 170 (2,2',3,3',4,4',5-heptachlorobiphenyl)	35065-30-6	0
PCB 180 (2,2',3,4,4',5,5'-heptachlorobiphenyl)	35065-29-3	0
PCB 189 (2,3,3',4,4',5,5'-heptachlorobiphenyl)	39635-31-9	0.00003

8 Polycyclic Aromatic Hydrocarbons (PAHs):

These substances are PAH-derivatives that have OEHHA-developed Potency Equivalency Factors (PEFs). PAHs should be evaluated as benzo(a)pyrene-equivalents. This evaluation process consists of multiplying individual PAH-specific emission levels with their corresponding PEFs listed below. The sum of these products is the benzo(a)pyrene-equivalent level and should be compared to the benzo(a)pyrene equivalent trigger level.

PAH or derivative	CAS Number	PEF
benz(a)anthracene	56-55-3	0.1
benzo(b)fluoranthene	205-99-2	0.1
benzo(j)fluoranthene	205-82-3	0.1
benzo(k)fluoranthene	207-08-9	0.1
benzo(a)pyrene	50-32-8	1.0
chrysene	218-01-9	0.01
dibenz(a,j)acridine	224-42-0	0.1
dibenz(a,h)acridine	226-36-8	0.1
dibenz(a,h)anthracene	53-70-3	1.05
7H-dibenzo(c,g)carbazole	194-59-2	1.0
dibenzo(a,e)pyrene	192-65-4	1.0

dibenzo(a,h)pyrene	189-64-0	10
dibenzo(a,i)pyrene	189-55-9	10
dibenzo(a,l)pyrene	191-30-0	10
7,12-dimethylbenz(a)anthracene	57-97-6	64
indeno(1,2,3-cd)pyrene	193-39-5	0.1
5-methylchrysene	3697-24-3	1.0
3-methylcholanthrene	56-49-5	5.7
5-nitroacenaphthene	602-87-9	0.03
1-nitropyrene	5522-43-0	0.1
4-nitropyrene	57835-92-4	0.1
1,6-dinitropyrene	42397-64-8	10
1,8-dinitropyrene	42397-65-9	1.0
6-nitrocrysene	7496-02-8	10
2-nitrofluorene	607-57-8	0.01

9 CREL (chronic Reference Exposure Level) and CP (Cancer Potency) Weighting Factors: These factors are to be used for purposes of calculating toxicity weighted emissions. Factors were developed assuming multi-pathway exposure where applicable, and continuously operating sources for residential receptor exposure.

10 Health Effects Values: All reference exposure levels (RELs) and cancer potency factors (CPFs) are the health effects values for the California Air Toxics Hot Spots Program that have been approved by the Cal/EPA Office of Environmental Health Hazard Assessment (OEHHA) as of ~~March 31, 2016~~ June 30, 2021.

(Adopted 6/15/05; Amended 1/6/10, 12/7/16)

BAAQMD

Air Toxics ~~NSR~~ Control Programs

Health Risk Assessment Guidelines

~~December 2016~~December 2021

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
375 BEALE STREET, SUITE 600
SAN FRANCISCO, CA 94105

BAAQMD Air Toxics ~~NSR~~ Control Programs

Health Risk Assessment Guidelines

1. INTRODUCTION

This document describes the Bay Area Air Quality Management District's guidelines for conducting health risk assessments. Any health risk assessment (HRA) that is required pursuant to Regulation 2 Permits, Rule 1 General Requirements or Rule 5 New Source Review of Toxic Air Contaminants or that is required to assess the applicability of Regulation 11, Rule 18 Reduction of Risk from Air Toxic Emissions at Existing Facilities shall be conducted in accordance with these Air District HRA Guidelines.

In accordance with Regulation 2-5-402, the Air District HRA Guidelines generally conform to the Health Risk Assessment Guidelines adopted by Cal/EPA's Office of Environmental Health Hazard Assessment (OEHHA) for use in the Air Toxics Hot Spots Program ~~for all types of facilities except gasoline dispensing facilities (GDFs)~~. In addition, these guidelines are in accordance with State "Risk Management Guidance for Stationary Sources of Air Toxics" developed by the California Air Resources Board (ARB) and the California Air Pollution Control Officers Association (CAPCOA).

~~The Air District is delaying implementation of OEHHA's 2015 HRA Guidelines for gasoline dispensing facilities while further research is conducted on the potential impacts of OEHHA's 2015 HRA Guidelines on gasoline dispensing facilities. The Air District HRA Guidelines for gasoline dispensing facilities are described in Section 2.2.~~

The Air District will periodically update these Air District HRA Guidelines to clarify procedures or incorporate other revisions to regulatory guidelines.

2. PROCEDURES

The procedures described below constitute the Regulation 2-5-603 Health Risk Assessment Procedures.

2.1 Procedures for All Facilities ~~Other Than Gasoline Dispensing Facilities~~

All HRAs for stationary source facilities ~~other than gasoline dispensing facilities~~ shall be completed by following the procedures described in the OEHHA Health Risk Assessment Guidelines for the Air Toxics Hot Spots Program adopted by OEHHA on March 6, 2015 and using the recommended breathing rates described in the ARB/CAPCOA Risk Management Guidance for Stationary Sources of Air Toxics adopted by ARB on July 23, 2015.

The OEHHA HRA Guidelines contain several sections which identify (a) the overall methodology, (b) the exposure assessment assumptions and procedures, and (c) the health effects data (cancer potency factors and reference exposure levels).

A summary of OEHHA's HRA Guidelines and an index of the relevant documents are located at:

~~http://www.oehha.ca.gov/air/hot_spots/index.html~~https://oehha.ca.gov/air/air-toxics-hot-spots

OEHHA's risk assessment methodology (February 2015) is located at:

~~http://www.oehha.ca.gov/air/risk_assess/index.html~~https://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0

The exposure assessment and stochastic technical support document (August 2012) is located at:

~~http://www.oehha.ca.gov/air/exposure_assess/index.html~~https://oehha.ca.gov/air/crnr/notice-adoption-technical-support-document-exposure-assessment-and-stochastic-analysis-aug

The Technical Support Document for Cancer Potency Factors: Methodologies for Derivation, Listing of Available Values, and Adjustments to Allow for Early Life Stage Exposures (May 2009) is located at:

~~http://www.oehha.ca.gov/air/hot_spots/tsd052909.html~~https://oehha.ca.gov/air/crnr/technical-support-document-cancer-potency-factors-2009

The Technical Support Document for the Derivation of Noncancer Reference Exposure Levels (June 2008) is located at:

~~http://www.oehha.ca.gov/air/hot_spots/rels_dec2008.html~~https://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-technical-support-document-derivation

The ARB/CAPCOA Risk Management Guidance for Stationary Sources of Air Toxics (July 23, 2015) provides guidance on managing potential health risks from sources subject to California air toxics programs and updates the Risk Management Policy for Inhalation Risk Assessments. It is located at:

http://www.arb.ca.gov/toxics/rma/rmaguideline.htm

Sections 2.1.1 through 2.1.6 below clarify and highlight some of the exposure assessment procedures including exposure assumptions (e.g., breathing rate and exposure duration), health effect values, and calculation procedures to be used for conducting Air District HRAs.

2.1.1 Clarifications of Exposure Assessment Procedures

This section clarifies and highlights some of the exposure assessment procedures that should be followed when conducting an Air District HRA.

2.1.1.1 Breathing Rate

On July 23, 2015, ARB adopted "Risk Management Guidance for Stationary Sources of Air Toxics", which includes an updated Risk Management Policy for Inhalation Risk Assessments. For the HRA methodology used in the Air Toxics NSR Program, the Air District has conformed with these State guidelines and adopted the exposure assessment recommendations made by ARB and CAPCOA. The policy considers the new science while providing a reasonable estimate of potential cancer risk for use in risk assessments for risk management decisions. This policy recommends using a combination of the 95th percentile and 80th percentile daily breathing rates as the minimum exposure inputs for risk management decisions. Specifically, the policy recommends using the 95th percentile rate for age groups less than 2 years old and the 80th percentile rate for age groups that are greater than or equal to 2 years old.

To assess potential inhalation exposure to offsite workers, OEHHA recommends assuming a breathing rate of 230 L/kg-8 hours. This value represents the 95th percentile 8-hour breathing rate based on moderate activity of 16-70 years-old age range.

To assess exposure to children at schools and daycare facilities, OEHHA recommends using the 95th percentile moderate intensity breathing rates from Table 5.8 of OEHHA's HRA Guidelines. As a default, the Air District recommends using the breathing rate for 2<16 years (520 L/kg-8 hours) for children at schools. For a more refined analysis, the Air District will allow the use of breathing rates for other age ranges that are tailored to the ages of the children in the specific school under evaluation.

2.1.1.2 Exposure Frequency

Based on OEHHA recommendations, the Air District will estimate cancer risk to residential receptors assuming exposure occurs 24 hours per day for 350 days per year. For a worker receptor, exposure is assumed to occur 250 days per year. However, for some professions (e.g., teachers) a different schedule may be more appropriate. For children at school sites, exposure is assumed to occur 180 days (or 36 weeks) per year.

2.1.1.3 Exposure Duration

Based on OEHHA recommendations, the Air District will estimate cancer risk to residential receptors based on a 30-year exposure duration. Although 9-year and 70-year exposure scenarios may be presented for information purposes, risk management decisions will be made based on 30-year exposure duration for residential receptors.

For worker receptors, risk management decisions will be made based on OEHHA's recommended exposure duration of 25 years.

As a default, cancer risk estimates for children at school sites will be calculated based on a 9-year exposure duration, such as for a K-8 school. However, this exposure duration may be refined based on the specific school under evaluation (i.e. 6 years for a K-5 elementary school, 4 years for a 9-12 high school, or 3 years for a 6-8 middle school). For any analyses using an alternative to the 9-year default duration for school children, the breathing rate assumptions must also be adjusted in accordance with the ages of the children in the school.

2.1.2 Health Effects Values

Chemical-specific health effects values have been consolidated and are presented in Regulation 2, Rule 5, Table 2-5-1 Toxic Air Contaminant Trigger Levels for use in conducting HRAs. The Air District has added the 8-hour reference exposure levels (RELs) adopted by OEHHA to this table. The Air District will periodically update this table to include OEHHA's revisions to health effects values.

2.1.3 Cancer Risk Calculations

In accordance with OEHHA's 2015 HRA Guidelines, cancer risk estimates should incorporate age sensitivity factors (ASFs) and fraction of time at home (FAH) adjustment factors. Air District HRAs should follow OEHHA's recommended cancer risk calculation procedures as presented in Section 8.2 of OEHHA's 2015 HRA Guidelines.

For residential exposures, the cancer risk calculations should include the most sensitive age groups: from third trimester of pregnancy to 30 years of age for a 30-year exposure duration. For worker receptors, assume working begins at age 16 years.

2.1.3.1 Fraction of Time at Home (FAH)

For the initial cancer risk estimate, assume the fraction of time at home factors are equal to one (FAH = 1.0) for the following age groups: 3rd trimester to < 2 years and 2 to < 16 years. Use this initial analysis to assess if there are any schools within cancer risk isopleths of one in a million or greater. If there are no schools within one in a million or greater cancer risk isopleths, the cancer risk analysis may be refined by using the appropriate age-specific FAH factors as identified in Table 8.4 of the 2015 OEHHA Guidelines:

- FAH = 0.85 for age group: 3rd trimester to < 2 years;
- FAH = 0.72 for age group: 2 to < 16 years;
- FAH = 0.73 for age group: 16 to 70 years.

2.1.3.2 Short-Term Projects

In the 2015 HRA Guidelines, OEHHA recommends using actual project duration for short-term projects~~,~~ but cautions that the risk manager should consider a lower cancer risk threshold for very short-term projects, because a higher exposure over a short period of time may pose a greater risk than the same total exposure spread over a much longer period of time. To ensure that short-term projects do not result in unanticipated higher cancer impacts due to short-duration high-exposure rates, the Air District recommends that the cancer risk be evaluated assuming that the average daily dose for short-term exposure lasts a minimum of three years for projects lasting three years or less. For residential exposures, the cancer risk calculations should include the most sensitive age groups (beginning with the third trimester of pregnancy) and should use the 95th percentile breathing rates. The Air District recommends following OEHHA guidelines for other aspects of short-term projects. In summary, the Air District recommends:

- use of actual emission rates over a minimum 3-year duration for cancer risk assessments involving projects lasting 3 years or less, and
- use of actual project duration for cancer risk assessments on projects lasting longer than 3 years.

2.1.4 Noncancer Health Impacts

In accordance with OEHHA's 2015 HRA Guidelines, noncancer health impacts should be calculated using the hazard index approach. Air District HRAs should follow OEHHA's recommended calculation procedures for noncancer health impacts, as presented in Section 8.3 of OEHHA's 2015 HRA Guidelines.

Regarding Section 8.3.5 of OEHHA's 2015 HRA Guidelines, the Air District does not require inclusion of the contribution of background criteria pollutants to respiratory health effects for Air District HRAs.

2.1.5 Spatial Averaging

Typically, HRA results for an individual receptor have been based on air dispersion modeling results at a single point or location. In the 2015 OEHHA Guidelines (Section 4.7.3), OEHHA provides a refinement option that takes into account that people move around within their property or workplace and do not normally remain at a single fixed point for the entire exposure duration. This spatial averaging refinement may be used for any chronic analysis in an Air District HRA. Spatial averaging is not appropriate for an acute analysis.

After the points of interest have been identified by the air dispersion modeling analysis, the ground level air concentration for each maximum impact point may be refined by using the arithmetic mean of the receptor concentrations identified within a spatial average grid instead of the single maximum impact point concentration. The modeler shall generally center the spatial average grid around the maximum impact point, but the modeler shall also consider facility boundaries, possible receptor locations, and predominant wind direction. This grid shall be of an appropriate shape, shall be no larger than 400 square meters, with a grid resolution spacing no greater than ~~and shall have a receptor spacing within the grid of no less than~~ 5 meters. Grid shape, size, and location are subject to Air District approval.

2.1.6 Stochastic Risk Assessment

For a stochastic, multipathway risk assessment, the potential cancer risk should be reported for the full distribution of exposure from all exposure pathways included in the risk assessment. For risk management decisions, the potential cancer risk from a stochastic, multipathway risk assessment should be based on the 95th percentile cancer risk.

~~2.2 Procedures for Gasoline Dispensing Facilities~~

~~Any HRA for a gasoline dispensing facility shall be completed by following the procedures described in the OEHHA Health Risk Assessment Guidelines for the Air Toxics Hot Spots Program that were adopted by OEHHA on October 3, 2003 and any State risk assessment and risk management policies and guidelines in effect as of June 1, 2009.~~

~~The 2003 OEHHA Health Risk Assessment Guidelines contain several sections which identify (a) the overall methodology, (b) the exposure assessment assumptions and procedures, and (c) the health effects data (cancer potency factors, chronic reference exposure levels, and acute reference exposure levels).~~

~~A summary of OEHHA's 2003 Health Risk Assessment Guidelines and an index of the relevant documents are located at:~~

http://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk

OEHHA's 2003 risk assessment methodology is located at:

http://oehha.ca.gov/media/downloads/crnr/hraguidefinal.pdf

The exposure assessment and stochastic technical support document (Part IV of OEHHA's Risk Assessment Guidelines) is located at:

http://oehha.ca.gov/media/downloads/crnr/stoch4f.pdf

The Technical Support Document for Cancer Potency Factors: Methodologies for Derivation, Listing of Available Values, and Adjustments to Allow for Early Life Stage Exposures (June 2009) is located at:

http://oehha.ca.gov/media/downloads/crnr/tsdcancerpotency.pdf

The Technical Support Document for the Derivation of Noncancer Reference Exposure Levels (June 2008) is located at:

http://oehha.ca.gov/media/downloads/crnr/noncancertsdfinal.pdf

Sections 2.2.1 through 2.2.4 below clarify and highlight some of the exposure assessment procedures including exposure assumptions (e.g., breathing rate and exposure duration) and health effect values to be used for conducting HRAs for gasoline dispensing facilities.

2.2.1 Clarifications of Exposure Assessment Procedures

This section clarifies and highlights some of the exposure assessment procedures that should be followed when conducting an HRA for a gasoline dispensing facility.

2.2.1.1 Breathing Rate

On October 9, 2003, a statewide interim Risk Management Policy for inhalation-based residential cancer risk was adopted by the California Air Resources Board (ARB) and Cal/EPA's OEHHA (http://www.arb.ca.gov/toxics/rmpolicy.pdf). For the HRA methodology used in the Air Toxics NSR Program for gasoline dispensing facilities, the Air District has conformed with these State guidelines and adopted the interim exposure assessment recommendations made by ARB and OEHHA. The Air District will continue to use this interim recommendation for gasoline dispensing facilities even though newer guidance has been adopted by ARB and OEHHA. The interim policy recommended, where a single cancer risk value for a residential receptor is needed or prudent for risk management decision-making, the potential cancer risk estimate for the inhalation exposure pathway be based on the breathing rate representing the 80th percentile value of the breathing rate range of values (302 L/kg-day).

To assess potential inhalation exposure to offsite workers, OEHHA recommended assuming a breathing rate of 149 L/kg-day. This value corresponds to a 70 kg worker breathing 1.3 m^3/hour (breathing rate recommended by USEPA as an hourly average for outdoor workers) for an eight-hour day.

For children, OEHHA recommended assuming a breathing rate of 581 L/kg-day to assess potential risk via the inhalation exposure pathway. This value represents the upper 95% percentile of daily breathing rates for children.

2.2.1.2 Exposure Time and Frequency

Based on OEHHA's 2003 HRA Guidelines, the Air District will estimate cancer risk to residential receptors for gasoline dispensing facilities assuming exposure occurs 24 hours per day for 350 days per year. For a worker receptor, exposure is assumed to occur 8 hours per day for 245 days per year. However, for some professions (e.g., teachers) a different schedule may be more appropriate. For children at school sites, exposure is assumed to occur 10 hours per day for 180 days (or 36 weeks) per year.

2.2.1.3 Exposure Duration

Based on OEHHA's 2003 HRA Guidelines, the Air District will estimate cancer risk to residential receptors for gasoline dispensing facilities based on a 70-year lifetime exposure. Although 9-year and 30-year exposure scenarios may be presented for information purposes, risk management decisions will be made based on 70-year exposure duration for residential receptors. For worker receptors for gasoline dispensing facilities, risk management decisions will be made based on OEHHA's 2003 recommended exposure duration of 40 years. Cancer risk estimates for children at school sites will be calculated based on a 9-year exposure duration.

2.2.2 Health Effects Values

Chemical-specific health effects values have been consolidated and are presented in Regulation 2, Rule 5, Table 2-5-1 Toxic Air Contaminant Trigger Levels for use in conducting HRAs. Toxicity criteria summarized in Table 2-5-1 represent health effects values that were adopted by OEHHA/ARB as of March 31, 2016.

2.2.3 Cancer Risk Calculations

In accordance with OEHHA's revised health risk assessment guidelines (specifically, OEHHA's Technical Support Document (TSD) for Cancer Potency Factors, adopted June 1, 2009), calculation of cancer risk estimates for gasoline dispensing facilities should incorporate age sensitivity factors (ASFs).

The revised TSD for Cancer Potency Factors provides updated calculation procedures used to consider the increased susceptibility of infants and children to carcinogens, as compared to adults. The calculation procedure below includes the use of age-specific weighting factors in calculating cancer risks from exposures of infants, children and

adolescents, to reflect their anticipated special sensitivity to carcinogens. OEHHA recommended weighting cancer risk by a factor of 10 for exposures that occur from the third trimester of pregnancy to 2 years of age, and by a factor of 3 for exposures that occur from 2 years through 15 years of age. These weighting factors should be applied to all carcinogens emitted from gasoline dispensing facilities. For estimating cancer risk for residential receptors, the incorporation of the ASFs results in a cancer risk adjustment factor of 1.7. For estimating cancer risk for student receptors, an ASF of 3 should be applied. For estimating cancer risk for worker receptors, an ASF of 1 should be applied.

The cancer risk adjustment factors for gasoline dispensing facilities were developed based on the following:

Receptor	**Age Groups**	**ASF**	**Duration**	**Cancer Risk Adjustment Factor**
Resident	Third trimester to age 2 years	10	2.25/70	0.32
	Age 2 to age 16 years	3	14/70	0.6
	Age 16 to 70 years	1	54/70	0.77
				1.7
Student	Age 2 to age 16 years	3	9 years	***3***
Worker	Age 16 to 70 years	1	40 years	***1***

Since the exposure duration for a student receptor (9 years), and worker receptor (40 years), falls within a single age group, the student cancer risk adjustment factor is 3 and the worker cancer risk adjustment factor is 1.

Cancer risk adjustment factors should be used to calculate all cancer risk estimates for gasoline dispensing facilities.

Below is the equation for calculating cancer risk estimates for gasoline dispensing facilities:

Cancer Risk = Dose * Cancer Risk Adjustment Factor * Cancer Potency Factor

2.2.4 Noncancer Health Impacts

In accordance with OEHHA's 2003 HRA Guidelines, noncancer health impacts should be calculated using the hazard index approach. Air District HRAs should follow OEHHA's recommended calculation procedures for noncancer health impacts, as presented in Section 8.3 of OEHHA's 2003 HRA Guidelines, using the RELs identified in Table 2-5-1.

~~Regarding Section 8.3.A of OEHHA's 2003 HRA Guidelines, the Air District does not require inclusion of the contribution of background criteria pollutants to respiratory health effects for Air District HRAs.~~

3. Assessment of Acrolein Emissions

CARB has issued advisories regarding acrolein emissions data determined using CARB Method 430 (M430): http://www.arb.ca.gov/ei/acrolein.htm. The CARB advisories state that acrolein emissions data determined using CARB Method 430 are suspect and should be flagged as non-quantitative. Although acrolein emission factor data is available for several types of stationary combustion sources, this data was developed based on source tests that utilized CARB Method 430 or equally inaccurate test methods; therefore, the validity of this acrolein emission factor data is suspect. In addition, the tools the Air District needs to implement and enforce acrolein emission limits are not available due to the lack of an ARB approved acrolein test method for stationary sources.

In consideration of this information, the Air District has determined that acrolein emissions may be included in Air District HRAs for screening or informational purposes, but the Air District will exclude acrolein emissions from the final HRA results on which risk management decisions will be based.

References

~~*1 "Air Toxics "Hot Spots" Program Risk Assessment Guidelines, The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments," OEHHA, August, 2003*~~

~~*2 "Air Toxics "Hot Spots" Program Risk Assessment Guidelines, Part IV. Technical Support Document for Exposure Assessment and Stochastic Analysis", OEHHA, September, 2000*~~

~~3~~1 *"Air Toxics Hot Spots Program Risk Assessment Guideline; Technical Support Document for Cancer Potency Factors: Methodologies for derivation, listing of available values, and adjustments to allow for early life stage exposures", OEHHA, May, 2009*

~~4~~2 *"Air Toxics Hot Spots Program Risk Assessment Guidelines; Technical Support Document for the Derivation of Noncancer Reference Exposure Levels", OEHHA, June, 2008*

~~5~~3 *"Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values", California Air Resources Board, updated ~~March 28, 2016~~October 2, 2020*

~~6~~4 *"Air Toxics Hot Spots Program Risk Assessment Guidelines; Guidance Manual for Preparation of Health Risk Assessments", OEHHA, February, 2015*

~~7~~5 *"Air Toxics Hot Spots Program Risk Assessment Guidelines; Technical Support Document for Exposure Assessment and Stochastic Analysis", OEHHA, August, 2012*

~~8~~6 *"Risk Management Guidance for Stationary Sources of Air Toxics", Air Resources Board and California Air Pollution Control Officers Association, July 23, 2015*

ATTACHMENT B

CEQA NEGATIVE DECLARATION

CALIFORNIA ENVIRONMENTAL QUALITY ACT
NEGATIVE DECLARATION

Proposed Amendments to
Regulation 2, Rule 1 (Permits – General Requirements) and
Regulation 2, Rule 5 (Permits – New Source Review of Toxic Air Contaminants)

Pursuant to the California Environmental Quality Act (CEQA), Public Resources Code §§ 21000 et seq, and Sections 15071 and 15074 of the CEQA Guidelines, the Board of Directors of the Bay Area Air Quality Management District (Air District) hereby adopts this Negative Declaration finding that the adoption of Proposed Amendments to Regulation 2, Rule 1 (Permits – General Requirements) and Regulation 2, Rule 5 (Permits – New Source Review of Toxic Air Contaminants) will not have a significant effect on the environment.

Project Name: Proposed Amendments to Regulation 2, Rule 1 (Permits – General Requirements) and Proposed Amendments to Regulation 2, Rule 5 (Permits – New Source Review of Toxic Air Contaminants).

Project Description: The Air District has regulatory authority over stationary sources of air pollution in the San Francisco Bay Area. The proposed amendments to Rules 2-1 and 2-5 address multiple components of the Air District's stationary source permitting program to make it more transparent and health protective.

The proposed amendments to Rule 2-1 add a definition for the term "Overburdened Community," expand the existing public notice requirement to require notification of nearby addresses if a project in an Overburdened Community will require a health risk assessment and extend the Air District's permit application times.

The proposed amendments to Rule 2-5 fall into three major categories: (1) Making the cancer risk limit more stringent in Overburdened Communities; (2) Updating the Air District's Health Risk Assessment Guidelines to include the most recent health risk procedures for gas station projects; and (3) Updating Table 2-5-1, the Toxic Air Contaminant Trigger Levels Table to reflect new health effects values from the California Office of Environmental Health Hazard Assessment and synchronizing the acute trigger levels with those used to implement Air District Regulation 11, Rule 18, which regulates facility-wide toxic air contaminant emissions from existing facilities.

Project Location: The nine-county jurisdiction of the Bay Area Air Quality Management District, which includes all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties, and portions of southwestern Solano County and southern Sonoma County. A map of the project location is provided in Figure 2-1 on page 2-16 of the Initial Study attached hereto.

Project Proponent and Lead Agency: The Bay Area Air Quality Management District.

Finding of No Significant Impact: The Board of Directors of the Bay Area Air Quality Management District hereby finds, using its own independent judgment and analysis, that based on the whole record (including the Initial Study and public comments received) there is no substantial evidence that the proposed amendments to Regulation 2, Rule 1 (Permits – General Requirements) and Regulation 2, Rule 5 (Permits – New Source Review of Toxic Air Contaminants) will have a significant effect on the environment.

Initial Study: A copy of the Initial Study documenting the reasons supporting the finding of no significant impact is attached hereto.

Mitigation Measures: No mitigation measures need to be included in the project to avoid potentially significant effects, as the project will not have any potentially significant effects.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

FINAL STAFF REPORT

Proposed Amendments to Regulation 2, Rule 1 (Permits – General Requirements)

Proposed Amendments to Regulation 2, Rule 5 (Permits – New Source Review of Toxic Air Contaminants)

December 2021

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I. EXECUTIVE SUMMARY

The Bay Area Air Quality Management District (Air District) staff is proposing amendments to two rules within the Permitting Regulation (Regulation 2: Permits) to make those rules more health protective, with a particular emphasis on improving air quality at the local level. Regulation 2 includes the Air District's rules that govern New Source Review, which is a comprehensive permitting program that applies to entities within the San Francisco Bay Area when they install new equipment or make modifications to existing equipment that will increase air pollution emissions. When someone wants to install a new source of air pollution or modify an existing source that will increase emissions above the Air District's applicability thresholds, they must obtain a permit from the Air District. To obtain a permit from the Air District, the permit applicant must control emissions or exposure to people nearby if emissions or exposures exceed established thresholds. The Air District cannot issue permits for projects that will exceed health risk limits, or that do not comply with regulatory standards.

This current effort to amend the Air District's Permitting Regulation is in response to the immediate need to improve ambient air quality in areas that are disproportionately impacted by environmental and health burdens. The Air District is already implementing a variety of programs to correct well-documented disparities in air quality and community health vulnerabilities. These changes to the permitting process—which are collectively referred to as the Proposed Amendments—would complement ongoing regulatory and nonregulatory efforts that the Air District is currently planning or implementing. Ambient air quality varies from place to place in the Bay Area for many reasons, such as high concentrations of stationary sources of air pollution, proximity to high traffic roadways, or natural topography, to name a few. Other environmental and social factors can exacerbate community sensitivity to air pollution. Regulatory measures are an essential tool to reduce emissions and exposure in overburdened communities. The proposed regulatory updates to the permitting rules improve the Air District's tools for addressing environmental and public health disparities.

The Proposed Amendments fall into three broad categories. First, they will make health risk limits for new and modified projects more stringent if the project will be located in an Overburdened Community—a change that recognizes the fact that air quality, health burdens, and exposures to other environmental contaminants are concentrated in certain parts of the Bay Area—particularly in communities with the highest concentrations of Black and Brown residents. They will also require enhanced notification of nearby residents and businesses of proposed projects in Overburdened Communities to better inform the public of projects that are proposed in their communities. The Proposed Amendments would incorporate the findings of the California Communities Environmental Health Screening Tool (CalEnviroScreen) to identify Overburdened Communities. Second, the Proposed Amendments will update health risk evaluation procedures so that the Air District is using the most accurate and up to date information when it assesses health risk from proposed projects. Third, the Proposed Amendments will update and clarify internal processing procedures to ensure that the first two changes can be implemented effectively.

This regulatory amendment effort began in 2018, when Air District leadership committed to thoroughly reviewing the ways in which the permitting process could be updated to protect communities that face disproportionate environmental or health impacts. Community and public health advocacy organizations had been telling the Air District to revise its permitting program in the wake of several high-profile projects for which the Air District either issued or evaluated issuing air permits. Some advocates urged the Air District to incorporate cumulative impacts considerations into its permitting program, while others urged it to stop issuing air permits in

certain parts of the Bay Area altogether. Advocates wanted the Air District to consider community members' concerns about new sources of air pollution in their communities when it evaluates permit applications. Community advocates also demanded the Air District make the permit evaluation process more transparent. Finally, advocates requested that the Air District include them in the rule amendment process to ensure that the proposed changes are more health protective and responsive to their concerns.

As discussed in Section X of this Final Staff Report, staff met with community advocates in various meeting settings to better understand their specific concerns about the Air District's permitting regulations. In these meetings, staff presented information on the Air District's permitting process and listened to advocates' and community members concerns about nearby facilities, as well as their recommendations on how to make the Permitting Regulation more health protective.

Based on evaluation of the permitting process and feedback received during meetings with community advocates and organizations, members of the public, and public feedback received from two public workshops that were held in May and August of 2021, staff proposes changes to the following two permitting rules: (1) Regulation 2: Permits, Rule 1: General Requirements (Rule 2-1); and (2) Regulation 2: Permits, Rule 5: New Source Review of Toxic Air Contaminants (Rule 2-5). The Proposed Amendments are described below.

Rule 2-1: General Requirements

The proposed changes to Rule 2-1 include a new definition to identify areas that experience relatively high levels of cumulative impacts (areas that experience relatively high levels of environmental and health burdens). As mentioned above, areas that experience high levels of cumulative impacts are defined as Overburdened Communities in the proposed changes to Rule 2-1. Overburdened Communities are census tracts that score at or above the 70th percentile in CalEnviroScreen, Version 4.0, as well as areas that are within 1,000 feet of the boundaries of those census tracts. There are two additional significant proposed changes to Rule 2-1. First, the proposed changes expand the public notice requirement to require notification of nearby addresses if a project will require a health risk assessment because of toxic air contaminant (TAC) emissions and the project will be located within an Overburdened Community. Second, the proposed changes extend the Air District's permit application action times. The completeness review period will be increased from 15 working days (21 calendar days) to 30 calendar days. The final action period (from date of completeness to the date of the Air Pollution Control Officer's decision) is currently 35 working days (49 calendar days) for all permit applications, except those subject to California Environmental Quality Act (CEQA) review, major facility review, or public notice requirements. The Proposed Amendments replace this time period with two possible final action periods: 90 days, which will apply to most applications, and 180 days for more complex applications, unless the application is subject to CEQA review. Applications subject to CEQA review will continue to require approval of CEQA certification documents before the Air District may make a decision on the application. The Proposed Amendments will also increase the time period allowed for responding to public comments on applications from 30 days to 60 days.

Rule 2-5: New Source Review of Toxic Air Contaminants

There are three major categories of proposed changes to the Air District's Air Toxics New Source Review Rule, Rule 2-5. First, the cancer risk limit in Rule 2-5 will be more stringent in Overburdened Communities, as defined in the proposed changes to Rule 2-1. In Overburdened Communities, the risk limit will be reduced from ten in one million to six in one million. Second, proposed revisions to the Air District's Health Risk Assessment Guidelines incorporate updates to the health risk assessment procedures for gasoline dispensing facilities, to be consistent with existing procedures used to evaluate health risk from other sources of toxic air contaminants.

Third, the proposed changes update Table 2-5-1, the Toxic Air Contaminant Trigger Levels table, by adding and revising trigger levels based on new and revised health effects values developed and approved by the California Office of Environmental Health Hazard Assessment (OEHHA). In addition, proposed acute trigger levels are updated based on an acute target hazard index of 0.20 to make them consistent with the acute hazard indices used to implement the Air District's Rule 11-18. Previous acute trigger levels were based on a target hazard index of 1.0. In addition to the proposed changes discussed above, Air District staff is proposing several changes to Rule 2-5 that are intended to prevent circumvention of Rule 2-5's health risk requirements and to enable the Air District to more effectively manage staff resources.

An analysis of the potential socioeconomic impacts found that there probably would not have been any significant economic impacts on the Bay Area region overall had the Proposed Amendments been implemented during the four-year lookback period discussed in Section IV of this Final Staff Report. However, the analysis showed that several industry and small business types might have had significant impacts if they installed the most expensive emissions or exposure reduction controls to comply with the more stringent limits. As discussed in Section VII of this Final Staff Report, the costs and economic impacts staff analyzed are not costs associated with the compliance with a retrofit control requirement but are instead the potential cost of installing new equipment that is not already in place or modifying existing equipment. From this perspective, a substantial portion of the costs due to the Proposed Amendments could be considered optional where the project applicant may have other means of accomplishing its intended goal. The socioeconomic impacts analysis is included in Appendix E to this Final Staff Report. An analysis of the potential environmental impacts of the Proposed Amendments concluded that there is no substantial evidence suggesting that the Proposed Amendments will have any significant adverse environmental impacts. Accordingly, Air District staff prepared a proposed Negative Declaration under CEQA for consideration by the Board of Directors, which is included in Appendix F to this Final Staff Report.

As described in Section VII of this Final Staff Report, the Proposed Amendments will require additional staff resources: eight full-time equivalents (FTEs) for the Air District's Engineering Division, three FTEs for the Meteorology and Measurement Division, and one FTE for the Compliance and Enforcement Division. Staff also proposes that the amendments, if adopted, will not take effect until July 1, 2022, to reflect necessary upcoming proposed amendments to Regulation 3: Fees.

The Air District's Board of Directors will consider adoption of the Proposed Amendments at a public hearing scheduled for December 15, 2021. Air District staff published this Final Staff Report in advance of the public hearing to provide the Board of Directors and interested members of the public with a detailed explanation of what the Proposed Amendments will entail and why it is important for the Air District to adopt them. Air District staff encourages interested members of the public to review this Final Staff Report and to submit any comments they may have. Further information on public comment opportunities is provided in Section X of this Final Staff Report.

II. BACKGROUND

The effort to amend the Air District's Permitting Regulation began with community advocates and concerned members of the public urging the Air District to address air quality impacts from permitting activities in communities overburdened by pollution and health vulnerabilities. This section describes the history of the regulatory amendment effort, the industries and sources that might be affected by the Proposed Amendments, and other applicable regulations.

A. Concerns from Community Stakeholders

At the 2018 Assembly Bill 617 (AB 617) Community Health Protection Program Regional Kick-Off meeting, community advocates and members of the public stated that the Air District needed to make significant changes to its permitting regulation.[1] Meeting participants referenced recent high-profile projects for which the Air District issued permits, stating that the Air District, by issuing permits for the projects, was allowing areas already overburdened by air pollution and the combined effects of cumulative impacts (such as those from land and water pollution, poverty, and economic and social injustices) to be exposed to more pollution. Meeting participants called on the Air District to update its permitting regulation to consider the impacts of sources of air pollution in areas that disproportionately impact minority communities and communities that experience relatively high levels of cumulative impacts. Community advocates called on the Air District to consider cumulative impacts in the permitting process.

In response to the concerns that community advocates expressed during the meeting, Air District staff leadership committed to conducting a thorough evaluation of its permitting processes to assess how to reduce air pollution emissions and exposure in impacted communities. Air District leadership stated that it would collaborate with community advocates and stakeholders to develop solutions to address concerns about air permitting. Further information on the rule development and public participation process is provided in Section X of this Final Staff Report.

B. Industry and Source Description

The Air District is responsible for issuing air quality permits for stationary equipment in the Bay Area and ensuring that resulting air pollutant emissions comply with Air District regulations and permit conditions. Nearly all stationary equipment that emits to the atmosphere requires an Air District permit. There are ten rules within the Permitting Regulation. The individual rules state the permitting requirements for various sources, facility types, and air pollutants. The Proposed Amendments recommend changes to two rules: Rule 2-1, which describes the general requirement of the Air District's permitting process, and Rule 2-5, which states the requirements for projects that will emit toxic air contaminants.

1. Pollutants and Emission Sources

The Proposed Amendments primarily address new and modified sources of toxic air contaminant emissions. The California Health and Safety Code defines a toxic air contaminant as "an air pollutant which may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health."[2] Additionally, toxic air contaminants include substances that are listed as federal hazardous air pollutants (HAPs) under section 7412 of the United States Code.[3] The California Air Resources Board lists over 200 substances as toxic air contaminants.[4] The Air District regulates toxic air contaminant emissions from new and modified sources of air pollution through Rule 2-5, which incorporates the

[1] BAAQMD, 2018. AB 617: Community Health Protection Program Regional Kick-off.
[2] California Health and Safety Code Section 39655.
[3] California Health and Safety Code Section 39657, subd. (b).
[4] California Code of Regulations, Title 17, Sections 93000 and 93001.

requirements of the Air Toxics New Source Review program. The Air Toxics New Source Review program is discussed below in Section II.C of this Final Staff Report.

Toxic air contaminants are emitted by a variety of different sources and in a variety of different operations. They are emitted as combustion byproducts (for example, diesel fuel combustion emits diesel particulate matter), as fugitive emissions (for example, from equipment leaks at gas stations), and through off-gassing of materials. Some toxic air contaminants are also released from natural sources, such as forest fires.[5] In terms of facilities that hold Air District permits, Figure 1 below shows the largest emitters of toxic air contaminants, by standard industrial classification (SIC) category.[6]

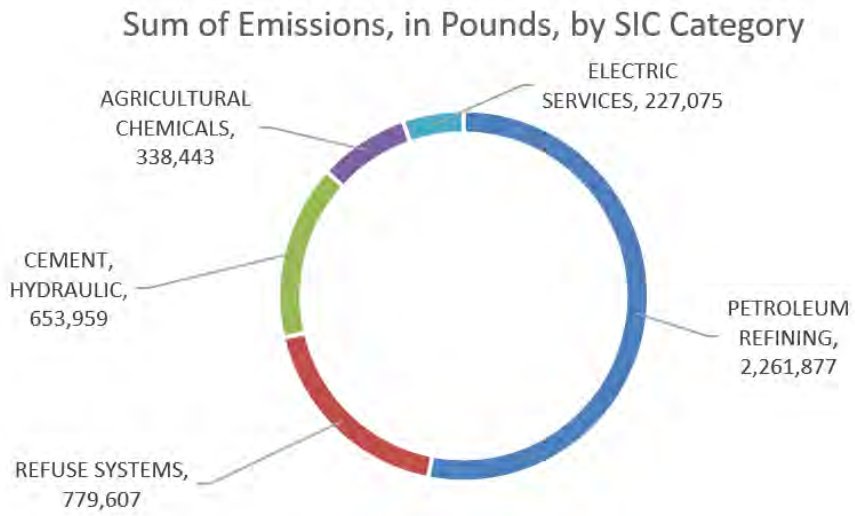

Figure 1 – 2018 Toxic Air Contaminant Emissions, Largest Source Categories, Air District-Permitted Facilities

Previous research by the Air District found that the following toxic air contaminants account for more than 90 percent of all toxicity-weighted toxic air contaminant emissions in the Bay Area:[7]

[5] BAAQMD, 2019. Air Toxics Data Analysis and Regional Modeling in the San Francisco Bay Area to Support AB617. April. See page 4.
[6] BAAQMD, 2018 Toxic Air Contaminant Inventory.
[7] BAAQMD, 2019. Air Toxics Data Analysis and Regional Modeling in the San Francisco Bay Area to Support AB617. April. See page 2.

- Acetaldehyde
- Acrolein
- Benzene
- 1,3-Butadiene
- Diesel particulate matter
- Formaldehyde

Section III of this Final Staff Report provides additional information on toxic air contaminants and potential health effects associated with exposure to them.

C. Regulatory History

1. Air District Rules/Regulations

The Air District's permit requirements are contained in Regulation 2: Permits. As mentioned above, Regulation 2 consists of ten rules that govern various aspects of the Air District's permitting programs, of which two are the subject of the Proposed Amendments:

- Regulation 2, Rule 1 (Rule 2-1), which establishes the general requirements that govern all of the permitting provisions in Regulation 2; and
- Regulation 2, Rule 5 (Rule 2-5), which establishes the requirements for new and modified sources subject to Air Toxics New Source Review.

This section provides a background summary of the permitting programs that would be affected by the Proposed Amendments.

a) General Permitting Requirements

The first rule within the Air District's Permitting Regulation, Rule 2-1, states the general requirements that apply to all the permitting provisions within the regulation. Rule 2-1 describes equipment and operations that are exempted from some or all permitting requirements provided they do not trigger permitting requirements under the backstop provisions that are included in sections 2-1-316 through 2-1-319. For sources that require Air District permits, permit applicants must obtain authorization from the Air District to construct the equipment as well as the authorization to operate the equipment. Authorization to construct equipment is called "authority to construct," and authorization to operate equipment is called the "permit to operate," and it must be renewed annually.[8] Renewals of permits to operate do not trigger a requirement to re-assess existing pollution controls or health impacts. A renewal also does not require that the applicant reapply for a permit. Rather, the permit holders are required to pay fees and submit any other information required to remain in compliance with existing permit conditions or other Air District rules. Rule 2-1 also states the requirements for compliance with the California Environmental Quality Act (CEQA), distinguishing between different project types and their respective requirements under CEQA.

Rule 2-1 establishes the basis for denials of permit applications, as well as the basis for suspension and revocation of a permit from an existing permit holder. The Air District would deny a permit application that exceeded emissions limitations or did not comply with CEQA requirements. Permit applicants whose applications are denied may appeal the Air District decision to the Air District's Hearing Board, which can reverse or modify permitting determinations

[8] The length of time of an Air District Permit to Operate is stated in Regulation 3: Fees. See section 3-408: Permit to Operate Valid for 12 Months.

it finds are erroneous. The Air District may also suspend issued permits if the permit holder refuses or willfully fails to submit requested information regarding emissions information for the air pollution source for which the permit was issued. Suspensions may also be appealed to the Air District's Hearing Board. Finally, the Air District may request the Hearing Board to hold a hearing to determine whether the Air District should revoke a permit if it is found that the holder of a permit is in violation of permit conditions, or any Air District rules or applicable orders.

b) Air Toxics New Source Review Program

The Air Toxics New Source Review Program was established in 1987 at the direction of the Air District's Board of Directors and was initially implemented based on policies and procedures established by the Air District Air Pollution Control Officer (APCO). In 2005, the Air District updated the Air Toxics New Source Review Program and codified the Air Toxics New Source Review policies and procedures in Rule 2-5; in the Manual of Procedures, Volume II, Part 4: New and Modified Sources of Toxic Air Contaminants; and in the Bay Area Air Quality Management District Health Risk Assessment (HRA) Guidelines. When evaluating heath impacts from new and modified sources, the Air District follows its Health Risk Assessment Guidelines, which generally conform to State Air Toxics Hot Spots Health Risk Assessment guidelines. The California Office of Environmental Health Hazard Assessment (OEHHA) periodically revises the State Health Risk Assessment guidelines and has made some changes since the Air District Health Risk Assessment Guidelines were updated in 2015. The last time Rule 2-5 was amended, at the end of 2016, the Air District updated the rule to include the most current OEHHA health risk assessment procedures for estimating health risk from new and modified sources of toxic air contaminants, which resulted in a 40 percent increase in estimated cancer risk for the same emission levels of most toxic air contaminants. For a dozen toxic air contaminants, the estimated cancer risk increased by up to a factor of five, solely based on the revised health risk assessment calculation methodology.[9]

The goal of the Air Toxics New Source Review Program is to evaluate and mitigate potential increases in public health risks resulting from new and modified sources of toxic air contaminants based on preconstruction permit review. The program is also intended to reduce existing health risks by requiring updated control requirements when older, more highly polluting sources are modified or replaced. Rule 2-5 applies to a wide range of industries and sources of air pollution, although most permit applications at a region-wide level are for diesel engines, with another large share of applications for projects at gas stations. Other projects that emit toxic air contaminants include, but are not limited to, projects at or involving crematories, concrete batch plants, and soil vapor extraction operations.

Rule 2-5 contains health risk-based thresholds at which a new or modified source must employ Best Available Control Technology for Toxics (TBACT) and health risk limits that each project cannot exceed. The rule also describes the procedures to be used for calculating toxic air contaminant emission increases from sources and projects and for evaluating the health impacts that result from these emission increases.

The stringency of the program is affected by both the established methodology and the action levels. Stringency can be increased either by changes in methodology that result in a higher calculated risk or by reductions in the risk action levels. The recommended changes to Rule 2-5 presented in this document include increased stringency through a reduction in risk action level in communities overburdened by higher levels of pollution or health vulnerability, as well as

[9] BAAQMD, 2016. Staff Report, Proposed Amendments to BAAQMD Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants. September.

changes in the methodologies for assessing health risks from gas stations, which will result in higher calculated risks for projects involving gas stations.

c) General Findings of the Advisory Council

In 2019 and 2020, the Air District and the Air District's Advisory Council convened a series of meetings and symposia on particulate matter and its health effects. The Advisory Council prepared a report on its findings and recommendations on ways to address particulate matter pollution and exposure (including diesel particulate matter), which it shared with the Air District Board of Directors during a special joint meeting with the Advisory Council on December 16, 2020. In its *Particulate Matter Reduction Strategy Report*, the Advisory Council concluded that current ambient air quality standards for particulate matter are not adequately health protective and that further particulate matter reductions would realize additional health benefits.[10] Furthermore, the Advisory Council report states that the projected increased particulate matter exposure from wildfire smoke related to climate change justifies greater efforts to reduce controllable sources of particulate matter to reduce overall health risks. The report also states that particulate matter is the most important health risk driver in Bay Area air quality, and that there is no known threshold for harmful health effects from particulate matter in the form of $PM_{2.5}$. The Advisory Council also found that while some species of particulate matter may be more impactful than others, no particulate matter species can be exonerated from being considered dangerous to human health. The Advisory Council recommended that the Air District develop strategies to consider cumulative community particulate matter impacts in permitting processes and modify Air District permitting regulations to address hyper-localized hot-spot and cumulative particulate matter health risks.[11] Air District staff is continuing to evaluate potential changes to the permitting program to address undifferentiated particulate matter emissions and exposure, but the Proposed Amendments will address diesel particulate matter emissions through updates to Rule 2-5.

d) 2017 Clean Air Plan

In 2017, the Air District adopted its current Clean Air Plan: Spare the Air, Cool the Climate (2017 Clean Air Plan or 2017 Plan). The 2017 Plan describes the Air District's approach to reducing emissions of air pollutants. One of the 2017 Clean Air Plan's goals is to "[e]liminate disparities among Bay Area communities in cancer health risk from toxic air contaminants."[12] The 2017 Plan includes Stationary Source Control Measure SS21: "New Source Review of Toxic Air Contaminants," which proposes to update the toxic New Source Review program by incorporating the 2015 Health Risk assessment guideline revisions by OEHHA.[13] In 2016, the Air District Board of Directors adopted revisions to Rule 2-5 to implement SS21 for all types of facilities except gas stations. The Proposed Amendments will update the Air District's Health Risk Assessment Guidelines such that the 2015 OEHHA Health Risk Assessment guideline revisions apply to gas station permitting projects.

2. Federal and State Regulations

The Air District's New Source Review program, which applies to sources of criteria pollutants and sources of toxic air contaminants, is based upon federal and state New Source Review programs.

[10] BAAQMD Advisory Council, 2020. Advisory Council Particulate Matter Reduction Strategy Report. December.
[11] BAAQMD Advisory Council, 2020. Advisory Council Particulate Matter Reduction Strategy Report. December. Page 9.
[12] BAAQMD, 2017. 2017 Clean Air Plan: Spare the Air, Cool the Climate. April. Page 1/2.
[13] BAAQMD, 2017. 2017 Clean Air Plan, Volume 2. April. Page SS-71.

Federal and state New Source Review programs establish requirements for criteria pollutant emissions. Criteria pollutants are regional air pollutants for which health-based regional ambient air quality standards are established. The Air District's New Source Review program operates within the overlay of these state and federal requirements. The Air District has some latitude to adopt a New Source Review Program that is most suited to the specific circumstances facing the San Francisco Bay Area. But it must at a minimum satisfy the state and federal program requirements, and it is subject to review and approval by the California Air Resources Board and the United States Environmental Protection Agency to ensure that it does.

New and modified sources must comply with federal and state regulations for emissions of hazardous air pollutants and toxic air contaminants, respectively. The U.S. Environmental Protection Agency has promulgated regulations to implement Section 112 of the Federal Clean Air Act, which addresses emissions of hazardous air pollutants (also referred to as HAPs). These regulations establish technology- and risk-based standards for sources that emit hazardous air pollutants. Like criteria pollutant New Source Review, the U.S. Environmental Protection Agency can delegate authority to regulate hazardous air pollutant emissions to states and local agencies such as air districts. As discussed in section II.B above, California categorizes hazardous air pollutants as toxic air contaminants, along with other substances that the state identifies as "toxic air contaminants" as it is defined in the California Health and Safety Code. The California Air Resources Board adopts regulations, called Airborne Toxic Control Measures, that are codified in the California Code of Regulations. These Airborne Toxic Control Measures regulate toxic air contaminant emissions from certain types of stationary sources, as described in the California Code of Regulations.

3. Existing Regulations in Other Districts

Other California air districts also oversee programs that regulate emissions and exposure from new and modified sources of air pollution. A comparison of several of the largest air districts in California—South Coast Air Quality Management District, San Diego Air Pollution Control District, and San Joaquin Valley Air Pollution Control District—shows that these three air districts have similar requirements to the Bay Area Air District's permitting program, although some requirements vary by district.

a) South Coast Air Quality Management District

The air toxics New Source Review program in the South Coast Air Quality Management District (South Coast) uses risk thresholds that, if exceeded, will require permit applicants to install pollution abatement controls. If modeled risks exceed risk limits, permit applicants will not be allowed to install or operate the proposed equipment. As in the Bay Area, air toxics permitting requirements are uniform throughout South Coast's jurisdiction; subregional requirements do not exist. Also like the Bay Area's permitting program, South Coast's inclusion of risk thresholds and limits enables the permitting process to take into account local impacts, in terms of risk posed by a proposed project to a nearby resident or worker. South Coast will not issue permits to proposed projects that will exceed cancer risk, acute hazard index, or chronic hazard index limits. The risk limits in South Coast's air toxics New Source Review rule are the same as the current limits in the Bay Area, although they are less stringent than the Proposed Amendments.[14] In addition to the requirements just described, South Coast also includes a cancer burden limit.[15] South Coast defines cancer burden to mean "the estimated increase in the occurrence of cancer cases in a population subject to a [maximum individual cancer risk] of greater than or equal to one in one

[14] See SCAQMD Rule 1401(d)(1)-(3). Compare with BAAQMD proposed amendments to Rule 2-5.
[15] SCAQMD Rule 1401(d)(1)(C).

million resulting from exposure to toxic air contaminants."[16] South Coast's procedures explain how to calculate cancer burden.[17]

b) San Diego Air Pollution Control District

San Diego Air Pollution Control District (San Diego) oversees a similar air toxic permitting process to that of the Bay Area Air District. Permitting rules apply throughout San Diego's permitting jurisdiction; differing subregional standards do not exist. Like South Coast, San Diego includes a cancer burden requirement in its New Source Review rule for sources that emit toxic air contaminants.[18] For the purpose of reviewing new or modified sources, however, San Diego only requires an analysis of cancer burden if the cancer risk to the maximally exposed individual exceeds the limit with best available control technology for toxics applied and the permit applicant can demonstrate, among other things, that the cancer burden falls below the limit.[19] Thus, compliance with the cancer burden limit is only required in exceptional circumstances.

c) San Joaquin Valley Air Pollution Control District

San Joaquin Valley Air Pollution Control District's (San Joaquin) air toxics permitting program differs from the other large air districts mentioned above in that it does not have air toxics permitting requirements stated in its New Source Review rule. Instead, San Joaquin's requirements are stated in a policy document.[20] San Joaquin's risk assessment methodology also differs from that utilized by the Bay Area Air District and other air districts in that it uses different exposure periods to assess health risk, and it in turn uses a different maximum cancer risk limit than what is used in the Bay Area.[21]

III. TECHNICAL REVIEW OF THE PROPOSED AMENDMENTS

The Proposed Amendments complement the Air District's ongoing efforts to reduce emissions and exposure to air pollution in areas that are overburdened by poor air quality, with additional consideration of impacts from other environmental and public health stressors. The Proposed Amendments focus on addressing toxic air contaminant emissions because of their localized impacts, as discussed below. The Air District conducts health risk assessments for projects that exceed established trigger levels in Rule 2-5, which involve modeling the health risks of proposed projects. While toxic air contaminants are not the only types of air pollutants the Air District can regulate to reduce localized impacts, they negatively impact public health and therefore must be controlled. To evaluate localized impacts from projects that require Air District permits, the Proposed Amendments utilize CalEnviroScreen. CalEnviroScreen is a cumulative impacts screening tool that has undergone refinements for over ten years, and it is a tool that members of the public and environmental justice organizations have highlighted in their communications with Air District staff as being the preferred screening method to identify cumulative impacts.

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[16] SCAQMD Rule 1401(c)(3).
[17] SCAQMD, 2017. Risk Assessment Procedures for Rules 1401, 1401.1 and 212. Version 8.1. September.
[18] San Diego Air Pollution Control District, Rule 1200: Toxic Air Contaminants – New Source Review.
[19] San Diego Rule 1200(d)(1)(iii)(B)(9).
[20] See San Joaquin Valley APCD, 2015. APR – 1905: Risk Management Policy for Permitting New and Modified Sources. May. (The policy references Rule 2201, which is San Joaquin's New Source Review rule.)
[21] See San Joaquin Valley APCD, 2015. APR – 1905: Risk Management Policy for Permitting New and Modified Sources. May. See also San Joaquin Valley APCD, 2015. Final Draft Staff Report: Update to District's Risk Management Policy to Address OEHHA's Revised Risk Assessment Guidance Document. March.

A. Differences in Pollution and Health Vulnerability at the Local Level

Due to a variety of factors, air quality in the Bay Area often varies between different locations. As described below, Air District staff focused on reducing disparities in access to clean air for decades and developed programs that are specifically targeted to achieve reductions in air pollution in the Bay Area's communities that are overburdened by poor air quality, the effects of which may be compounded by exposure to other forms of environmental pollution and health vulnerabilities.[22] Efforts by the Air District in conjunction with actions undertaken by other regulatory agencies and industries contributed to an overall decline of the average background cancer risk in the Bay Area, as Figure 2 shows below. Air District modeling and monitoring data show that cancer-risk weighted air toxics trends are declining throughout the Bay Area, and that the most significant driver of air toxics emissions in the region comes from mobile source emissions. Since 1990, the estimated lifetime cancer risk for Bay Area residents over a 70-year lifespan from all toxic air contaminant emissions combined declined from 4,100 chances per million to around 600 chances per million today.[23] Diesel particulate matter still accounts for the majority of toxic air contaminant emissions and toxic risk in the Bay Area and the majority of toxic emissions still result from mobile source emissions.[24]

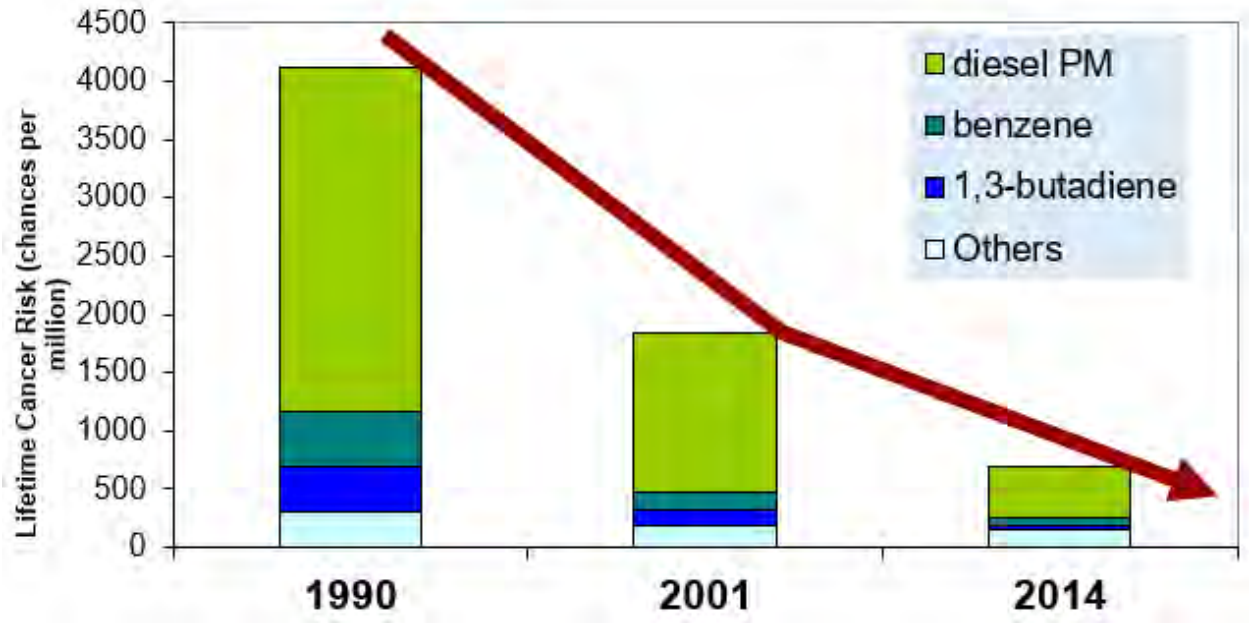

Figure 2 – Bay Area Lifetime Residential Cancer Risk* from TAC Exposure

* Cancer risk is based on average ambient air monitoring data and the population wide risk assessment methodology presented in OEHHA's 2015 HRA Guidelines.

[22] BAAQMD, 2021. Workshop Report: Draft Amendments to Regulation 2: Permits, Rule 1: General Requirements; Draft Amendments to Regulation 2: Permits, Rule 5: New Source Review of Toxic Air Contaminants. July. Page 8.
[23] BAAQMD, 2017. Final 2017 Clean Air Plan: Spare the Air – Cool the Climate. April. See page 2/25.
[24] BAAQMD, 2017. Final 2017 Clean Air Plan: Spare the Air – Cool the Climate. April. See pages 2/22 and 2/25.

Despite the positive overall trend shown in Figure 2 above, information obtained through the Air District's implementation of AB 617 demonstrates the persistent differences in exposure and vulnerability to air pollution, as discussed further below. Even though carcinogenic toxic air contaminant emissions are declining, they still contribute to cancer risk in the region, and in some communities, cancer risk remains higher than elsewhere because of the existence of nearby roadways or stationary sources of air pollution permitted by the Air District. As discussed further in Section IV.B of this Final Staff Report on proposed amendments to Rule 2-5, Sections 2-5-302 and 303, staff proposes a more stringent cancer risk limit of six in one million in Overburdened Communities that is based on the regionwide average background cancer risk in the Bay Area. Staff proposes the six in one million cancer risk limit in Rule 2-5 that will apply to proposed projects in Overburdened Communities because it would be about one percent of the regionwide background cancer risk from toxic air contaminant emissions. The report subsections below describe recent reports by the Air District on the locations of communities that experience relatively high levels of air pollution.

As mentioned above in Section II of this Final Staff Report, the following toxic air contaminants account for more than 90 percent of all toxic air contaminant emissions in the Bay Area:[25]

- Acetaldehyde
- Acrolein
- Benzene
- 1,3-Butadiene
- Diesel particulate matter
- Formaldehyde

Each of the toxic air contaminants listed above, except acrolein, are known to be carcinogenic when inhaled, while acrolein has noncarcinogenic toxic impacts. Also, each of the above listed toxic air contaminants may be emitted during fuel combustion, although they can be emitted through other applications or operations as well. Acetaldehyde is emitted from a variety of uses, including from its use as a solvent, including from some types of fuel combustion from stationary sources. Acrolein is formed from the combustion of fossil fuels as well as from photochemical reactions in the atmosphere. Benzene is present in fugitive emissions from gasoline operations and from fuel combustion. 1,3-Butadiene is another byproduct of fuel combustion, often associated with mobile source emissions. Diesel particulate matter is emitted from sources that burn diesel fuel. It can consist of many different types of toxic air contaminants, including each of those listed above. In the Bay Area, diesel particulate matter is the largest source of cancer risk from ambient air pollution.[26] Finally, formaldehyde is also emitted from fuel combustion operations.

1. AB 617 Screening Tools that Highlight Disparities in Exposure to Air Pollution and Health Vulnerability

The Air District has overseen studies and research that demonstrate differences in air quality and exposure to air pollution at the local level. The Air District's current efforts to address air pollution in communities identified through the AB 617 community emissions reductions processes utilized several tools to screen environmental impacts—including air quality impacts—and community health vulnerabilities that may contribute to increased sensitivity to air pollution. To identify

[25] BAAQMD, 2019. Air Toxics Data Analysis and Regional Modeling in the San Francisco Bay Area to Support AB617. April. See page 2.
[26] BAAQMD, 2020. Diesel Free by '33: Why Replacing Diesel is a Public Health Priority. September.

communities for AB 617 monitoring or emissions reductions projects, staff relied primarily upon the following screening tools:[27]

- Air District Community Air Risk Evaluation (CARE) program;
- CalEnviroScreen;
- Environmental Justice Screening Method; and
- Healthy Places Index

Staff also used life expectancy as a public health indicator and identified the locations of large sources of air pollution, including industrial sources, airports, and seaports. The overlay of the screening tools identified areas that experience high levels of pollution exposure and health vulnerabilities. Also, many communities that experience relatively high levels of pollution also experience relatively high levels of health vulnerability.[28]

The ongoing work by the Air District to implement AB 617 builds upon the Air District's CARE program, which was a collaborative program between Air District staff, community stakeholders, and industrial stakeholders that the Air District initiated in 2004 to identify and track areas with high concentrations of air pollution and populations most vulnerable to air pollution's health impacts. The CARE program supporting data were last updated around 2014, although it continues to provide a framework for assessing community exposure to air pollution and identifying areas that experience air pollution and health vulnerability.

2. Ongoing Air District modeling and monitoring results

Additionally, Air District reports of data gathered through other programs and projects also demonstrate that air quality varies geographically. A 2019 report on regional modeling efforts to support AB 617 implementation simulated 11 air toxic compounds emissions throughout the Bay Area. The simulation showed that six of the modeled air pollutants account for more than 90 percent of toxic air contaminant emissions in the Bay Area.[29] One of the major human health outcomes resulting from air toxics exposure is cancer risk. In the context of air permitting, cancer risk is an estimate of the chance that an individual may develop cancer as a result of exposure to emitted carcinogens at a given receptor location, and considering, where appropriate, age sensitivity factors to account for inherent increased susceptibility to carcinogens during infancy and childhood.[30] To assess cancer risk from all facilities other than gas stations, the Air District follows the procedures described in the Health Risk Assessment Guidelines for the Air Toxics Hot Spots Program adopted by OEHHA on March 6, 2015.[31] The Air District uses the recommended breathing rates described in the Risk Management Guidance for Stationary Sources of Air Toxics adopted by the California Air Resources Board on July 23, 2015.[32]

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[27] BAAQMD, 2018. San Francisco Bay Area Community Health Protection Program: Improving Neighborhood Air Quality. August.
[28] BAAQMD, 2018. San Francisco Bay Area Community Health Protection Program: Improving Neighborhood Air Quality. August.
[29] BAAQMD, 2019. Air Toxics Data Analysis and Regional Modeling in the San Francisco Bay Area to Support AB617. April. See page 2.
[30] Age sensitivity factors are cancer risk adjustment factors that account for children's heightened sensitivity to air toxics. See California Office of Environmental Health Hazard Assessment, 2015. Air Toxics Hot Spots Program—Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments. February. Pages 8/4-8/5.
[31] BAAQMD, 2016. Air Toxics NSR Program Health Risk Assessment Guidelines. December. See page 2.
[32] BAAQMD, 2016. Air Toxics NSR Program Health Risk Assessment Guidelines. December. See page 2.

Modeling results show that the highest cancer risk locations in the Bay Area tend to be where diesel particulate matter concentrations are high.[33] Figure 3 below shows cancer risk in the Bay Area from toxic air contaminant exposure, expressed in chances per million. Figure 4 shows the simulated annual average diesel PM concentrations for 2016.

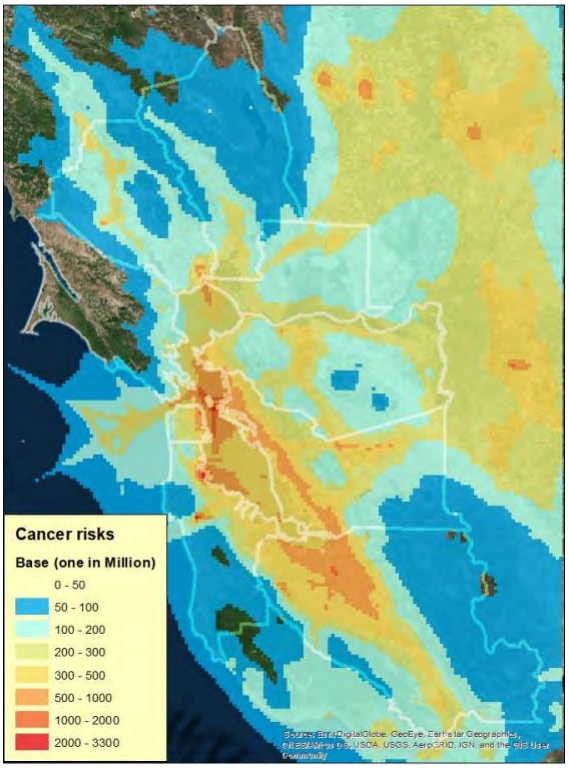

Figure 3 – Cancer risk from air pollution (chances per million)[34]

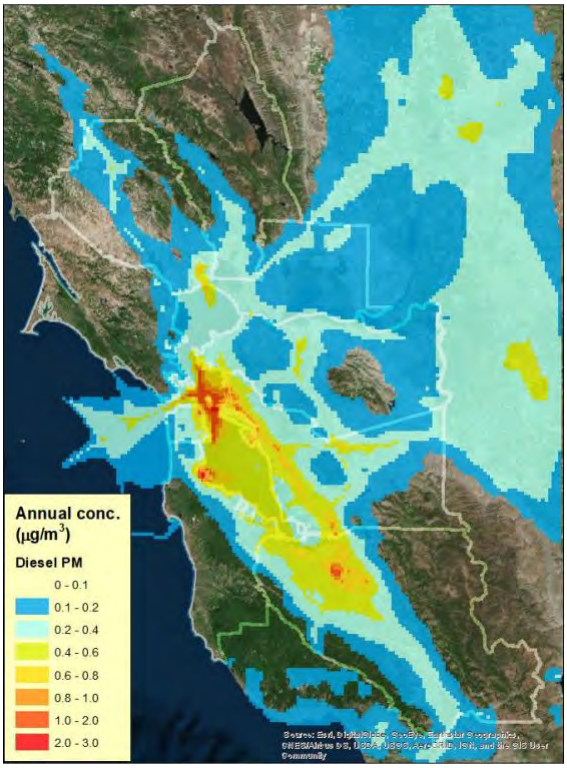

Figure 4 – Simulated annual average diesel PM concentrations for 2016[35]

In addition to modeling data, the Air District also maintains an ambient air quality monitoring network with over thirty air monitoring stations located throughout the region.[36] The Air District's air quality monitoring network monitors a variety of air pollutants, including:

- Ozone
- Oxides of nitrogen
- Black carbon
- Sulfur dioxide

[33] BAAQMD, 2019. Air Toxics Data Analysis and Regional Modeling in the San Francisco Bay Area to Support AB617. April. See page 33.
[34] BAAQMD, 2019. Air Toxics Data Analysis and Regional Modeling in the San Francisco Bay Area to Support AB617. April. See page 34.
[35] BAAQMD, 2019. Air Toxics Data Analysis and Regional Modeling in the San Francisco Bay Area to Support AB617. April. See page 25.
[36] BAAQMD, 2019. Air Toxics Data Analysis and Regional Modeling in the San Francisco Bay Area to Support AB617. April. See page 11.

- Particulate matter (including PM_{10}, $PM_{2.5}$, and $PM_{0.1}$ (ultrafine particles))
- Lead
- Hydrogen sulfide
- Air toxics (which consist of 22 gaseous toxic compounds that are monitored at 23 toxics monitoring sites located throughout the Bay Area)[37]

Air District staff utilized air monitoring data to evaluate the simulated air toxics data described above in Figures 3 and 4.[38]

3. CalEnviroScreen

As mentioned previously, CalEnviroScreen is a mapping tool developed and maintained by OEHHA that uses 21 indicators to identify communities impacted by environmental and health burdens. CalEnviroScreen was first developed in 2010 as the product of a statewide effort to assess cumulative impacts,[39] and was subsequently refined several times with new and improved supporting data.[40] On October 13, 2021, OEHHA released the final version of CalEnviroScreen 4.0, the latest iteration of the tool.[41] CalEnviroScreen 4.0 includes the most recent available supporting data and methodologies. It also adds one new indicator: lead risk to children from housing.[42]

Like the previous version of CalEnviroScreen (3.0), version 4.0 multiplies pollution burden by population characteristics within a census tract to determine an overall score for the tract.[43] CalEnviroScreen bases scores upon indicators, which fall into four different components—two that cover pollution burden, and two covering population characteristics. Pollution burden indicator categories are exposures and environmental effects, while population characteristics indicator categories are sensitive populations and socioeconomic factors. The indicators within each category are shown in Table 1 below.

[37] BAAQMD, 2021. 2020 Air Monitoring Network Plan. July. See page 63.
[38] BAAQMD, 2019. Air Toxics Data Analysis and Regional Modeling in the San Francisco Bay Area to Support AB617. April. See page 27.
[39] Defined by CalEPA to mean "exposures, public health or environmental effects from the combined emissions and discharges, in a geographic area, including environmental pollution from all sources, whether single or multi-media, routinely, accidentally, or otherwise released. Impacts will take into account sensitive populations and socioeconomic factors, where applicable and to the extent data are available." OEHHA, 2021. Update to the California Communities Environmental Health Screening Tool: CalEnviroScreen 4.0 Report. October. Page 12.
[40] OEHHA, 2021. Update to the California Communities Environmental Health Screening Tool: CalEnviroScreen 4.0 Report. October. Page 8.
[41] OEHHA, 2021. CalEnviroScreen 4.0 webpage.
[42] OEHHA, 2021. Update to the California Communities Environmental Health Screening Tool: CalEnviroScreen 4.0 Report. October. Page 66.
[43] OEHHA, 2021. Update to the California Communities Environmental Health Screening Tool: CalEnviroScreen 4.0 Report. October. Page 13.

Table 1: CalEnviroScreen 4.0 Indicators[44]

Pollution Burden		Population Characteristics	
Exposures	**Environmental Effects**	**Sensitive Populations**	**Socioeconomic Factors**
• Ozone Concentrations • PM2.5 Concentrations • Diesel PM Emissions • Drinking Water Contaminants • Children's Lead Risk from Housing • Pesticide Use • Toxic Releases from Facilities • Traffic Impacts	• Cleanup Sites • Groundwater Threats • Hazardous Waste • Impaired Water Bodies • Solid Waste Sites and Facilities	• Asthma Emergency Department Visits • Cardiovascular Disease (emergency department visits for heart attacks) • Low Birth-Weight Infants	• Educational Attainment • Housing-Burdened Low-Income Households • Linguistic Isolation • Poverty • Unemployment

a) CalEnviroScreen 4.0 Scores in the Bay Area

Air District staff evaluated CalEnviroScreen 4.0 scores in the Bay Area to determine the areas where permitting requirements could be made more stringent due to relatively high cumulative impacts. Staff examined census tracts with scores at or above the 75th percentile as well as tracts within the range of 70th through the 75th percentile.

The California Environmental Protection Agency (CalEPA) designated the highest scoring 25 percent of census tracts in CalEnviroScreen as "disadvantaged communities," as defined in Senate Bill 535 (De León, Chapter 830, Statutes of 2012).[45] Staff further evaluated the inclusion of the 70th through 75th percentile census tracts and found communities previously identified as disadvantaged under CalEnviroScreen 3.0 no longer score in the top 25 percent of impacted census tracts but continue to face many of the same pollution burdens or health vulnerabilities as before.

Using the categorization described above, staff found that, out of 1,552 total census tracts within the Air District's jurisdiction, 159 census tracts, or about ten percent of all census tracts, would be considered disadvantaged or overburdened based on CalEnviroScreen 4.0 scoring. Table 2 below shows the breakdown of census tracts by county and score type, and Figures 5 through 9 show the census tracts and one-thousand-foot buffer areas. Please see Appendix D: Maps of Overburdened Communities, for higher quality maps of areas identified as "Overburdened Communities" for the purposes of the permitting rules.

Additionally, since 2004, the Air District administered the CARE Program "to identify areas with high concentrations of air pollution and populations most vulnerable to air pollution's health

[44] OEHHA, 2021. Update to the California Communities Environmental Health Screening Tool: CalEnviroScreen 4.0 Report. October. Page 21.
[45] CalEPA, 2017. Designation of Disadvantaged Communities Pursuant to Senate Bill 535 (DE LEÓN). Page 1. April.

impacts".[46] The Air District also implemented the Assembly Bill 617 (C. Garcia, Chapter 136, Statutes of 2017) Community Health Protection Program, which seeks to reduce exposure in communities most impacted by air pollution. Collectively, the CARE Program and AB617 Community Health Protection Program informed the identification of Bay Area communities and populations disproportionately impacted by air pollution and associate health impacts. Because of this, the Air District previously advocated for consideration of the 70th percentile and above in CalEPA's designation of "disadvantaged communities" for CalEnviroScreen 3.0 and recommends inclusion of the top 70th percentiles of CalEnviroScreen 4.0 census tracts for the purpose of these proposed amendments described in this Final Staff Report.[47]

Table 2: ≥70th Percentile CalEnviroScreen 4.0 Census Tracts by County[48]

County	Census Tracts ≥70th Percentile Overall
Alameda	**47**
Contra Costa	**44**
Marin	**1**
Napa	**0**
San Francisco	**17**
San Mateo	**10**
Santa Clara	**20**
Solano	**17**
Sonoma	**3**
TOTAL	**159**

[46] BAAQMD, 2014. Improving Air Quality & Health in Bay Area Communities. Community Air Risk Evaluation Program Retrospective & Path Forward (2004 – 2013). Page 1. April 2014.

[47] BAAQMD, 2016. Bay Area Air Quality Management District CalEnviroScreen 3.0 Comments. October. Page 7; BAAQMD, 2021. Comment Letter on OEHHA's Draft Version 4.0 of CalEnviroScreen. May. Page 3.

[48] Using 2010 census tracts, consistent with CalEnviroScreen 4.0. OEHHA, 2021. Update to the California Communities Environmental Health Screening Tool: CalEnviroScreen 4.0 Report. October. Page 15.

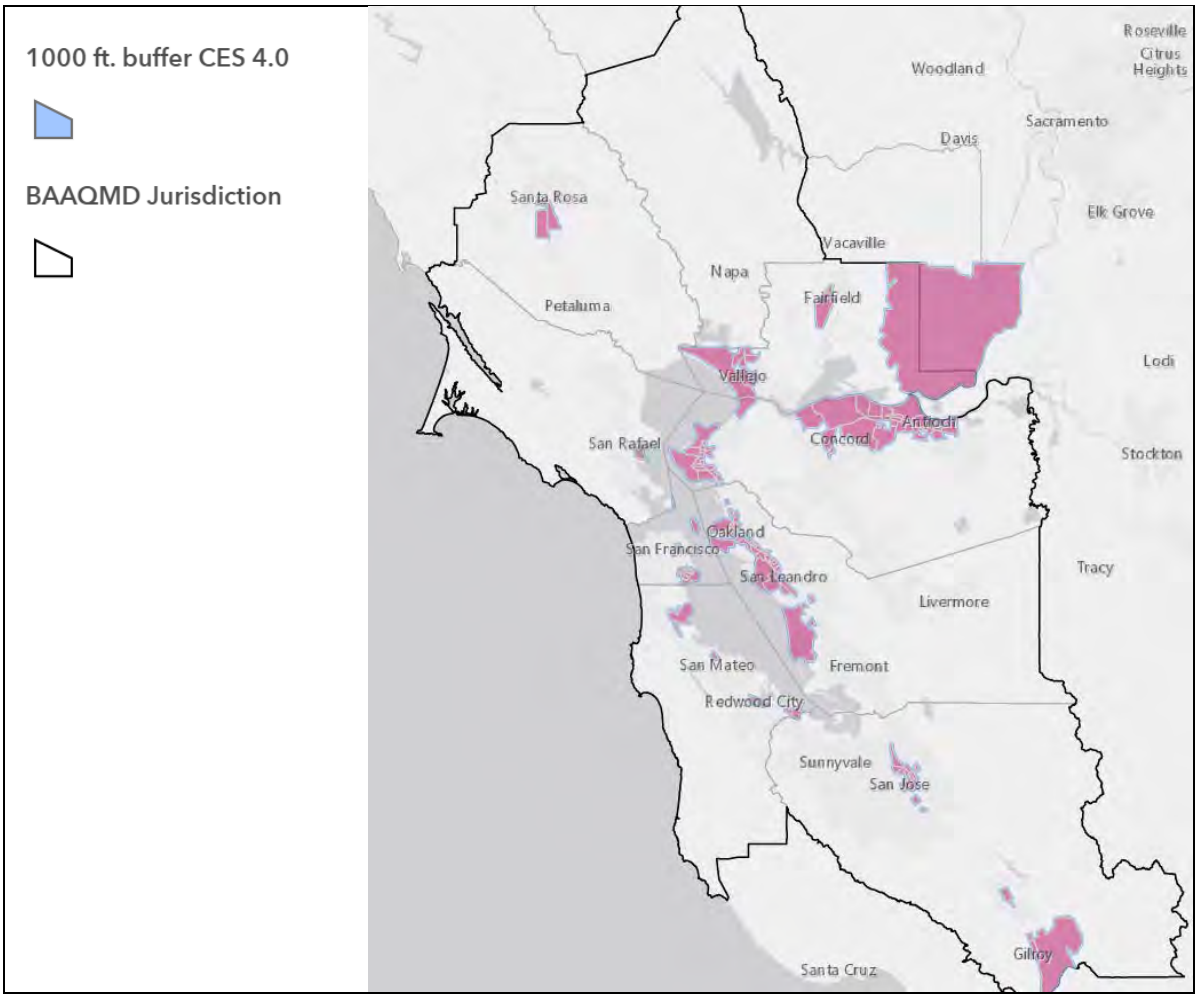

Figure 5 – Bay Area Top 30% CalEnviroScreen 4.0 Census Tract Scores

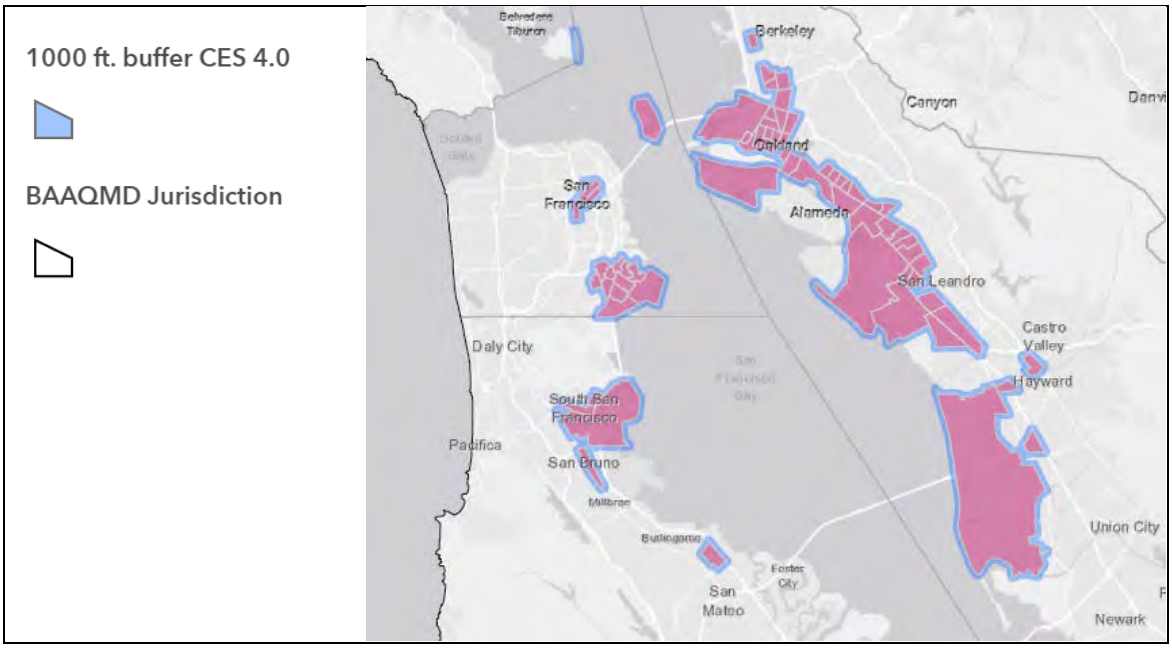

Figure 6 – San Francisco Bay Region Top 30% CalEnviroScreen 4.0 Census Tract Scores

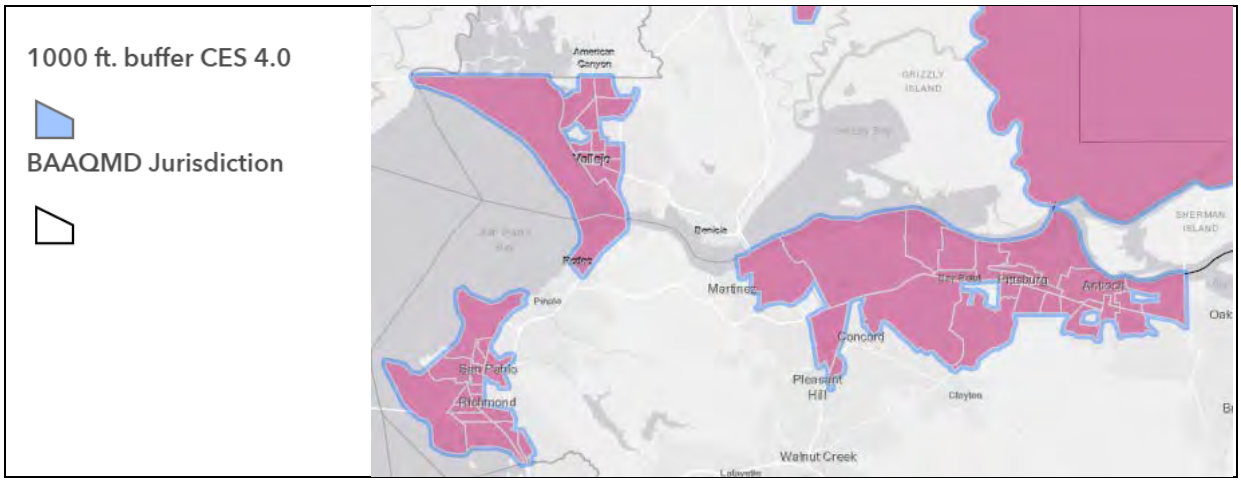

Figure 7 – San Pablo/Carquinez/Suisun Top 30% CalEnviroScreen 4.0 Census Tract Scores

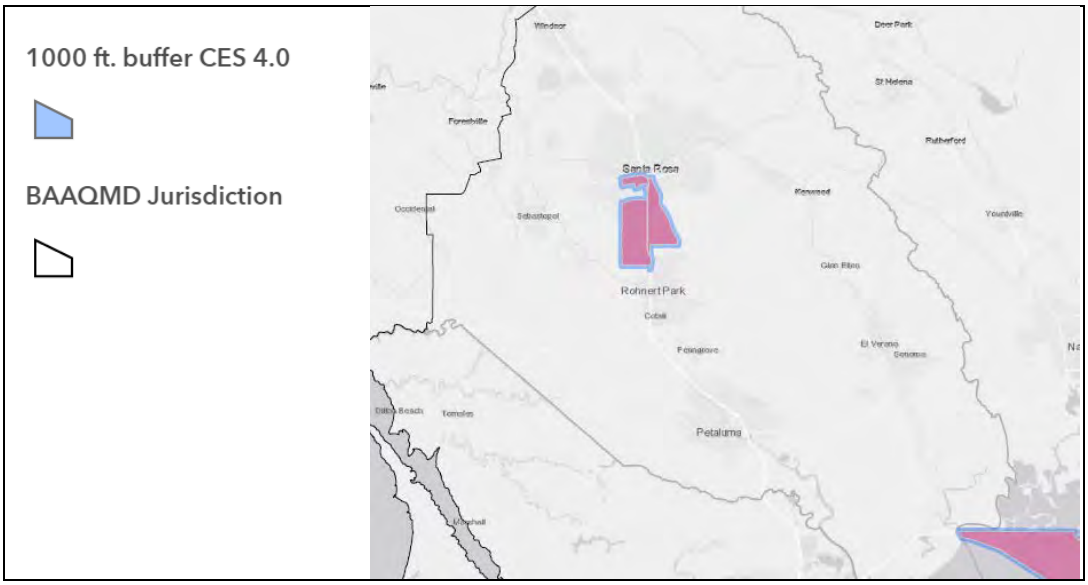

Figure 8 – North Bay Top 30% CalEnviroScreen 4.0 Census Tract Scores

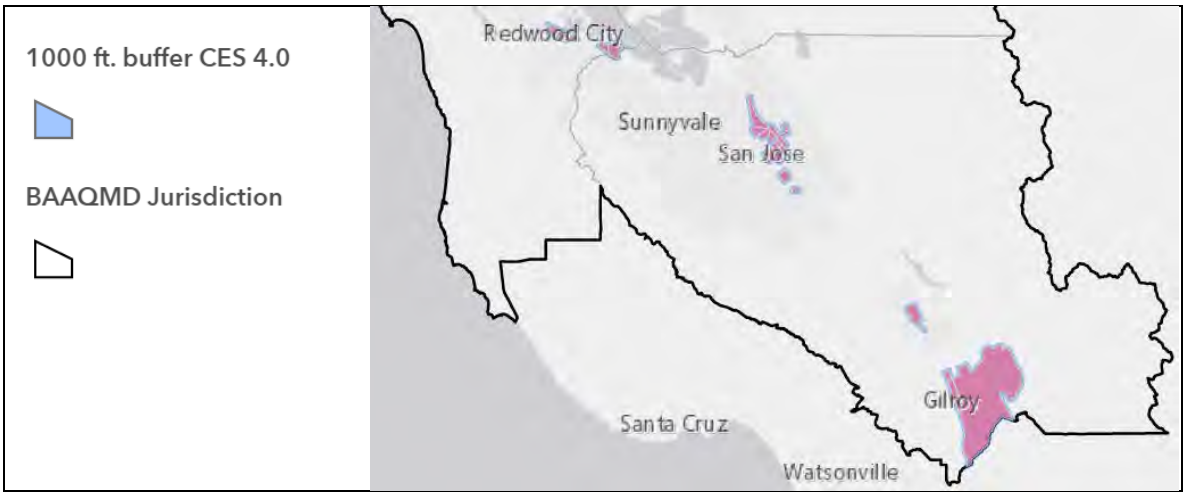

Figure 9 – South Bay Top 30% CalEnviroScreen 4.0 Census Tract Scores

OEHHA also published a preliminary analysis on the relationship between the Draft CalEnviroScreen 4.0 results and race and ethnicity.[49] OEHHA has also published an analysis between Final CalEnviroScreen 4.0 results and race and ethnicity, which indicate similar results to the preliminary analysis of Draft CalEnviroScreen 4.0. The analysis that is currently available takes a statewide perspective, but Figures 10 and 11 below, developed by OEHHA from preliminary Draft CalEnviroScreen 4.0, show the most densely populated regions of the Bay Area in terms of the most prevalent racial group and the highest ten percent scoring census tracts statewide tend to be largely nonwhite and predominantly Black or Latino.

[49] See OEHHA, 2021. Preliminary Analysis of Race/Ethnicity and Draft CalEnviroScreen 4.0 Scores. February. See also OEHHA, 2021. CalEnviroScreen 4.0 and Race/Ethnicity Analysis. October.

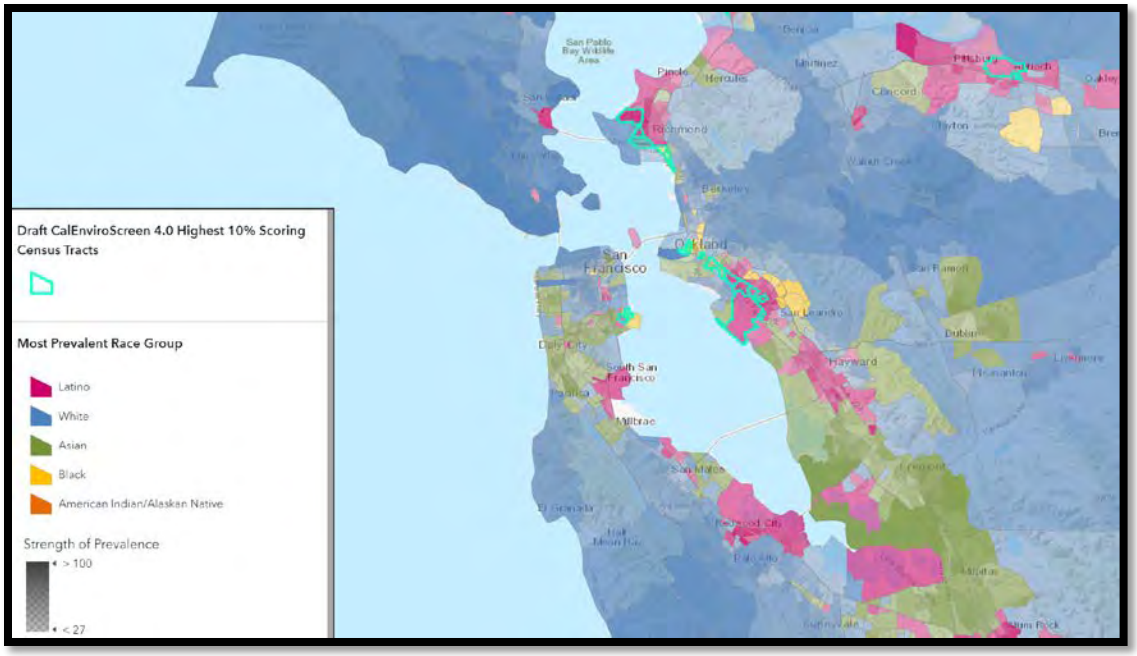

Figure 10 – Highest scoring Draft CalEnviroScreen 4.0 Census Tracts and Most Prevalent Racial Groups, Central Bay Area

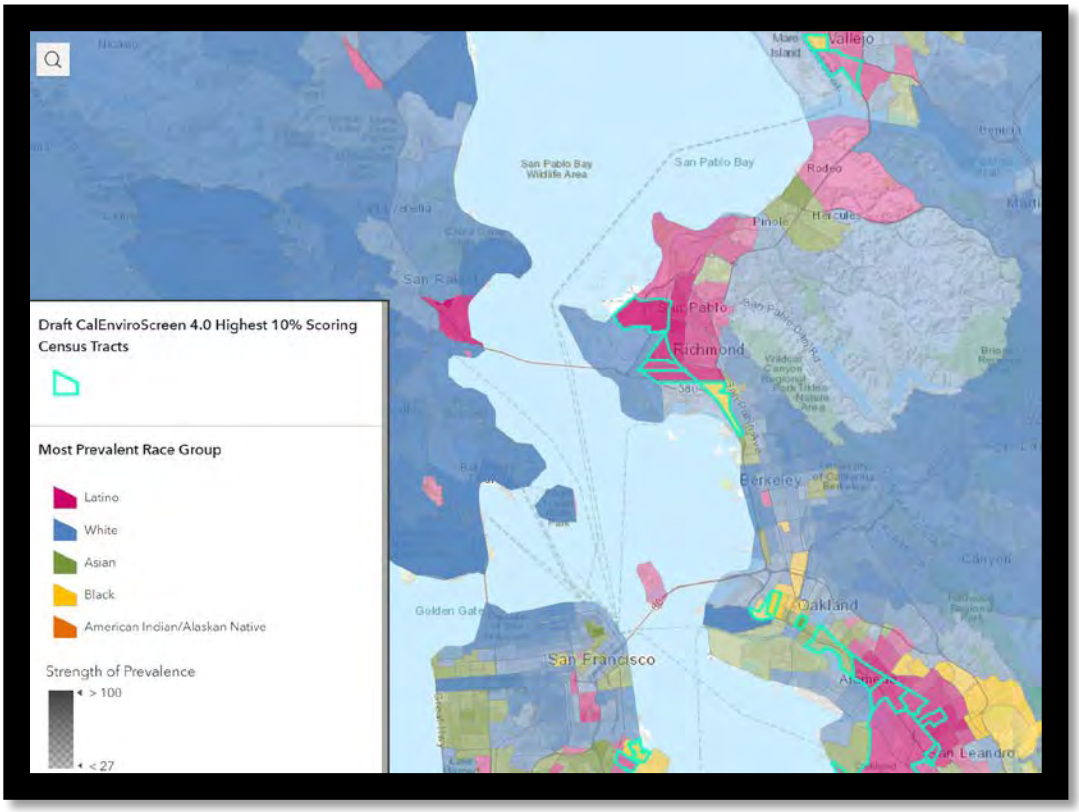

Figure 11 – Highest scoring Draft CalEnviroScreen 4.0 Census Tracts and Most Prevalent Racial Groups, Central Bay Area (Zoomed)

Furthermore, Table 3 below provides a demographic breakdown of the Bay Area by race/ethnicity in the highest-scoring census tracts in Final CalEnviroScreen 4.0.

Table 3: Demographics Comparison, Bay Area[50]

Race/Ethnicity	BAAQMD Jurisdiction	90th+ CES Percentile	80th+ CES Percentile	70th + CES Percentile
Black	6.2%	25.9%	18.7%	12.6%
Asian	25.5%	12.5%	18.0%	19.4%
American Indian/Alaska Native	0.2%	0.3%	0.3%	0.4%
Latino	22.6%	47.1%	41.7%	41.4%
Pacific Islander	0.5%	0.6%	1.1%	0.7%
White	40.4%	10.4%	16.1%	21.4%
Other	4.5%	3.2%	4.1%	4.1%
TOTAL POPULATION	**7,521,536**	**97,923**	**230,959**	**464,323**

IV. PROPOSED AMENDMENTS

The purpose of the Proposed Amendments is to reduce exposure to toxic air contaminants from new and modified sources of air pollution in communities that are overburdened by pollution or face health vulnerabilities at the community level that could contribute to residents being more susceptible to the detrimental health effects from air pollution. Staff utilized data from CalEnviroScreen 4.0 to identify census tracts in the Bay Area where more stringent cancer risk limits and enhanced notifications could be justified based on a cumulative impacts analysis. Additionally, staff intends to update the air toxic New Source Review rule (Rule 2-5) to ensure it reflects the latest advances in the science of air pollution health risk assessments.

The proposed amendments to Rule 2-1: General Requirements and Rule 2-5: Toxic New Source Review will require more health protective risk requirements due to cumulative impacts analyses completed using CalEnviroScreen 4.0 and will require enhanced notification in high-scoring CalEnviroScreen 4.0 communities.

A. Proposed Amendments to Rule 2-1: General Requirements

Proposed changes to Rule 2-1: General Requirements work in tandem with the proposed changes to Rule 2-5: New Source Review of Toxic Air Contaminants. Rule 2-1 provides the framework for and overarching requirements of the Air District's permitting regulation, whereas other rules within the regulation (such as Rule 2-5) focus on specific elements of the permitting process. For example, Rule 2-5 references the term Overburdened Community that is defined in the Proposed Amendments to Rule 2-1.

[50] See OEHHA, 2021. CalEnviroScreen 4.0 Results.

Also, community stakeholders have called on the Air District to increase the transparency of the permitting process, particularly with respect to permits for projects in communities that experience relatively high levels of pollution or where residents face relatively high health vulnerabilities that may make them more susceptible to the detrimental effects of air pollution. The Proposed Amendments to Rule 2-1 to include a new notification requirement for projects that are proposed to be located in communities that are overburdened by environmental or health burdens. Although the proposed changes to the notification requirements will not increase the stringency of emissions limitations on their own, they are intended to provide greater transparency to the public.

The proposed changes to Rule 2-1 and Rule 2-5 will require additional staff processing time to analyze projects and abatement systems, refine health risk assessments, and respond to public comments. Therefore, staff is also proposing to extend the action times for permit applications.

1. Purpose

The purpose of the proposed amendments to Rule 2-1 is to define what constitutes an overburdened community and provide more information to the public on active permit applications in communities that face environmental and health burdens. The Air District would provide more awareness of permit applications and the proposed projects by making information available by mailing information to residents and posting notifications on the Air District website. Additionally, this change will include a written public comment period, which will enable members of the public to provide additional information for the Air District to consider in evaluating permit applications. The Air District APCO will be required to reply to public comments received on projects subject to the amended provision in Rule 2-1.

The purpose of the proposed amendments to the permit application review times is to establish appropriate review time periods that are commensurate with the level of staff work expected for high-quality evaluations of proposed projects. Amending these review times will enable industry to better plan for the necessary permit application processing time. The proposed two-tiered approach (90 days for certain routine applications and 180 days for all other applications) will enable the Air District to improve allocation of staff resources and provide more assurance that permit applications will be completed within the allotted action times.

2. Applicability

Proposed amendments to Rule 2-1 that pertain to the new notification requirement for projects that require health risk assessments and are in areas that have high CalEnviroScreen scores will be limited to a relatively small number of applications per year compared to the overall volume of applications that the Air District receives. However, to account for the proposed changes to Rule 2-5, the proposed changes to the notification procedures, and increasing constraints on staff due to implementation of multiple new programs over the recent past, staff proposes to increase the amount of time by which the Air District must notify the permit applicant of an approval, approval with conditions, or denial of the application. This proposed change would apply to all permit applications. It is explained in the “Administrative Requirements” section on the proposed amendments to Rule 2-1 below.

3. Exemptions

Rule 2-1, Section 2-1-114 describes the permit exemption criteria for combustion equipment. The equipment is not exempt from permit requirements if emissions exceed any of the thresholds or other criteria in Rule 2-1, Sections 2-1-316, 317, 318, or 319. A health risk assessment is

necessary to verify permit exemption applicability under Section 2-1-316 if toxic compound emissions exceed a Rule 2-5, Table 2-5-1 trigger level. The diesel particulate emissions from small (less than 50 brake horsepower) diesel-fired internal combustion engines may exceed a Table 2-5-1 trigger level, even for an emergency back-up engine with limited operating time. In 2016, the Air District added Section 2-5-113 to Rule 2-5, which exempted these small engines from the requirement to conduct a health risk assessment in order to verify that the small engine qualifies for a permit exemption. Staff determined that this permit exemption criteria is more appropriately stated in Rule 2-1, Section 2-1-114 rather than Rule 2-5, Section 2-5-113. Therefore, staff is explaining in Rule 2-1, Section 2-1-114 that sources described by Section 2-1-114.2.1 are not subject to Rule 2-1, Section 2-1-316, and staff is proposing to delete Regulation 2-5, Section 2-5-113. Furthermore, Rule 2-1, Section 2-1-114 will be amended to clarify that sources described by Sections 2-1-114.1.2 and 114.2.3 are not subject to Section 2-1-316. As with small engines, small natural gas fired boilers and heaters (Section 114.1.2) and portable engines that are on site less than 72 hours (Section 2-1-114.2.3) may result in toxic emissions that exceed a Rule 2-5, Table 2-5-1 trigger level, but these small boilers, heaters and temporary portable engines are not expected to present any significant health risk. Therefore, these sources will not need to undergo a health risk assessment and will not be subject to Rule 2-1, Section 2-1-316.

These proposed amendments to Rule 2-1, Section 2-1-114 are intended to clarify and streamline the existing exemptions between Rule 2-1 and Rule 2-5. The proposed amendments do not expand existing permitting exemptions for these small engines, small natural gas fired boilers and heaters, and portable engines that are on site less than 72 hours

4. Definitions

Section 2-1-243 – Overburdened Community: The Proposed Amendments will add a definition for Overburdened Community. The Air District's Permitting Regulation does not currently differentiate permitting requirements based on where in the Bay Area an applicant wishes to install or modify equipment or operations. The California Health and Safety Code recognizes that more stringent regulations are warranted in some areas. The proposed changes to the Permitting Regulation will require proposed projects in areas that experience relatively high environmental or health burdens to meet more stringent health risk requirements. As discussed in Section VI of this Final Staff Report, staff analyzed the number and types of potentially affected facilities in Overburdened Communities and prepared maps that show their locations (see Figures 5, 6, 7, 8, and 9 above and Appendix D). These changes, along with those described in detail in this Final Staff Report and available for review in the proposed regulatory text in Appendices A and B, will make the Permitting Regulation more health protective throughout the Bay Area.

The definition refers to CalEnviroScreen 4.0 scoring percentiles to determine whether an area constitutes an Overburdened Community. It also includes a 1,000-foot buffer zone around any census tract identified by the CalEnviroScreen criteria to ensure that projects that may influence the air quality in overburdened communities would also be subject to a more stringent risk limit.[51] The permit applications for projects that would be located within the high-scoring census tracts or in the 1,000-foot area from the census tract boundary would be required to comply with the more stringent cancer risk requirement in proposed amended Rule 2-5, Section 2-5-302.

[51] See CAPCOA, 2009. Health Risk Assessments for Proposed Land Use Projects. July. Page 9. See also CARB, 2005. Air Quality and Land Use Handbook: A Community Health Perspective. April.

Staff evaluated health risk assessments for several common project types to identify the distance the point of maximum impact (PMI) is from the source and to determine the percent reduction in concentration from this point of maximum impact to a 1,000-foot distance from a source. For the project types evaluated (diesel engines, gas stations, a concrete batch plant, and a landfill flare), the points of maximum impact were mainly located 300 feet or less from the source. At 1,000 feet from the source, the maximum concentration decreased by at least 56 percent, although most example projects showed more than an 80 percent reduction, and the average reduction was 85 percent. Table 4 below provides a description of the permitted source type, location, distance from the permitted source to the point of maximum impact, and the impact reduction 1,000 feet downwind of the permitted source.

Thus, if a project were located just outside of the buffer zone (where ten in one million is the applicable limit), the point of maximum impact could be somewhere in the buffer zone, but by the time the pollutants get to the Overburdened Community (more than 1,000 feet from the source), the risk would be reduced by at least 56 percent to 4.4 in one million within the Overburdened Community. This analysis demonstrates that a 1,000-foot buffer zone is necessary and is adequately protective of the overburdened community.

Table 4: Point of Maximum Impact Locations in the Bay Area

Permitted Source(s)	Location	Distance from Permitted Source(s) to PMI* (feet)	Impact Reduction 1,000 Feet Downwind of Permitted Source(s)
Data Center (diesel engines) 1	Santa Clara	300	75%
Data Center (diesel engines) 2	San Jose	300	65%
Data Center (diesel engines) 3	San Jose	300	56%
Prime Diesel Engine	San Jose	220	84%
Standby Diesel Engine 1	San Carlos	180	83%
Standby Diesel Engine 2	San Jose	400**	81%
Standby Diesel Engine 3	Oakley	40**	98%
Standby Diesel Engine 4	Daly City	55	97%
Standby Diesel Engine 5	Pleasanton	170	95%
Standby Diesel Engine 6	Pleasanton	100**	77%
Standby Diesel Engine 7	St. Helena	250	76%
Standby Diesel Engine 8	Orinda	350	77%
Standby Diesel Engine 9	San Francisco	80	85%
Standby Diesel Engine 10	San Francisco	100	77%
Gasoline Dispensing Facility 1	Daly City	60**	96%
Gasoline Dispensing Facility 2	American Canyon	120**	93%
Gasoline Dispensing Facility 3	Novato	100**	93%
Gasoline Dispensing Facility 4	Brentwood	100**	94%
Gasoline Dispensing Facility 5	Petaluma	100**	94%

Permitted Source(s)	Location	Distance from Permitted Source(s) to PMI* (feet)	Impact Reduction 1,000 Feet Downwind of Permitted Source(s)
Gasoline Dispensing Facility 6	Oakland	60**	98%
Concrete Batch Plant	Windsor	200**	80%
Landfill Flare	Pittsburg	160	85%

*PMI = Point of Maximum Impact
**Distance to property boundary

5. Standards

The Proposed Amendments do not include any changes to the Standards section of Rule 2-1.

6. Administrative Requirements

Section 2-1-403 – Permit Conditions: The Air District is making an editorial correction to this section to replace the pronoun "he" with "the APCO."

Section 2-1-408 – Final Action on Applications: This section identifies the Air District's standard permit application review period, which is the period of time beginning on the date an application is deemed complete until the date the Air District should make the final decision on the application and notify the applicant whether the permit application will be approved, approved with conditions, or denied. This section also identifies the types of applications that are not subject to this standard review period, which include applications subject to public noticing requirements or to the provisions of Rule 2-6: Major Facility Review.

This current action time (35 working days, which is 49 calendar days) for routine applications was established in 1995 when most routine permit applications were not subject to health risk assessments, state airborne toxic control measures (ATCMs), or federal regulations. In 2001, diesel particulate matter was declared a toxic air contaminant and a permit exemption for emergency engines was eliminated. These 2001 regulatory changes had a profound impact on both the number of applications that the Air District processes as well as the time required to process these applications, because most applications for diesel-fired emergency engines require a health risk assessment. In addition, after 1995, California adopted several air toxic control measures and the U.S. Environmental Protection Agency adopted many new source performance standards (NSPS) and national emission standards for hazardous air pollutants (NESHAPs) for many common source categories that increased the complexity of the evaluation required for these routine source categories. As a result of these earlier regulatory changes, the more complex health risk assessment procedures adopted with Rule 2-5 in 2016, and the current proposed revisions to Rule 2-5 that are expected to require more refinement of health risk assessments and additional engineering evaluation time, the Air District has determined that the current application review time (49 days) is not feasible for current routine permit applications. In addition, the current regulation does not provide a clear application review period for non-routine permit applications that require public noticing or that are located at major facilities or synthetic minor facilities that are subject to Rule 2-6: Major Facility Review requirements.

The Proposed Amendments will resolve these issues by establishing new review time periods for permit applications that are reasonable, realistic, and consistent with review time periods for other

air districts. The proposal includes two potential action periods: 90 days, which will apply to most routine permit applications, and 180 days for more complex or non-routine permit applications.

For most applications, the proposed review time will increase by 41 days (from 49 days to 90 days). As is currently the case, this time period will apply to applications that are not subject to public noticing, that are not located at a site that is subject to Rule 2-6 (Major Facility Review), and that are exempt from CEQA. As discussed above, this increase in review time is necessary due to past regulatory changes that have resulted in more complex review procedures including the need to conduct health risk assessments for many routine applications. As shown in Table 5 below, several other districts have 90-day review periods for small to medium sources with restrictions on the types of applications that trigger public noticing, Federal Clean Air Act Title V requirements, and CEQA. One notable difference is that staff is proposing to include applications subject to health risk assessments under this 90-day period, while Ventura and Santa Barbara exclude applications that require air toxic New Source Review and health risk assessments from the 90-day review period and allow the longer 180-day review period for such applications.

For all other applications, the proposed review period will be 180 days. As noted above, there is no clear review period now for applications subject to public noticing or Rule 2-6. Under this proposal, applications at sites that are not subject to Rule 2-6 or CEQA review but that are subject to public noticing requirements will have a total review period of 180 days. This 180-day period will include approximately 90 days to reach a preliminary decision and another 90 days to complete the final decision. This latter 90-day period is necessary to prepare the required notices, provide a minimum of 30 days for public comment, review and respond to comments (which may take longer for applications in overburdened communities), and prepare the final decision materials. Applications for projects located at a facility that is required to have either a Title V permit or Synthetic Minor Operating Permit often involve more complex review due to the level of existing emissions and high public interest in these facilities. For example, such projects often trigger Best Available Control Technology (BACT) and offset requirements, include multiple related applications that must be included in the health risk assessment, have applicable New Source Performance Standard and National Emission Standards for Hazardous Air Pollutants requirements, require more detailed permit conditions to assure compliance, and require filing of a CEQA Notice of Exemption (NOE) or Notice of Determination (NOD). Therefore, a 180-day review period is reasonable for permit applications located at facilities that are subject to Rule 2-6. As shown in Table 5 below, a 180-day review period is consistent with the review period for similar types of applications at other air districts.

Table 5: Comparison of Application Review Periods in California Air Districts

Agency	Agency Regulation	Completeness Review Period (days)	Application Review Period (days) [1]	Notes
Bay Area (current)[2]	2-1-408, 432	21	49	Excludes public noticing, Title V, and CEQA
Bay Area (proposed)	2-1-408, 432	30	90 180	Excludes public noticing, Title V, and CEQA all other applications
South Coast	Rule 210 (b), (d)	30 [3]	60 180	Excludes Title V and CEQA[4] Excludes CEQA
San Joaquin	Rule 2201, Section 5.1, 5.3	30	180	Excludes CEQA
San Diego	Rule 18 (a), (b)	30	90 180	If possible

Agency	Agency Regulation	Completeness Review Period (days)	Application Review Period (days) (1)	Notes
Ventura	Rule 13 (B), (C)	30	90 180	Excludes toxic NSR, public noticing, NSPS, NESHAP, Title V, and CEQA(5)
Santa Barbara	Rule 208 D2, E	30	90 180	Excludes toxic NSR, public noticing, NSPS, NESHAP, Title V, and CEQA(5)
Monterey Bay	Rule 207, Part 6.2, 6.11	30	180	

(1) The Application Review Period is the number of days from the date the application is declared complete until the APCO issues a decision, usually to approve or deny an Authority to Construct.
(2) The Bay Area's time periods are currently expressed as working days (15 working days for completeness review and 35 working days for application review). These periods were converted to calendar days in this table for easier comparison.
(3) At South Coast, if insufficient information to deem the application complete has not been submitted within 120 days of filing, the application is denied, unless the APCO grants an extension.
(4) This 60-day period applies if South Coast is the Lead Agency for the project, and it excludes the time required for South Coast to approve a Negative Declaration or a Determination of Exemption from CEQA.
(5) Ventura and Santa Barbara also have 30-day review periods for applications with additional restrictions. These restrictions are similar to the Bay Area's accelerated permit requirements in 2-1-302.2.

In addition to revisions to the action time periods for permit applications, staff is proposing to move a statement about substantial changes to applications from Rule 2-1, Section 2-1-408.1 to Section 2-1-408.5. In addition, staff is proposing to revise the consequences of substantive changes to an application from resetting of the application completeness date and applicable time periods to a requirement to submit a new application. This latter requirement is intended to support Air District permit streamlining initiatives.

Section 2-1-408.2 now describes alternative time periods for applications that are not exempt from CEQA requirements. Staff is also proposing to extend the time period required to take action after CEQA documents have been certified from 30 days to 60 days, because significant comments and required mitigation measures can impact the engineering review and require more than 30 days to complete all the necessary changes to a draft permit.

Section 2-1-412 – Public Notice, Schools & Overburdened Communities: The Air District publishes information on permit applications on its website and provides public notifications and opportunities for public comment on permit applications that meet certain criteria, such as permit applications for projects that will result in an increase in toxic air contaminants near K-12 schools. Rule 2-1: General Requirements states that the Air District must notify the parents and guardians of children enrolled in a school or schools near to where a proposed source or group of sources will be located, as well as each address near the source.[52] The Air District is required to review and consider all comments received during the application period. The permit applicant is required

[52] See Section 2-1-412 and Regulation 3, Section 318 for specific requirements regarding the schools notification process.

to cover the cost of the public notice process. Since 2009, the Air District has carried out an annual average of 72 public notifications per year for projects triggering the schools notification requirement under Section 2-1-412 at a cost of over $160,000 per year in total.

Proposed amendments to Rule 2-1 include revising Section 2-1-412 to add a new notification requirement for proposed projects that would be located in Overburdened Communities, defined under Rule 2-1, Section 2-1-243. (See Figures 5, 6, 7, 8 and 9 above and Appendix D.) The Proposed Amendments will require the same type of notification that is currently required for projects that will result in an increase in toxic air contaminant emissions that are proposed to be located near K-12 schools—but the applicability would extend to all projects within Overburdened Communities for which a health risk assessment is prepared. Under the Proposed Amendments, projects that will require a Health Risk Assessment will be required to distribute the notice to surrounding addresses located within 1,000 feet of the proposed source, if the source will be located within an Overburdened Community as defined in Proposed Amendments Section 2-1-243. As with existing Public Noticing requirements, Air District staff will administer the Public Noticing program, including drafting notices, distribution lists and distribution of the Public Notices in accordance to proposed Rule 2-1, Section 2-1-243.

In Section 2-1-412.2, the requirement to distribute a notice 30 days prior to the date that final action is to be taken on that application is being removed because it is confusing and is not necessary given the clarifications and additional time periods added to Section 2-1-408.

Section 2-1-432 – Determination of Complete Application: This section identifies the time periods allowed for the Air District to review an initial application submittal and determine all information and fees that are necessary before the application may be deemed complete. Currently, these completeness review periods are 15 working days (21 calendar day) for most applications and 30 days for applications that involve new major facilities, major modifications, or other types of large projects subject to Regulations 2-2-404 or 2-10-402. Staff is proposing to extend the completeness review periods by 9 days (from 21 days to 30 days) for most applications and by 30 days (from 30 days to 60 days) for applications involving new major facilities, major modifications, and other very large projects. As shown in Table 5 above, 30 days is a standard completeness review period for other districts. Due to the substantial requirements for new major facilities and major modifications, a 60-day completeness review period is warranted.

7. Monitoring and Records

The Proposed Amendments do not include any changes to the Monitoring and Records section of Rule 2-1.

8. Manual of Procedures

The Proposed Amendments do not include any changes to the Manual of Procedures section of Rule 2-1.

B. Proposed Amendments to Rule 2-5: Toxic New Source Review of Toxic Air Contaminants

As mentioned previously in this Final Staff Report, the purpose of Rule 2-5: New Source Review of Toxic Air Contaminants is to provide for the review of new and modified sources of toxic air contaminant emissions to evaluate potential public exposure and health risk, mitigate potentially significant health risks resulting from these exposures, and provide net health risk benefits by

improving the level of control when existing sources are modified or replaced. Rule 2-5's current requirements (including cancer risk limits) are the same throughout the Bay Area, regardless of a proposed project's location.

The Proposed Amendments will make the cancer risk limit more stringent in the census tracts that score highly on CalEnviroScreen and the buffer zones surrounding them. Instead of having one standard that applies throughout the Bay Area, Rule 2-5 will have two standards for cancer risk limits: one that applies in areas that do not score highly on CalEnviroScreen, and another, more stringent standard, for areas the Air District determines to be Overburdened Communities based on quantified cumulative impacts.

1. Purpose

The Proposed Amendments are intended to reduce exposure to carcinogenic toxic air contaminant emissions by increasing the level of stringency for new or modified equipment subject to Air Toxics New Source Review. The Proposed Amendments also include updates to the Air District's Health Risk Assessment Guidelines, which describe the procedures for assessing health risk from sources that emit air toxics. The Proposed Amendments include updates to the list of toxic air contaminants and trigger levels that the Air District uses to determine whether a site-specific health risk assessment is necessary. Finally, the Proposed Amendments include revisions to exemptions, definitions, and procedures that are necessary to clarify applicability and enable efficient use of staff resources.

2. Applicability

The Proposed Amendments to Rule 2-5 will apply to sources that are subject to the Air Toxics New Source Review requirements, although not all proposed changes will apply to every future proposed project. Projects located in areas that receive higher CalEnviroScreen scores will be subject to a more stringent cancer risk limit, but projects located outside of the high-scoring census tracts and surrounding buffer zones would be subject to the existing cancer risk limit of ten in one million. Updates to the Air District's Health Risk Assessment Guidelines that specifically pertain to gasoline dispensing facilities will only apply to those facilities. Lastly, updates to the Toxic Air Contaminant Trigger Level table (Table 2-5-1) will apply to sources emitting those chemicals that have been added or updated.

3. Exemptions

Section 2-5-113 – Exemption, Small Internal Combustion Engines and Gas Turbines: As discussed above for Regulation 2-1-114, this exemption from a health risk assessment requirement to validate a permit exemption is being moved to Regulation 2-1-114, and Section 2-5-113 will be deleted.

4. Definitions

Section 2-5-216 – Project: The Proposed Amendments will modify the definition of Project to include new and modified sources of toxic air contaminants at a facility that have been permitted within the five-year period immediately preceding the date a complete application is received and any project at a facility for which the Authority to Construct has been issued and has not expired. This revision is intended to ensure that all potentially related projects are included in the health risk assessment to further prevent circumvention of the requirements of Rule 2-5. This revision

will also ensure that the cumulative impacts of multiple projects at a facility are fully considered in the health risk assessment.

Section 2-5-227 – Priority Community: Section 2-5-227 is proposed to be deleted because the definition is no longer necessary. The proposed definition for Overburdened Community is located in Rule 2-1, Section 2-1-243.

Section 2-5-230 – Essential Public Service: The Proposed Amendments include a new definition for essential public service, which is defined to mean: a police or firefighting facility, a hospital or other medical emergency facility, or a building designated as an emergency shelter location. The language in this proposed definition is based upon Air District and South Coast Air District rules that exempt some operations from specific standards based upon their categorization as essential public services.[53] Essential public services will not be subject to the more stringent limit in areas that score highly on CalEnviroScreen; they will instead be subject to the existing project cancer risk limit of ten in one million. In reviewing recent permit applications since the last time Rule 2-5 was amended, this limited exemption probably would not be used often.

Air District staff understands there may be many different potentially affected operations and industries that will need to comply with a more stringent cancer risk limit when installing new equipment or modifying existing equipment in Overburdened Communities. The lookback analysis, which included a review of permit applications over a recent four-year period for projects in Overburdened Communities with a cancer risk greater than six in one million, indicates that most projects would not fit neatly into any conventionally used definition for essential services. Staff prepared the lookback analysis to understand the number and types of projects that might have been impacted by the proposed cancer risk limit of six in one million in Overburdened Communities had the limit been in place during the review period. The findings of the lookback analysis are discussed in section VI of this Final Staff Report. To ensure regulatory clarity, staff proposes to keep the Essential Public Service definition in Rule 2-5 narrow and applicable only to project types that clearly fit the description of an essential public service. This definition of Essential Public Service only impacts the applicable cancer risk for the project and will not affect requirements in other rules such as Regulation 9, Rule 8.

5. Standards

Section 2-5-302 – Project Risk Requirement: The Proposed Amendments to Rule 2-5 modify the text of the project risk requirement to clarify that there are two project risk requirement standards. These two standards apply based on the geographic location of a proposed project; the more stringent cancer risk limit applies in areas that score highly (70th percentile) on CalEnviroScreen and the surrounding 1,000-foot buffer zones, while the existing cancer risk limit applies in areas outside of high-scoring CalEnviroScreen locations. (See Figures 5, 6, 7, 8 and 9 above and Appendix D.) Proposed amendments to Section 2-5-302 would clarify that in Overburdened Communities, as they are defined in proposed Rule 2-1, Section 2-1-243, the cancer risk limit is six in one million. In areas that are not located within Overburdened Communities, the current

[53] See, e.g., Bay Area Air Quality Management District Rule 9-8: Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines, Section 331, which allows additional hours of operation for reliability-related testing for essential public services, which are defined in Section 9-8-233 and include similar facility types and operations as those included in proposed amended Rule 2-5. See also South Coast Air Quality Management District Regulation XII: New Source Review, Rule 1304: Exemptions and Rule 1309.1: Emission Reduction Credits and Short-Term Credits, Priority Reserve, which are permitting rules governing offsets and emission reduction credits, respectively, and which enable additional flexibility for essential public services as defined in Rule 1302: Definitions, Section (m).

project cancer risk limit of ten-in-one million would remain unchanged. Also, the project chronic and acute hazard index limits would remain unchanged from the current version of Section 2-5-302.

Staff proposes the cancer risk limit of six in one million in high-scoring CalEnviroScreen communities based upon an understanding of the relative contribution of the proposed project to the overall regionwide-average cancer risk. The six in one million cancer risk limit means that a proposed project in an Overburdened Community would need to have a cancer risk that is less than one percent of the overall background cancer risk from carcinogenic toxic air contaminant emissions in the Bay Area. Staff also considered the number of applications per year, as the intention of the rule amendment is to increase the health protectiveness of the Permitting Regulation without unduly restricting new operations in the Bay Area. Staff conducted a lookback analysis and reviewed health risk assessments prepared for permit applications over a four-year window between February 2017 and February 2021.[54] The lookback analysis is discussed in Section VI of this Final Staff Report.

A breakdown of the number of health risk assessments per year prepared for project applications and the corresponding cancer risk is shown in Figure 12 below, which shows that the number of projects tends to decrease with higher project cancer risk. The analysis showed that about one third of health risk assessments prepared over this period would exceed the cancer risk limit of six in one million. Section VI of this Final Staff Report provides additional information on the lookback analysis.

Staff also analyzed two more stringent cancer risk limits in overburdened communities—a risk limit of three in one million, and a risk limit of five in one million. After analyzing potential project impacts that would be associated with these risk limits, staff recommends the six in one million cancer risk limit for the reasons described above.

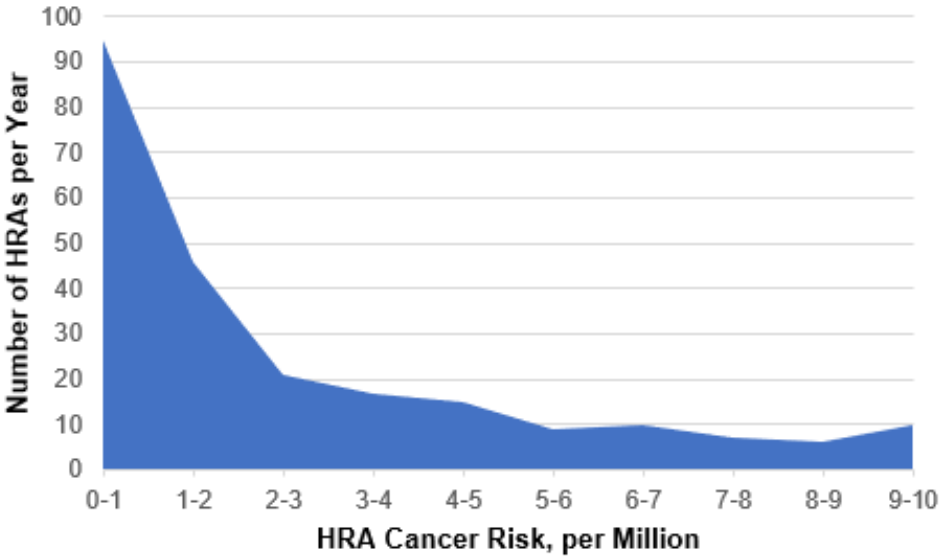

Figure 12: Number of Projects per Year, Projects with Health Risk Assessments between 2017 and 2021

[54] The Board of Directors adopted amendments to Rule 2-5 in December 2016. Amendments included updates to health risk assessment procedures, which enable comparison of project risk levels between projects within the lookback window.

Section 2-5-303 – Net Project Risk Requirement: Section 2-5-303 was added to Rule 2-5 in 2016 to allow consideration of contemporaneous risk reductions for a small number of projects that involve pre-1987 modified sources.[55] To be subject to Section 2-5-303, projects need to meet the applicability and procedural criteria in Section 2-5-406. To date, no permit applicants have requested to comply with Section 2-5-303.

As with Section 2-5-302 above, the Proposed Amendments to Rule 2-5 will modify the text of the net project risk requirement to clarify that there are two net project risk requirement standards.

6. Administrative Requirements

Section 2-5-404 – Designation of Priority Community: The Proposed Amendments delete Section 2-5-404. The procedures for identifying overburdened communities are proposed to be moved to Rule 2-1, Section 2-1-433 because Rule 2-1 will contain the public notification procedures for applications located in overburdened communities and is a more general requirement that applies to all permit activities.

Section 2-5-405 – Cumulative Impact Summary for Priority Communities: The Proposed Amendments will also delete Section 2-5-405 because the procedures it describes are no longer necessary. The Air District will address cumulative impacts through other efforts, such as the Community Health Protection Program.

7. Monitoring and Records

The Proposed Amendments do not include any changes to the Monitoring and Records section of Rule 2-5.

8. Manual of Procedures

Section 2-5-602 – Baseline Emission Calculation Procedures: The proposed changes to Section 602.2.2 will clarify that baseline throughput is the lowest of the actual, authorized, or functional capacity of the source. Functional capacity describes the procedures for calculating baseline throughput when a source's throughput rate is limited by a bottleneck at a related source. Functional capacity is described in the definition of a modified source but was not clearly included in the baseline emission calculation procedure. These proposed changes are intended to ensure consistency with the Section 2-5-214.3 definition of a modified source of toxic air contaminants for a source that does not have conditions limiting daily or annual toxic emissions.

Section 2-5-603 – Health Risk Assessment Procedures: The Proposed Amendments will not change the text of Section 2-5-603: Health Risk Assessment Procedures, however, they will revise the Air District's Health Risk Assessment Guidelines, which are included in Appendix C. Updates to the Air District's Health Risk Assessment Guidelines will revise the health risk assessment procedure for gas stations so that it is consistent with the health risk assessment procedures for all other source types subject to Air Toxics New Source Review.

[55] See BAAQMD, 2016. Staff Report: Proposed Amendments to Regulation 2, Rule 5, New Source Review of Toxic Air Contaminants. September. Page 24.

Gas stations account for more than 20 percent of Air District-permitted facilities.[56] Bay Area-wide, gas stations and other gasoline dispensing facilities (collectively referred to in this Final Staff Report as gas stations) make up anywhere from five to 15 percent of permitting health risk screening analyses.[57] Gas station emissions include toxic air contaminants such as benzene that can pose health risks to nearby residents and workers. Under Rule 2-5, new gas stations and existing gas stations that propose modifications are required to apply for a permit from the Air District. During the review and evaluation of the permit application, the Air District performs a health risk assessment, which models cancer and non-cancer health risks based on various factors including the proposed project location, the proximity of nearby residents and workers, weather patterns, terrain, and emissions data.

The Proposed Amendments will revise the Air District's Health Risk Assessment Guidelines by updating the health risk assessment procedures for gasoline dispensing facilities to be consistent with health risk assessments that are currently used for other permitted sources and facilities. In 2015, OEHHA approved and adopted updated Health Risk Assessment Guidelines (2015 Guidelines) that are referenced in the Air District's Health Risk Assessment Guidelines. Under the Proposed Amendments, the Air District will update and incorporate the 2015 Guidelines to its evaluation of new and modified gasoline dispensing facility projects. The 2015 Guidelines adjusted multiple factors used to prepare health risk assessments, including breathing rate assumptions, exposure frequency and exposure duration, that in combination will result in higher calculated risks. Fully incorporating all the 2015 OEHHA health risk calculation procedures will result in cancer risk estimates for residents that are about 40 percent higher than the current procedures based on the same level of emissions and will add a new limit on acute impacts. While these changes would not prevent gas stations from renewing permits, they may prevent some existing gas stations from being able to increase throughput or reduce the amount of gasoline throughput that might otherwise be allowed for a new station. The inclusion of acute health impacts in gas station risk assessment procedures may limit the number of dispensers or the maximum hourly pumping rate for new stations.

Furthermore, Air District staff continues to monitor the California Air Resources Board and the California Air Pollution Control Officer's Association as the two entities work to update standardized technical guidance for evaluating health risk from gas station facilities.[58] Although there is no publicly available information at this time on the next steps in these processes, Air District staff is following the update process closely.

Table 2-5-1 Toxic Air Contaminant Trigger Levels: The Proposed Amendments will update Table 2-5-1 with new toxic air contaminants, new and updated health effects values, and new and updated trigger levels. New toxic air contaminants include: carbonyl sulfide, cobalt, 1,6-hexamethylene diisocyanate, and tertiary butyl acetate. Also, zinc chromate will be added as a hexavalent chromium compound. Chronic inhalation reference exposure levels (RELs) or the associated chronic trigger level will be updated for: arsine, mercuric chloride, methylene diphenyl isocyanate, selenium sulfide, toluene, and toluene diisocyanates. Updated chronic trigger levels for methylene diphenyl isocyanate, toluene, and toluene diisocyanates are based on updated chronic RELs developed by OEHHA. OEHHA also developed a new chronic REL for ethylene glycol butyl ether (EGBE). Therefore, this new chronic trigger level will be added to Table 2-5-1.

[56] BAAQMD, 2021. 2020 Annual Report. Page 13.
[57] BAAQMD, 2017-2021 Annual Reports. Gas station heath risk analyses vary year to year.
[58] CARB, 2021. Gasoline Service Station Industrywide Risk Assessment Guidance. Accessed September 2021.

Chronic trigger levels for arsine, mercuric chloride, and selenium sulfide will be updated based on updated molecular weight adjustment factors provided by OEHHA.

In addition, staff is proposing to revise the procedures by which acute trigger levels are determined. Currently, the acute trigger level is determined based on a target acute hazard index of 1.0. The proposed acute trigger levels will instead be based on a target acute hazard index of 0.2, which is consistent with the significant source thresholds in Rule 11-18. This change will impact all compounds in Table 2-5-1 that have an acute reference exposure level. Also, OEHHA revised acute inhalation RELs for ethylene glycol butyl ether (EGBE) and toluene. The updated acute trigger levels for EGBE and toluene will reflect their revised acute RELs. Previously, the acute trigger level for nickel was inadvertently calculated based on its chronic REL. The proposed acute trigger level for nickel reflects the corrected use of the acute REL in the trigger level calculation.

The Air District uses toxic air contaminant emission rate trigger levels to determine the need for health risk assessments for projects involving new and modified sources. The toxic air contaminant trigger levels are considered reasonable de minimis emission rates (acute and chronic) for use at a project-level. Projects with emissions below the toxic air contaminant trigger levels are unlikely to cause, or contribute significantly to, adverse health risks. These toxic air contaminant trigger levels are also used: (1) to establish permit requirements for certain sources that may otherwise qualify for permit exemptions, (2) as part of the applicability of the accelerated permit program, and (3) in determining permit fees.

The proposed toxic air contaminant trigger levels are calculated using: (1) target health risk levels that are considered de minimis for project-level risks; (2) OEHHA health effect values; (3) generally conservative modeling procedures that establish the extent to which a toxic air contaminant is transported and dispersed in the atmosphere after it is emitted from the source; and (4) health-protective assumptions regarding the extent of an individual's exposure to an emitted toxic air contaminant. The current toxic air contaminant trigger levels and the OEHHA health effects data on which these trigger levels were based are identified in Table 2-5-1 Toxic Air Contaminant Trigger Levels in Rule 2-5. Table 2-5-1 was last updated in March 2016.

Since 2016, OEHHA has updated or added non-cancer health effects values for the following four toxic air contaminants:

- ethylene glycol butyl ether (EGBE);
- methylene diphenyl diisocyanate;
- toluene; and
- toluene diisocyanates

In addition, OEHHA has developed health effects values for the following four new toxic air contaminants:

- carbonyl sulfide;
- cobalt;
- 1,6-hexamethylene diisocyanate (HDI) (monomer); and
- tertiary butyl acetate (TBAc)

Carbonyl sulfide is a chemical intermediate and a byproduct of oil refining. Inhalation of carbonyl sulfide results in adverse health effects mainly affecting the central nervous system.

OEHHA has identified cobalt as a carcinogen via inhalation exposure. Most cobalt is used industrially in the form of cobalt metal powder as an alloying component and in the preparation of cobalt salts. Cobalt salts and oxides are used as pigments in the glass and ceramics industries, as catalysts in the oil and chemical industries, as paint and printing ink driers, and as trace metal additives in agriculture and medicine. In the Bay Area, the petroleum industry is one of the main stationary sources that use and/or emit cobalt.

HDI-based polyisocyanates are primarily used as hardeners for automobile and airplane polyurethane spray paints, including primers, sealers, and clear coats. HDI polyisocyanates may also be used in some adhesives. Exposure to HDI monomer vapor and HDI-based polyisocyanate aerosols has been shown to cause adverse effects on the respiratory system.

OEHHA has identified tertiary butyl acetate (TBAc) as a carcinogen via inhalation, dermal and oral exposure. TBAc is commonly used as a solvent in a variety of products including industrial coatings, inks, adhesives, industrial cleaners and degreasers.

The Air District is proposing to incorporate OEHHA's new and updated health effects values into the trigger level calculation procedures. The changes to health effect values will impact acute and chronic trigger levels for eight toxic air contaminants. In addition, acute trigger levels for all toxic air contaminants will be lowered by 80 percent based on the proposal to lower the target health risk level for non-cancer acute hazard index from 1.0 to 0.2. Appendix C contains a detailed description of the procedures that the Air District is using to calculate the acute and chronic trigger levels. The revised trigger levels, health effects data, and toxicity weighting factors will be reflected in Table 2-5-1. The proposed revisions to Table 2-5-1 are identified in Appendix B.

Target Health Risk Levels

For the proposed toxic air contaminant acute trigger levels, the Air District is proposing to lower the target health risk level for non-cancer acute hazard index from 1.0 to 0.2 for all toxic air contaminants; this is an impact equal to 20 percent of the acute reference exposure level. This will lower the acute trigger levels by 80 percent. A target acute hazard index of 0.2 is consistent with the significant risk threshold for facilities, as defined in Regulation 11-18-221.3, and at which a source is required to use best available controls if facility risks exceed Rule 11-18 risk action levels. It is also 20 percent of the project risk limit required under Rule 2-5. For compounds with acute reference exposure levels, the proposed acute trigger levels will generally be 20 percent of the previous value unless the acute reference exposure level was also revised. This revision is necessary for consistency with Rule 11-18 requirements to ensure potentially significant sources of acute health risks are not overlooked in project level health risk assessments.

For the proposed toxic air contaminant chronic trigger levels, the Air District is proposing to maintain the target health risk levels for cancer risk and non-cancer chronic hazard index. For chronic health risk, the Air District uses a cancer risk of one in one million and a non-cancer chronic hazard index of 0.2 as the target health risk levels; these are the risk thresholds at which TBACT is required, as stated in Section 2-5-301.

V. ADDITIONAL REVISIONS CONSIDERED DURING THE RULE DEVELOPMENT PROCESS

In addition to the revisions that will be made by the Proposed Amendments, Air District staff also initially developed three other substantive changes to Rule 2-5 at the public workshop stage. Staff included these draft changes in the workshop draft that was circulated for public review and

comment in July of 2021 and discussed them with interested members of the public at the virtual workshop that was held on August 24, 2021. Staff does not propose action on these three provisions at this time for the reasons discussed below.

A. Draft Amendments to Rule 2-5, Section 2-5-111: Limited Exemption, Emergency Standby Engines

Air District staff sought public feedback during the public workshop stage on a draft amendment that would include toxic air contaminant emissions from emergency operations of emergency standby engines in the permit application health risk evaluation. Staff received comments in numerous forums requesting that the Air District do more to reduce diesel engine emissions. This change would result in a decrease in diesel engine emissions. Air District staff is not proposing action on this provision at this time because staff needs additional time to research how this provision would be structured.

The draft amendments to Rule 2-5 that were circulated for public review in July 2021 proposed to modify Section 2-5-111, which states the requirements for a limited exemption in the rule's applicability to emergency standby engines. Currently, Section 2-5-111 does not apply to toxic air contaminant emissions occurring from emergency operation of standby engines, from initial start-up testing, or from emission testing of emergency standby engines required by the APCO. The draft amendments to Rule 2-5 would modify Section 2-5-111 by proposing to include some number of hours per year of emergency operating time per engine in the health risk assessment rather than exempting all emergency operating time from the health risk assessment.

The draft amendments that were circulated in July did not recommend a number of emergency hours to use for the health risk evaluation. Instead, staff sought feedback on what this number should be. If the Air District considered the health risk from emergency operations in health risk assessments, projected engine health risks would increase due to this change to more accurately account for anticipated emergency use. This proposed change would result in both toxic air contaminant and particulate matter emission reductions, because many more standby engines would be required to install diesel particulate filters to meet either the existing TBACT requirements or the project risk limits in Rule 2-5. It may have also encouraged applicants to explore cleaner back-up power technologies, especially in overburdened communities where the project cancer risk is proposed to be reduced as well.

Staff received multiple comment letters and heard many comments during the public workshop that the Air District should not consider emergency operations during Air Toxics New Source Review. Staff received some suggestions from the public on how the provision could be structured and how to accurately forecast the probable number of emergency hours for an emergency backup engine, but staff will need additional time to collect information before proposing an amendment to Section 2-5-111. In the meantime, there are multiple ongoing efforts at the Air District, including these Proposed Amendments, that will improve the health protectiveness of the rule by requiring increased stringency of the sources that emit toxic air contaminants.

B. New Section 2-5-116: Exemption, Small Gas-Fired Boilers and Similar Combustion Equipment

Staff also introduced draft Section 2-5-116 for public review and comment when the workshop package released in July 2021. Draft Section 2-5-116 would exempt small boilers (less than 10 million British thermal units (MM BTU) per hour capacity if fired on natural gas or other clean fuels or less than 1 MM BTU per hour capacity fired on any gaseous fuels) from the requirement to

undergo a health risk assessment to verify that these small boilers will continue to meet all permit exemption criteria. Staff proposed this change because it does not expect these sources to present any significant health risks, based on modeling experience with these sources, even though toxic air contaminant emissions from these sources may exceed health risk assessment trigger levels. This draft exemption was intended to enable the Air District to focus staff resources on projects that are more likely to have significant health risks.

As discussed in Section IV.A of this Final Staff Report, staff determined these sources, as well as the sources exempted from Rule 2-5 by existing Section 2-5-113, are more appropriately exempted under Regulation 2-1-114.

C. New Section 2-5-231: Acute Receptor

Lastly, staff introduced draft Section 2-5-231 in the July workshop package release as well. Draft Section 2-5-231 would define "acute receptor" to mean "receptors for each offsite location within the modeling domain where an individual person or group of people may reasonably be expected to be exposed to toxic air contaminants for durations as short as one hour." Staff included this definition in the draft rule language in an attempt clarify the applicability of the acute hazard index limit, under the assumption that it would be useful for gas stations that will be subject to acute limits for the first time. However, staff determined that the addition of this definition in the absence of updating other definitions in Rule 2-5 on receptor types could lead to confusion, which the public comments staff received on the draft rule also suggested. Staff therefore will not propose this new definition in Rule 2-5.

VI. POTENTIAL IMPACTS OF THE PROPOSED AMENDMENTS

This section presents estimates of potential impacts associated with the Proposed Amendments. The Proposed Amendments will update the Air Toxics New Source Review Program via Rule 2-5 and update noticing and processing time requirements in the Permitting General Requirements rule (Rule 2-1). Changes to Rule 2-5 will increase the stringency of the program and the number of permit applications requiring a site-specific health risk assessment.

The Air District conducts about 300 health risk assessments per year for a wide variety of new and modified sources of air pollution. Common source types that require health risk assessments include diesel-fired internal combustion engines, other types of combustion operations, and gasoline stations. The Air District also conducts Air Toxics New Source Review health risk assessments for remediation operations, cement plants, concrete batch plants, asphalt plants, petroleum refineries, coating and solvent operations, tanks and loading operations, landfills, wastewater treatment plants, metal melting plants, coffee roasters, and projects at many other types of industrial facilities.

A. Estimates of Potential Impacts from Amendments to Rule 2-5

The Proposed Amendments to Rules 2-1 and 2-5 will increase the stringency of the Air District's Air Toxics New Source Review Program and will increase the transparency of permit evaluations. Staff reviewed information from past permitting projects to contextualize how the Proposed Amendments might impact applications had they been in place at that time. The lookback analysis is not a prediction of the types of projects that will be affected in the future; it is included to provide a perspective on how past projects might have been affected by the more stringent cancer risk

limit of six in one million in Overburdened Communities. The sections below discuss staff's analysis using permitting information from the recent past.

1. Lookback Analysis

This section of the Final Staff Report discusses a lookback analysis that examined the types of projects that would have likely been affected if the proposed changes to Rule 2-5 were in place during the review period. In the lookback review analysis, staff examined the types of permit applications for projects that would emit toxic air contaminants between February 2017 and February 2021, which is the same period that was used for analyses presented in the Concept Paper and Workshop Reports in this rule amendment process and goes back to the last time Rule 2-5 was amended. The analysis examined projects in Bay Area census tracts that scored at or above the 70th percentile in Draft CalEnviroScreen 4.0. Final CalEnviroScreen 4.0 was subsequently released by OEHHA in October 2021. Air District staff reviewed the updates and changes included in the Final CalEnviroScreen 4.0 version and determined that these updates do not result in substantial changes to the lookback analysis, nor do they result in additional affected projects or project types. As stated previously, the lookback analysis is not a prediction of the exact types of projects that will be affected in the future but is included to provide a perspective on how past projects might have been affected by the proposed amendments.

There were about 40 total applications with a cancer risk between six in one million and ten in one million during this period, which translates to about ten projects per year that may need to modify operations, install additional abatement equipment, or consider other options such as moving the proposed source location to comply with the more stringent risk limit in the high-scoring areas.

Table 6: Cancer Risk Assessments for Projects with Cancer Risk of 6-10 in One Million, in High-Scoring Draft CalEnviroScreen 4.0 Communities, Feb. 2017 – Feb. 2021

Project Type	Number of Applications	Approximate Percent of Total
Metal Casting Facility Project	1	<3%
Conveyors/Stockpiles at Waste Facility	1	<3%
Crematory Project	2	5%
Prime Diesel Engines	2	5%
Standby Diesel Engines	19	49%
Gas Station Project	11	28%
Soil Vapor Extraction Project	2	5%
Concrete Manufacturing Facility Project	1	<3%
TOTAL	**39**	**100**

As Table 6 shows, about 80 percent of applications in areas that score highly in CalEnviroScreen are for standby diesel engines or gas stations, with standby diesel engines making up about half of the total projects. These numbers are generally consistent with the breakdown by project type in areas identified through the Air District's Community Health Protection Program and its CARE Program—as well as air permitting trends throughout the Bay Area.[59]

Staff also evaluated the types of facilities that would be subject to the more stringent cancer risk limit in areas that have high scores in CalEnviroScreen. In areas within or near census tracts scoring at or above the 70th percentile in CalEnviroScreen 4.0, there is a wide range of facility

[59] See BAAQMD, 2021. Concept Paper, pages 13-17.

types whose carcinogenic toxic air contaminant emissions would be subject to a more stringent cancer risk limit. Many facilities with applications that have undergone Air Toxic New Source Review permitting have been required to do so because they operate a diesel engine, which emits toxic air contaminants when it operates. Other facilities or operations, such as gas stations, crematories, and soil vapor extraction systems may release toxic air contaminants during operations. Most of the Proposed Amendments to both Rule 2-5 (on Air Toxics New Source Review requirements) and Rule 2-1 (on notifications) would only apply to sources undergoing Air Toxics New Source Review. However, the Proposed Amendments to Rule 2-1 regarding permit application completeness review periods and application processing time will impact all permit applications.

2. Emissions or Exposure Reductions

When a health risk assessment exceeds the maximum risk level, there are several options available to the permit applicant to reduce health risk from the proposed source. [60] The applicant could reduce operating hours or throughput rates, which is the most common and least expensive toxic emission reduction method available.[61] Reducing operating hours or throughput rates may be feasible, but below a certain point these changes may not be cost effective to install the source, or the source may not be able to operate below a baseline number of hours or throughput level. Alternatively, or in conjunction with the option above, the applicant could reduce the emission rate to comply with the health risk limits. Reducing emission rates may require a permit applicant to install an abatement device or an enclosure to control emissions. Diesel particulate filters can be used to reduce diesel particulate matter emissions. Carbon adsorbers reduce organic toxic air contaminant emissions such as benzene and perchloroethylene. Oxidation catalysts may be used on combustion devices to reduce formaldehyde emissions. Enclosures and baghouses may be used to capture and control particulate matter that contains toxic metals.

Additionally, a permit applicant could change project plans to reduce exposure to individuals. An applicant may also be able to increase the height of the stack from which emissions are exhausted or relocate the source farther away from where people could be exposed to the emissions. Enclosing a fugitive emission source and venting it through a stack or changing stack orientations to encourage dispersion of contaminants in the atmosphere. Changing the time of day that a source is operating to avoid exposing people nearby (for example, prohibiting diesel operations near schools during the times that children are there) is another way to reduce exposure.

Finally, the permit applicant may decide to completely change the project (for example, use an alternative type of back-up power to a standby diesel engine) or cancel the permit application if the applicant decides that it would be too costly to meet the cancer risk limit. The applicant could re-apply to install the project elsewhere, or the applicant may cancel the project altogether or construct the project outside of the Bay Area.

The subsections below briefly discuss the two most common types of projects that are expected to be affected by the more stringent risk limit based upon permitting trends: diesel engines and gas stations.

[60] As explained in BAAQMD, 2016. Regulation 2, Rule 5 Staff Report. September. Page 29.
[61] Throughput generally means the amount of something that passes through something else, such as the amount of diesel fuel that passes through a diesel engine to power it.

a) Diesel Engines

As discussed in the Workshop Report, diesel engines make up the largest share of applications that have cancer risk.[62] Diesel engines are used for many purposes, such as providing prime and backup power for facilities such as data centers, fire stations, hospitals, hotels, residential housing operations, and airport operations, to name just a few. The sections below state the potential impacts of the Proposed Amendments on diesel engine projects.

(1) Potential Impacts of Changes to the Cancer Risk Limit in High-Scoring CalEnviroScreen Census Tracts

Historical information on health risk assessments prepared for emergency engine projects showed that of the 19 applications in Overburdened Communities with a cancer risk exceeding six in one million between February 2017 and February 2021, the average cancer risk value was 7.9 in one million, with a median value of 7.6 in one million. Nineteen applications per year over four years means that about five projects per year would have needed to be revised to meet the more stringent cancer risk limit in Overburdened Communities had the proposed risk limit discussed in this Final Staff Report been in place at that time.

As described above, cancer risk from diesel engine operations can be reduced by limiting throughput or operating hours or installing diesel particulate filters to catch particles before they enter the ambient air. Exposure can be lessened by increasing stack height.[63] In 2016, staff compiled a list of types of controls and typical control costs for reducing toxic air contaminant emissions or exposures. Staff assessed the price of diesel particulate filter controls to be within the range of $3,500 and $11,400 per year, in 2016 dollars.[64] After adjusting for inflation, typical annualized compliance costs for diesel particulate filters are estimated to range from $4,000 to $13,000 per engine, with maximum annualized control costs of up to $72,000 per engine for facilities needing to retrofit older model engines or larger engines.[65]

In 2020, the Air District updated the BACT Guideline for emergency backup engines greater than or equal to 1,000 brake horsepower to U.S. Environmental Protection Agency Tier 4 emissions standards, which is the U.S. EPA's most stringent emission standard.[66] For engines of this size, the Best Available Control Technology is the same as the Best Available Control Technology for Toxics.[67] At present, there are over 2,000 diesel emergency backup engines that are 1,000 brake horsepower or larger in the Bay Area, out of a total of nearly 8,000 diesel emergency backup engines in the region.[68] This means that permit applicants that wish to install a new engine of this size or modify an existing engine that does not meet this requirement will need to meet the more stringent Tier 4 emissions standard. There are several ways to comply with the Tier 4 emission standard, including: purchasing an EPA-certified Tier 4 engine, purchasing a Tier 4-compliant

[62] BAAQMD, 2021. Workshop Report: Draft Amendments to Rules 2-1 and 2-5. July. Page 31.
[63] See BAAQMD, 2016. Regulation 2, Rule 5 Staff Report. September. Page 31.
[64] See BAAQMD, 2016. Regulation 2, Rule 5 Staff Report. September. Page 31.
[65] See Appendix E, Socioeconomic Impacts Analysis.
[66] BAAQMD, 2020. BACT/TBACT Workbook: I.C. Engine – Compression Ignition, Emergency ≥1000 hp. December.
[67] BAAQMD, 2020. BACT/TBACT Workbook: I.C. Engine – Compression Ignition, Emergency ≥1000 hp. December.
[68] BAAQMD, 2021. Presentation on Best Available Control Technology for Large Standby Diesel Engines. March. Slide 6.

engine that is packaged by the engine manufacturer with abatement equipment, or retrofitting a Tier 2 engine with aftermarket abatement equipment from a third-party vendor.[69]

b) Gas Stations

Gas stations undergoing Air Toxics New Source Review will be affected by the proposed updates to the Air District's Health Risk Assessment Guidelines. As mentioned above, incorporation of the 2015 OEHHA health risk calculation procedures for gas stations as recommended in the Proposed Amendments will show that cancer risk increases by about 40 percent for projects where the maximally exposed individual is a residential receptor and will add a new limit on acute impacts.[70] In addition, gas stations that are located in areas that score highly on CalEnviroScreen will also need to comply with a more stringent cancer risk limit. As Table 6 above indicates, applicants seeking permits for gas station projects made up about 30 percent of overall applications in high scoring areas, or about three projects per year in these areas.

In high-scoring CalEnviroScreen locations, the average cancer risk value for the 11 projects since February 2017 that had a cancer risk value exceeding six in one million was 9.1 in one million. Also, because the proposed changes to the Health Risk Assessment Guidelines would increase cancer risk where the maximally exposed individual is a residential receptor, it is likely that some gas station projects that were below six in one million would have exceeded the limit due to the updated risk calculation guidelines. Given this information, staff expects that there would have been about three projects per year based on the lookback analysis that may have needed to undergo revisions to meet the more stringent risk limits in Overburdened Communities. Staff's estimate does not include gas station projects that might exceed the new limit on acute impacts, because current risk assessment procedures do not take this into account.

Staff also analyzed the number of gas station projects within and outside of Overburdened Communities that might be impacted by a more stringent cancer risk assessment. A 40 percent increase in cancer risk for residential receptors likely means that many projects would still be below the cancer risk limit of ten in one million outside of Overburdened Communities, but the analysis indicates that about six gas station projects per year might have exceeded the ten in one million risk limit and required changes to comply with the limit. Table 7 below provides a summary of the number of health risk assessments that would have exceeded the proposed limits if they had been in place during the lookback analysis period.

Table 7: Cancer Risk Exceedances from Gas Station Projects During Historical Lookback Period, Assuming HRA Procedure Changes and More Stringent Risk Limit in Overburdened Communities

Location	Number of Health Risk Assessments Exceeding Limit Per Year*
Overburdened Communities	3
Outside Overburdened Communities	6

[69] BAAQMD, 2021. Presentation on Best Available Control Technology for Large Standby Diesel Engines. March. Slide 14.

[70] Health risk assessments consider the type of individual (for example, resident, worker, student, etc.) when assessing health risk. Rule 2-5 defines the receptor types that are considered in health risk assessments. A "residential receptor" is defined in Section 2-5-220 to mean any receptor location where an individual may reside for a period of six months or more out of a year.

*Assumes the limit in Overburdened Communities of 6 in a million and the limit elsewhere remains 10 in a million.

Controls available to address toxic air contaminant emissions from gas stations include limiting the throughput rate, or in the case of new proposed gas stations, possibly revising source locations so that emissions sources are located farther from where people are likely to be exposed.[71] Costs borne by the applicant to reduce risk include the potential for reduced profitability as a result of limited throughput. Revisions to source locations could have consequences for overall construction planning and costs.

3. Overall Impacts of Updates to Rule 2-5 Table 2-5-1: Toxic Air Contaminant Trigger Levels

Proposed changes to Table 2-5-1 within Rule 2-5 include updates to toxic air contaminant trigger levels, including updates to the list of toxic air contaminants that are regulated under Rule 2-5. Updates to Table 2-5-1, which are shown in Appendix B, also reflect new and revised health effects values adopted by OEHHA as of June 30, 2021. In addition, proposed acute trigger levels are updated based on an acute target hazard index of 0.20, which is consistent with the Air District's Rule 11-18 significant source threshold of an acute hazard index of 0.20. Previous acute trigger levels were based on a target hazard index of 1.0.

For non-carcinogenic compounds and compounds with non-cancer impacts, the acute and chronic trigger levels will change in proportion to the change in the OEHHA reference exposure levels (RELs) for that compound. In addition, based on lowering the target acute hazard index from 1.0 to 0.2, the proposed toxic air contaminant acute trigger levels will decrease by 80 percent. The proposed acute trigger levels will generally be 20 percent of the previous value unless the acute reference exposure level was also revised. These lower trigger levels will result in more proposed projects requiring health risk assessments; however, staff expects that number to be small. Staff review of permit evaluations over the past five years showed that there were no projects during that period in which acute impacts were the sole driver of the trigger level exceedance. In over 90 percent of situations where a health risk assessment is required, carcinogenic emissions are the health risk driver; fewer than ten percent of health risk assessments are required because of a non-cancer trigger level exceedance. In those cases where the risk driver for the health risk assessment requirement is a noncancer toxic air contaminant emission, there was no large group of project types that were primarily responsible for exceeding the risk trigger. Staff found that hydrogen sulfide emissions from some projects at wastewater treatment plants considerably exceeded the existing acute trigger level. Staff found that some fumigation projects with noncancer toxic air contaminant emissions exceeded chronic emissions trigger levels (but not acute trigger levels). Finally, staff found that one wave solder machine project exceeded risk trigger levels. In summary, staff found that only about five projects per year required health risk assessments because of noncancer toxic air contaminant trigger level emissions exceedances. Of those projects, acute impacts were either not the risk driver or greatly exceeded the current acute trigger level, such that lowering the acute trigger level is expected to result in, at most, a small change in the overall number of health risk assessments.

The following four compounds were added to Table 2-5-1: carbonyl sulfide; cobalt; 1,6-hexamethylene diisocyanate (monomer); and tertiary butyl acetate (TBAc). With the addition of these compounds, more proposed projects will require health risk assessments, although staff

[71] See BAAQMD, 2016. Regulation 2, Rule 5 Staff Report. September. Page 31.

does not have sufficient information to know how many health risk assessments will be required because of this change.

B. Estimates of Potential Impacts from Proposed Changes to Rule 2-1

Proposed changes to Rule 2-1 include a new definition for Overburdened Community, a new notice requirement for projects that require health risk assessments and an extension of the completeness review time for permit applications and the time to notify a permit applicant on the determination of whether the Air District will approve or deny the application.

1. Public Notifications of Permit Applications

A requirement to notify residents who live within 1,000 feet of a proposed project that would require a health risk assessment due to toxic air contaminant emissions in the highest-scoring CalEnviroScreen 4.0 census tracts would probably require Air District staff to oversee about 66 additional notifications and response to comment periods per year. As described above, to arrive at this estimate, staff reviewed projects for which health risk assessments had been prepared since the last time Rule 2-5 had been updated. A diverse array of projects would have been included, such as projects at concrete batch plants, backup diesel engine projects, soil vapor extraction projects, projects involving gas stations, and paint repair booth projects, to name several representative project types.

To recover costs, staff would attach a public notice fee for any notification that is required under the proposed notification section in Rule 2-1. Staff anticipates that the fee structure, including the fee amount, would be similar to the fee that is assessed for school notifications under Section 2-1-412. Under the school notification process, an applicant whose project requires a public notification is required to pay a fee to the Air District to carry out the notification process. The fee that is paid by the applicant covers the cost of preparing and delivering physical mail copies of the notice to the intended addresses.[72] The Air District would refund the applicant for the portion of the fee that the applicant pays to the Air District but is not necessary for preparation and distribution of the notice. To include the fee portion of the enhanced notification requirement in Overburdened Communities, the Air District will need to update Regulation 3: Fees. At this point in time, the fee applicants must pay to comply with Regulation 2-1-412 is $2,272 per application, however, that amount may be different based upon staff's continued analysis of administrative impacts of the proposed amendment to the notification section.[73] Finally, public notices add about two to three months (more time if there are many public comments) to the overall processing time for permit applications that trigger a noticing requirement.

2. Extension of Time for Action on Applications

As mentioned earlier in this document, to account for past regulatory changes that have resulted in significantly more complex engineering evaluations, many of which include health risk assessments, the proposed changes to Rule 2-5, the changes to the notification procedures, and increasing constraints on staff due to implementation of multiple new programs over the recent past, staff proposes increasing permit application review times. The proposed changes include increasing the completeness review time for most permit applications from 21 days to 30 days and increasing the completeness review time for new or modified major facility applications from 30 days to 60 days. The proposed changes also include extending the application review period

[72] See Regulation 2-1-412, see also Regulation 3-318.
[73] Regulation 3-318.

from 49 days to 90 days for routine applications that are exempt from CEQA review, do not trigger public noticing, and are not located at facilities required to have Title V or Synthetic Minor operating permits. A default review time of 180-days is being added for all other types of applications. These extensions will realign the Permitting Regulation with timelines that are more conducive to fulfilling the goal of high-quality evaluations of permit applications that are more realistic in terms of its time expectations and that are consistent with review periods for other air districts.

Despite Engineering Division staff resource challenges during the last three years, staff maintained an average completeness review time of 23 days for applications that are not located at Title V facilities and that are not subject to public noticing. Also, 86 percent of these applications (out of a total of 1730 applications) were reviewed for completeness within a 30-day time period. Similar completeness review period results were found for applications at Title V facilities.

For New Source Review applications not subject to Title V or public noticing requirements, the average application review period (from date of completeness to date of issuance) was 51 days, with 85 percent of applications reviewed within 90 days and 95 percent of applications reviewed within 180 days. Statistics for applications at Title V facilities were more variable and reflect the increased complexity of the review for these facilities. The average review period for Title V facilities has been 145 days over the last five years with 81 percent of the applications reviewed within the proposed 180-day review period.

Additional Engineering Division staff resources that previously approved combined with the additional staff resources requested for implementation of these rule changes are expected to ensure that all applications can be reviewed within the proposed time periods.

Over the short term, applicants may need to update their estimates of project timelines. However, over the long term, these timeline changes will improve transparency and allow applicants to better estimate permit processing timelines. Therefore, these timeline changes are not expected to have adverse impacts to applicants.

VII. ECONOMIC IMPACTS

The California Health and Safety Code generally requires two different economic analyses for proposed regulations by an air district. The first (Health and Safety Code Section 40728.5) is a socioeconomic analysis of the adverse impacts of compliance with the proposed regulation on affected industries and business. Table 8 in Section VII.A of this report lists the estimated costs of compliance with each element of the proposed amendments to Rules 2-1 and 2-5 that have a significant cost. Section VII.B of this report discusses the required socioeconomic analysis that is based on the costs in Section VII.A. Section VII.C of this report discusses the incremental cost analysis. Section VII.D of this report discusses the anticipated impacts to Air District staff resources, and Section VII.E discusses the Air District's Cost Recovery Policy.

The Proposed Amendments apply to projects that are subject to Air Toxics New Source Review. The Proposed Amendments will not require facilities to retrofit existing equipment unless that equipment is subject to Air Toxics New Source Review. The cost information presented in the sections below uses historical Air District information from February 2017 through February 2021 on projects subject to Rules 2-1 and 2-5.

A. Cost of Compliance

Table 8 below presents the estimated compliance costs based upon Air District information from past projects. The information is based on staff estimates of control costs based on previously permitted projects, information from vendors, or information from permitted facilities.

Table 8 – Compliance Costs for Proposed Revisions to Rule 2-5

Type of Control	**Typical Control Costs** ($ per year)	**Maximum Control Cost** ($ per year)
Limiting Throughput or Operating Hours	$0/year	Potential for Reduced Profitability
Diesel Particulate Filters	$4,000 - $13,000	$72,000
Thermal Oxidizer	$35,000 - $361,000	$688,000
Increase Stack Height	$1,700	Not Available
Baghouse	$76,000 - $1,184,000	$2,292,000
Stockpile Water Spray System and/or Mobile Water Spray System	$31,000 - $130,000	Not Available

Projects subject to Air Toxics New Source Review may also be subject to the proposed changes to Rule 2-1, Section 2-1-412, which will require public noticing of projects in Overburdened Communities that would result in an increase in toxic air contaminant emissions. As discussed in Section IV.A of this Final Staff Report, the requirement would only apply to projects that require health risk assessments and would require the same type of notification that is currently required for projects that will result in an increase in toxic air contaminant emissions that are proposed to be located near K-12 schools. Applicants that propose projects that will require a health risk assessment will need to distribute the notice to surrounding addresses located within 1,000 feet of the proposed source. Compliance costs for the enhanced notification requirement would be one-time costs and average annualized compliance costs would be minimal.

B. Socioeconomic Impacts

Section 40728.5 of the California Health and Safety Code requires an air district to assess the socioeconomic impacts of the adoption, amendment, or repeal of a rule if the rule is one that "will significantly affect air quality or emissions limitations." BAE Urban Economics of Berkeley, California prepared a socioeconomic impacts analysis of the proposed revisions to Rules 2-1 and 2-5. This analysis is based on the costs of compliance with the proposed rule amendments discussed in Sections IV.A and IV.B of this Final Staff Report. The analysis is attached to this Final Staff Report as Appendix E.

1. Businesses Affected

The socioeconomic analysis concludes that, on average, the Proposed Amendments would not result in significant economic impacts. However, they could potentially result in significant economic impacts for several individual industries, as discussed below. Economic impacts are deemed significant if the compliance costs exceed ten percent of the profits for a specific industry type.[74] For this analysis, the socioeconomic analysis assumed that projects would use the most

[74] Berck, P. Development of a Methodology to Assess the Economic Impact Required by SB 513/AB 969. August.

expensive compliance option, except for diesel particulate filters for diesel engines, which use the typical high cost rather than the maximum control cost. For each of the industries listed below, less expensive compliance options are available. The impacts discussion is split into two parts. One part focuses on potential impacts to businesses other than gas stations that might be affected by the more stringent cancer risk in Overburdened Communities, and a second part that focuses on impacts to gas stations, which will be impacted by the more stringent cancer risk limit in Overburdened Communities in addition to the updated health risk assessment procedure.

a) Projects in Overburdened Communities Other Than Gas Station Projects

According to the socioeconomic analysis, a variety of industry types may need to install diesel particulate filters on emergency standby engines to meet the more stringent cancer risk requirement in Overburdened Communities. The socioeconomic analysis shows typical low costs of installation of a diesel particulate filter, typical high cost, and the maximum control cost. There are no compliance costs exceeding ten percent under the typical low-cost scenario. Under the typical high-cost scenario, the Nursing and Residential Care Services industry would exceed the ten percent compliance cost threshold. Finally, under the maximum control cost scenario, lessors of residential buildings and dwellings, wired and wireless telecommunications carriers, and nursing and residential care services industries would each encounter costs above the ten percent threshold.

Next, projects that involve soil vapor extraction systems may require controls to reduce toxic air contaminant emissions. Possible controls for soil vapor extraction projects include limiting the throughput rate or operating time, installing carbon adsorbers, installing thermal or catalytic oxidizers, increasing the stack height, or revising the source location. The socioeconomic analysis analyzed the cost of compliance of a thermal oxidizer, which is likely the highest-cost solution. For this control technology, the average lessor of commercial buildings would exceed the ten percent compliance cost threshold under the average cost scenario. Additionally, for remediation services businesses, impacts would be significant. However, these businesses are typically larger full-service firms that are hired to complete remediation projects for other parties that would absorb the increased costs of the Proposed Amendments. Thus, businesses in this industry would not be negatively impacted under the analysis.

Foundry facilities may be impacted by the Proposed Amendments, based on the project lookback analysis and the socioeconomic analysis of potentially impacted projects. If a facility installed baghouses with high-efficiency particulate absorbing (HEPA) filters and carbon adsorbers, the impacts on profits would be slightly above the threshold of significance for the average metal casting establishment under the low-cost scenario, at just over ten percent of profits. If a facility chooses to install equipment at the average- or high-cost levels, the impacts on profits would be significant, ranging from 162.2 percent of profits under the average-cost scenario to 313.9 percent of profits under the high-cost scenario. However, it is important to note that some facilities might be able to undertake no- or lower-cost alternatives such as increased stack height or reduced operating hours to meet the revised rule. Thus, the impacts described in the socioeconomic analysis likely reflect the worst-case compliance cost impacts on these businesses.

At waste facilities, compliance costs for a stockpile spray system are below the level of significance, on average. However, for the higher cost mobile truck system option, compliance costs would be above the level of significance for the average business in this industry, at 23.0 percent.

Finally, projects at concrete batching facilities may include limiting throughput rate or operating time, installing enclosures and baghouses, water spray systems, increasing stack height, or revising source location. The socioeconomic analysis assumes the use of an additional water spray system, which is consistent with past permitting trends. Like the analysis for waste facilities, low- and high-cost estimates are assessed to show the full range of potential impacts. The resulting analysis shows profit impacts that are above the significance threshold under the high-cost scenario, with an estimated impact at 38.7 percent.

b) Projects at Gas Stations Within and Outside of Overburdened Communities

Since the control measure for gasoline stations is limited to reducing throughput, there are no compliance costs to estimate as a share of profits for these facilities, however, the lookback analysis indicates that a small number of projects would have been impacted by the proposed changes to cancer risk in Overburdened Communities and risk assessment procedures. As discussed in Section VI.A of this Final Staff Report, the lookback analysis showed that 11 gas station projects in Overburdened Communities would have been impacted by the more stringent cancer risk limit. For those 11 projects, the socioeconomic analysis found that two projects would have been adversely impacted by the more stringent cancer risk limit and health risk assessment procedures. One of those projects would have had to reduce its actual throughput by about 25 percent, assuming no alternatives existed to reduce cancer risk. For that facility, the socioeconomic analysis estimated a net impact on profits of about $183,000.

The lookback analysis indicated that about 20 gas station projects would have exceeded the ten in one million cancer risk limit outside of Overburdened Communities because of the proposed revisions to the health risk assessment procedures. Of those 20 facilities, one facility would have needed to reduce its actual throughput by about 13 percent to meet the cancer risk limit of ten in one million, in the absence of other risk-reducing alternatives. For that facility, the socioeconomic analysis estimated a net impact on profits of about $16,000 per year.

2. Impact on Employment and the Economy

Assuming the businesses would close rather than implement the above controls or modify the project to use less expensive controls, the annual lost sales from these industries would be $1.3 million plus a loss of five jobs. Including potential indirect and induced impacts on the region results in a total regional impact of $2.1 million in annual sales losses and just over eight job losses. The IMPLAN model estimates that the gross regional product from the nine counties in the Bay Area is approximately $1.028 trillion annually. The total direct, indirect, and induced impacts from these potentially affected industries is equal to about .0002 percent of the Bay Area region's gross regional product.

Although it is not possible to predict how many future affected projects would be classified as small businesses based on the permits that were issued between February 2017 and February 2021, small businesses in the following industries would have been affected by the reduced cancer risk limit in high scoring areas:

- NAICS 623, Nursing and Residential Care Facilities
- NAICS 4471, Gasoline Stations
- NAICS 325314, Fertilizer (Mixing Only)
- NAICS 562910, Remediation Services
- NAICS 812220, Cemeteries and Crematories

While staff does not expect the Proposed Amendments to have any significant economic impacts on the Bay Area region overall, staff anticipates that economic impacts may be significant for several industry types and five small business types based on the Air District's lookback analysis. This analysis was based on worst-case assumptions, such as use of the most expensive control technology and closure of the business in response to rule requirements. The Air District notes that less expensive control options are available, and that business will typically choose project modification rather than business closure. While significant socioeconomic impacts are possible for the industry types and small business noted above, significant socioeconomic impacts are not a likely outcome. It should be noted that the costs and economic impacts analyzed in this section are not costs associated with the compliance with a retrofit control requirement but are instead the potential cost of installing new equipment that is not already in place or modifying existing equipment. From this perspective, a substantial portion of the costs due to the Proposed Amendments could be considered optional where the project applicant may have other means of accomplishing its intended goal. Several of these options were mentioned above in this Final Staff Report.

3. Range of Probable Costs of Regulation

The socioeconomic impacts analysis report in Appendix E provides ranges of probable costs to comply with the Proposed Amendments. The range of probable costs is specified by the potential control option, which may vary depending upon the type of equipment or operation for which the applicant seeks a permit from the Air District.

4. Availability of Cost-Effective Alternatives

There are no alternatives that will satisfy the goals and objectives of the Proposed Amendments with less cost. The Air District lacks regulatory authority over other sources of pollution that may contribute to exposures to airborne toxic air contaminant emissions, such as mobile sources. Mandated reductions by the Air District are necessary to ensure that future sources subject to Air District permitting authority will have reduced health risks.

5. Emission Reductions

The Proposed Amendments will mean that some projects will be subject to more stringent health risk limits with the intention of reducing air pollution exposure and associated health impacts. The discussion on the Proposed Amendments in Section IV.B of this Final Staff Report describes the more stringent health risk limits for projects that are subject to Rule 2-5. The Proposed Amendments would make the cancer risk limit 40 percent more stringent for projects subject to Rule 2-5 that would be located in Overburdened Communities. The Proposed Amendments would also update the Air District's Health Risk Guidelines such that gas station projects would be evaluated using a more stringent risk evaluation methodology, which would likely result in fewer toxic air contaminant emissions from gas station projects than under the status quo. Updates to the Health Effects Values in Table 2-5-1 would mean that health risk assessments would be required more often for projects that exceed the revised trigger levels or may emit newly added toxic air contaminants. The net effect of these changes, from an air quality perspective, is that project applicants would need to comply with more stringent risk limits in Overburdened Communities, and health risk from proposed projects would be more health protective regionwide. In Overburdened Communities, projects that would have been permitted with a cancer risk above six in one million would no longer be permitted; the permit applicant would need to reduce cancer risk from the project to be issued a permit. As described in the lookback analysis in Section VI of this Final Staff Report, about forty projects would have needed to reduce cancer risk from the

more stringent cancer risk limit proposed in Overburdened Communities under these Proposed Amendments.

6. Necessity

As discussed in Section XI of this Final Staff Report, the Proposed Amendments are necessary to reduce health risks from toxic air contaminants both in areas that experience high levels of cumulative impacts and throughout the Bay Area, ensure conformance with statewide health risk assessment and risk management guidance, and improve transparency of the Air District's permit application and review process. The reasons why the Proposed Amendments are necessary are discussed in detail in Section XI of this Final Staff Report.

C. Air District Impacts

Staff anticipates that the Proposed Amendments will require additional staff time and resources in a number of areas. Additional Air District Engineering Division resources will be necessary due to more extensive engineering and health risk assessment reviews for permit applications for projects located in overburdened communities due to the potential need to refine projects to meet the proposed lower cancer risk limit for overburdened facilities. Engineering and possibly Community Engagement Division resources will also be necessary to implement the additional public noticing requirements for overburdened facilities. Additional Engineering Division resources will be required to incorporate the updated Health Risk Assessment Guidelines into the gasoline dispensing facility program and to handle the more extensive health risk assessments that will be required for gas stations. Adding additional toxic air contaminants and updating health effects values are expected to result in a small number of additional health risk assessments per year. Air District Engineering Division resources may also be required for the processing and evaluation of permit applications for installations of new air pollution control equipment and abatement devices. And finally, Engineering Division resources will be needed to reduce overall application review times to ensure that the proposed review times are achieved for all permit applications. Overall, staff expects that eight (8) Engineering Division full-time equivalents (FTEs) will be needed to fully and properly implement the proposed amendments to Rule 2-1 and Rule 2-5.

Staff also anticipates additional staff resources will be necessary in the Air District Meteorology and Measurement Division. These resources will be needed to review monitoring and testing reports submitted, and to verify compliance with testing and monitoring procedures. Additional resources would be required to coordinate and conduct testing at the affected facilities. This may involve the procurement of additional equipment, instrumentation, and testing infrastructure, and ongoing costs for additional staffing to conduct testing. Staff will need at least three (3) FTEs for the Source Test group to properly implement the Proposed Amendments.

Furthermore, at least one (1) additional FTE will be necessary for the Air District's Compliance and Enforcement Division to oversee additional compliance activities associated with implementing the Proposed Amendments. Compliance and Enforcement Division resources may be required for review and documentation of any rule requirements that are not met and may also be required for assistance in the evaluation of permit applications for any air pollution control equipment installations.

As mentioned below in Section VII.E of this Final Staff Report, Air District staff will propose updated fee requirements in Regulation 3: Fees for the Air District Board of Directors' consideration for adoption in 2022, which will likely take effect on July 1, 2022. The forthcoming

proposed amendments to Regulation 3: Fees will update fee requirements for the proposed additional public notification processing requirements and health risk assessment requirements that this Final Staff Report describes. Therefore, staff recommends that the Proposed Amendments not take effect until the 2022 amendments to Regulation 3 take effect, on July 1, 2022.

D. Air District Cost Recovery

The Air District has the authority to assess fees to regulated entities for the purpose of recovering the reasonable costs of implementing and enforcing applicable regulatory requirements. In 2012, the Air District's Board of Directors adopted a Cost Recovery Policy which specifies that 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.

In accordance with the adopted Cost Recovery Policy, the Air District assesses risk screening fees for new and modified sources that are required to undergo health risk assessments under Rule 2-5. The risk screening fees in Regulation 3: Fees will need to be updated to incorporate the increased administrative time that will be necessary to process applications to comply with the revised, more stringent rule. Regulation 3 will also need to be updated to reflect the proposed change in Rule 2-1 to require notifications for projects that require health risk assessments in Overburdened Communities. As discussed in Final Staff Report Section VII.D above, staff recommends incorporating a future effective date of July 1, 2022, for the Proposed Amendments to ensure consistency and cost recovery.

VIII. REGULATORY IMPACTS

Section 40727.2 of the California Health and Safety Code requires an air district, in adopting, amending, or repealing an air district regulation, to identify existing federal and air district air pollution control requirements for the equipment or source type affected by a 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 changes.

There are currently no federal or state New Source Review regulations specific to toxic air contaminants. State Air Toxic Control Measures and National Emission Standards for Hazardous Air Pollutants regulate some of the same types of stationary sources (e.g., diesel engines, gasoline stations) as the types of stationary sources that are commonly subject to Air District Air Toxics New Source Review. However, the Air District would apply these state and federal standards during the permit evaluation. Rule 2-5, Section 2-5-301 requires TBACT at certain risk levels; TBACT would be at least as stringent as state and federal requirements. In fact, the California Air Resources Board has often stated that Air Toxic Control Measure standards are Best Available Control Technology for Toxics and the Air District generally agrees but occasionally establishes Best Available Control Technology levels for particular sources that are more stringent than Air Toxic Control Measure standards. Rule 2-5, Sections 2-5-302 and 2-5-303 establish health risk-based limits for New Source Review projects. There are no federal or state health risk-based limits that apply on a project level basis. The Air District has established public notification levels and mandatory risk reduction levels through the California Air Toxics "Hot Spots" Act of 1987, but the risk reduction levels in this program apply on a facility wide basis. In cases where a project represents the entire facility's toxic emissions, the Rule 2-5 project risk limits are at least as stringent as the "Hot Spots" requirements.

IX. ENVIRONMENTAL IMPACTS

The Proposed Amendments improve the health protectiveness of the Air District's Air Toxics New Source Review Program and increase transparency of the permit application evaluation process. Therefore, the Proposed Amendments will help support positive environmental benefits. The Air District is still required to evaluate the potential for the Proposed Amendments to have ancillary negative environmental impacts, however, notwithstanding these air quality benefits. This requirement is imposed by the California Environmental Quality Act (CEQA), Public Resources Code Section 21800 *et seq.*, as well as the CEQA Guidelines that have been adopted by the Air District to help implement the statutory provisions of CEQA.

To address these requirements under CEQA, the Air District contracted with Environmental Audit, Inc., of Placentia, California, an environmental consultant, to prepare a CEQA Initial Study to evaluate the potential for significant adverse environmental impacts as a result of the implementation of the Proposed Amendments. This Initial Study has been published in conjunction with this Final Staff Report and the Proposed Amendments. The Initial Study found that there is no substantial evidence suggesting that the Proposed Amendments will have any significant adverse environmental impacts. Accordingly, Air District staff prepared a proposed Negative Declaration under CEQA for consideration by the Board of Directors, which is included in Appendix F to this Final Staff Report.

Air District staff will present the proposed Negative Declaration for consideration by the Board of Directors, along with the Initial Study, all the supporting information in the record, and any comments from interested members of the public. After considering this information, if the Board determines in its own independent judgment there is no substantial evidence that the project will have a significant effect on the environment, it may adopt the Negative Declaration to support its approval of the Proposed Amendments. Interested members of the public are encouraged to review and comment on the Initial Study and proposed Negative Declaration, and to provide any comments to Air District staff and to the Board of Directors.

X. RULE DEVELOPMENT / PUBLIC PARTICIPATION PROCESS

The Proposed Amendments are the product of several years of work by Air District staff with input from a large number of interested stakeholders, including representatives from environmental and community public health advocacy organizations, representatives from the regulated community and industry groups, and interested members of the public. Engagement and participation by these stakeholders resulted in significant improvements to the Proposed Amendments as they have evolved during this process.

Air District staff began this regulatory amendment effort in 2018 after Air District leadership committed to evaluating the Air District's permitting process to try to reduce disproportionate air pollution impacts in communities that already experience relatively high levels of environmental burdens and public health vulnerability. To receive initial input on considerations for evaluating potential amendments to the permitting rules, staff met with community organizations that actively advocate for public health and air quality measures at the regional and local levels. Air District staff met with representatives from the organizations listed in Table 9 below to receive feedback on the Air District's permitting process and how the process could be improved to further protect public health.

Table 9 – Community Outreach Organizations

Geographic Region	Community Organization/Neighborhood Name
Carquinez Corridor	All Positives Possible
	Fresh Air Vallejo
	Bayo Vista (neighborhood residents)
Suisun Bay	La Clínica
Eastern San Francisco	Bayview Hunters Point Community Advocates
East Oakland	Communities for a Better Environment (East Oakland and Richmond)
	Rose Foundation/New Voices Are Rising
	Regional Asthma Management & Prevention
Tri-Valley	Tri-Valley Air Quality Alliance
South Bay	Breathe California
North Bay	Daily Acts

Air District staff noted the following overall suggestions from community advocates:

- Incorporate into the Permitting Regulation a way to assess the impacts on the surrounding community from a proposed project;
- Make the requirements for permitting more stringent, paying particular attention to communities that experience high levels of pollution burden and health vulnerabilities; and
- Consider that some communities already experience unacceptably high levels of background air pollution, which leads to elevated health risk in the community.

Community representatives urged the Air District to introduce potential concepts for public review and discussion prior to drafting amendments to regulatory text. On April 21, 2021, staff published on the Air District website a Concept Paper and accompanying appendices that further explain the Air District's Permitting Regulation, permitting regulatory processes at several other large California air districts, and a Frequently Asked Questions document. Air District staff also sent notification by email to all contacts on the Air District's lists of potentially interested parties.

Air District staff then held a virtual public workshop on May 12, 2021, to discuss the proposed concepts to amend the Permitting Regulation. The public workshop included a presentation by Air District staff explaining the reasons for the proposed concepts; a description of the concepts; and what the concepts might mean for Bay Area air quality, potentially affected facilities, and for the public at large. Staff requested feedback from workshop participants and included time after the presentation to hear feedback and respond to questions. Over 100 participants attended the workshop on the proposed concepts.

Air District staff also solicited written comments on the drafts published for the concepts workshop stage of the regulatory amendment process. Staff scheduled the close of the comment period to be over two weeks after the concepts workshop to allow interested members of the public to be able to attend the workshop and engage in an initial discussion on the proposed concepts and still have time to go back and finalize their input in the form of written comments. Staff was also available throughout the process to meet to answer questions, explain issues, and receive input from the public. Staff met with several interested stakeholders following the public concepts workshop. In addition to the public workshop process, staff presented concepts to the Air District Stationary Source and Climate Impacts Committee on May 17, 2021. Staff later gave a similar presentation to the Air District Community Equity, Health and Justice Committee on July 1, 2021, to receive feedback from that committee.

After considering comments on the proposed concepts to amend the Permitting Rules and meeting with interested stakeholders, the Air District released draft rule amendment language and a Workshop Report on July 22, 2021. On August 24, 2021, the Air District held a virtual public workshop to present draft rule amendments to Rules 2-1 and 2-5, receive public comments, and answer questions from the public. The public workshop included a presentation by Air District staff explaining the reasons for the draft changes to the rules; a description of the rule changes; and what the rule changes might mean for Bay Area air quality, potentially affected facilities, and for the public at large. The staff presentation was then followed by an open question-and-answer and discussion forum, which allowed staff to engage in a discussion with the attendees to provide additional information and get public input and feedback. Over 60 participants attended the August 24 public workshop (including Air District staff). As with the concepts workshop, staff made an archived webcast available on the Air District's website for later viewing by any interested members of the public who were not able to attend at the time of the live presentation.

The Air District also invited the public to submit written public comments on the draft rule amendments. The close of the public comment period was over a week after the public workshop to enable interested members of the public and stakeholders the opportunity to consider information presented at the workshop prior to submitting written public comments. As with the proposed comments release, Air District staff was available before and after the workshop to answer questions, explain issues, and receive input from members of the public. On September 27, 2021, staff presented to the Stationary Source and Climate Impacts Committee on the feedback received on the draft language and provided the Committee with an overview of the proposed amendments that are described in this Final Staff Report.

Air District staff received important public feedback from both workshops, and staff wishes to thank all who took the time to provide input. Based on the comments received on the proposed concepts and on the draft rule amendments, staff made further revisions to the initial drafts, which are reflected in the final version of the Proposed Amendments that staff proposed for adoption by the Board of Directors.

On October 19, 2021, staff published the CEQA Initial Study and proposed Negative Declaration, text of the proposed regulations and amendments, Final Staff Report and other supporting documents. The public comment period also opened on October 19, 2021, and closed on November 18, 2021. A total of four written comment letter and emails were received that covered many topics including:

- Cancer Risk Limits
- CEQA
- Enhanced Notifications
- Essential Public Services
- Exemptions
- Overburdened Community
- Permit Review Timeline

Air District staff has addressed the submitted comments and prepared a Response to Comments document, which is included as Appendix F in this Final Staff Report.

Air District staff plans to propose that the Air District's Board of Directors consider the Proposed Amendments at the public hearing scheduled for December 15, 2021. Interested members of the public may submit comments at the public hearing.

XI. CONCLUSION / RECOMMENDATIONS

Before adopting or amending any regulations, the Board of Directors must make certain findings required by the California Health and Safety Code, Section 40727. These include findings of necessity, authority, clarity, consistency, non-duplication, and reference. Air District staff conducted an analysis of the Proposed Amendments and concluded that there is substantial evidence on which the Board of Directors can make these required findings. The basis for this conclusion is as follows.

A. Necessity

As stated in California Health and Safety Code Section 40727(b)(1), "'Necessity' means that a need exists for the regulation, or for its amendment or repeal, as demonstrated by the record of the rulemaking authority."

There are several reasons why the Proposed Amendments to Rules 2-1 and 2-5 are necessary. As described in Sections III and IV of this Final Staff Report, there are differences in exposure to air pollution, including exposure to carcinogenic toxic air contaminants, depending on upon the location of a receptor in the Bay Area. Impacts from differential exposures can be compounded by exposures to other forms of environmental pollution and community health vulnerability. It is therefore necessary for the Air District, as an entity whose mission is to protect and improve public health, to utilize its regulatory authority to reduce potential exposures of toxic air contaminants in areas that experience relatively high cumulative impacts from environmental pollution burdens and population characteristics. It is also necessary for the Air District, as an entity that operates in the public trust, to ensure transparency in its permitting evaluations and provide opportunities for members of the public to be notified and participate in the permit evaluation process, with particular attention to permit applications and evaluations in communities that experience relatively high levels of cumulative impacts from environmental pollution and community health vulnerabilities. Furthermore, the Proposed Amendments are necessary to eliminate opportunities for circumvention of regulatory provisions that are designed to protect public health. Additionally, the Proposed Amendments are necessary for the Air District to ensure conformance with statewide health risk assessment and risk management guidance, as well as conformance with the Air District's own risk assessment methodology for air toxics health evaluations for existing facility-wide health risk assessment evaluations. Finally, the Proposed Amendments would extend the Air District's permit application action times, which is necessary to establish appropriate review time periods that are commensurate with the level of staff work expected for high-quality evaluations of proposed projects.

B. Authority

The California Health and Safety Code Section 40727(b)(2) states that "'Authority' means that a provision of law or of a state or federal regulation permits or requires the regional agency to adopt, amend, or repeal the regulation."

The Air District has the authority to adopt these rule amendments under Sections 40000, 40001, 40230, 40702, and 40725 through 40728.5 of the California Health and Safety Code.

C. Clarity

The California Health and Safety Code Section 40727(b)(3) states that "'Clarity' means that the regulation is written or displayed so that its meaning can be easily understood by the persons directly affected by it."

As explained in this Final Staff Report, Air District staff reviewed all relevant provisions of the regulatory language contained in the Proposed Amendments to ensure that it presents the requirements of the Air Toxics New Source Review program and the General Permitting Requirements in the clearest possible manner. Further details in the Final Staff Report clarify the Proposed Amendments, delineate potentially affected industries, compliance options, and administrative requirements for the industries subject to this rule.

D. Consistency

The California Health and Safety Code Section 40727(b)(4) states that "'Consistency' means that the regulation is in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations."

The Proposed Amendments are consistent with other Air District rules and are not in conflict with state or federal law.

E. Non-Duplication

The California Health and Safety Code Section 40727(b)(5) states that "'Nonduplication' means that a regulation does not impose the same requirements as an existing state or federal regulation unless a district finds that the requirements are necessary or proper to execute the powers and duties granted to, and imposed upon, a district."

The Proposed Amendments are non-duplicative of other statutes, rules or regulations. To the extent duplication exists, it is appropriate for the execution of powers and duties granted to, and imposed upon, the Air District.

F. Reference

The California Health and Safety Code Section 40727(b)(6) states that "'Reference' means the statute, court decision, or other provision of law that the district implements, interprets, or makes specific by adopting, amending, or repealing a regulation."

By adopting the Proposed Amendments, the Air District Board of Directors will be implementing, interpreting or making specific the provisions of California Health and Safety Code Sections 40000, 40001, 40702, and 40727.

The Proposed Amendments have met all legal noticing requirements, have been discussed with the regulated community and other interested parties, and reflect consideration of the input and comments of many affected and interested stakeholders.

G. Recommendations

For the reasons discussed in the foregoing Final Staff Report, Air District staff recommends that the Board of Directors adopt the Proposed Amendments. The Proposed Amendments have met

all applicable legal requirements for adopting amendments to Air District regulations, including both substantive and procedural requirements. The Proposed Amendments will strengthen the health protectiveness of the Air District's Air Toxics New Source Review permitting program and provide increased transparency in the overall permitting evaluation process. Staff also reiterates that adequate staff resources, as discussed in Section VII.D of this Final Staff Report, are critical to ensuring the Proposed Amendments can be implemented.

Air District staff respectfully submits that the Board of Directors should exercise the legal authority granted to it by the legislature of the State of California under the Health and Safety Code and adopt the Proposed Amendments as the policy and regulations of the Bay Area Air Quality Management District. To do so, staff recommends that the Board of Directors approve the following two actions:

- Adoption and Approval of a "Negative Declaration" under the California Environmental Quality Act finding and declaring that, in the independent judgment and analysis of the Board, and based on the entire record including the CEQA Initial Study prepared for the Proposed Amendments and any and all public comments received, there is no substantial evidence that the Proposed Amendments will have a significant adverse effect on the environment.
- Adoption of the Proposed Amendments, as set forth in Appendices A, B, and C hereto.

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BAY AREA AIR QUALITY MANAGEMENT DISTRICT

APPENDIX A

Proposed Amendments to Rule 2-1: General Requirements

REGULATION 2
PERMITS
RULE 1
GENERAL REQUIREMENTS

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REGULATION 2
PERMITS
RULE 1
GENERAL REQUIREMENTS

(Adopted January 1, 1980)

2-1-100 GENERAL

2-1-101 Description: The purpose of Regulation 2 is to provide an orderly procedure for the review of new sources of air pollution, and of the modification and operation of existing sources, and of associated air pollution control devices, through the issuance of authorities to construct and permits to operate. The applicability of Regulation 2, Rule 1 is illustrated by Figure 2-1-101, Permit/Exemption Flow Chart. An applicant may choose to obtain a permit to operate for a source that is exempt from permit requirements. In that case, the affected source is deemed to be subject to the requirements of Section 2-1-302 until such time as an application for return to exempt status is approved.

(Amended 7/17/91; 6/7/95; 5/17/00; 12/21/04)

2-1-102 Applicability to Other Rules in Regulation 2: The provisions of this Rule, including the definitions, shall apply to the other Rules of this Regulation, where applicable, unless superseded by specific provisions in those other Rules.

(Amended November 3, 1993)

2-1-103 Exemption, Source not Subject to any District Rule: Any source that is not already exempt from the requirements of Section 2-1-301 and 302 as set forth in Sections 2-1-105 to 2-1-128, is exempt from Section 2-1-301 and 302 if the source meets all of the following criteria:

103.1 The source is not in a source category subject to any of the provisions of Regulation 6[(1)], Regulation 8[(2)] excluding Rules 1 through 4, or Regulations 9 through 12; and

103.2 The source is not subject to any of the provisions of Sections 2-1-316 through 319; and

103.3 Actual emissions of precursor organic compounds (POC), non-precursor organic compounds (NPOC), nitrogen oxides (NOx), sulfur dioxide (SO_2), $PM_{2.5}$, PM_{10} and carbon monoxide (CO) from the source are each (i) less than 10 pounds per highest day; or (ii) if greater than 10 pounds per highest day, total emissions are less than 150 pounds per year, per pollutant; and

103.4 The source is not an ozone generator (a piece of equipment designed to generate ozone) emitting 1 lb/day or more of ozone.

Note 1: Typically, any source may be subject to Regulation 6, Particulate Matter and Visible Emissions. For the purposes of this section, Regulation 6 applicability shall be limited to the following types of sources that emit $PM_{2.5}$ and PM_{10}: combustion source; material handling/processing; sand, gravel or rock processing; cement, concrete and asphaltic concrete production; tub grinder; or similar $PM_{2.5}$ and PM_{10}-emitting sources, as deemed by the APCO.

Note 2: If an exemption in a Regulation 8 Rule indicates that the source is subject to Regulation 8, Rules 1 through 4, then the source must comply with all applicable provisions of Regulation 8, Rules 1 through 4, to qualify for this exemption.

(Adopted 6/7/95; Amended 5/17/00; 12/21/04)

2-1-104 Deleted October 7, 1998

2-1-105 Exemption, Registered Statewide Portable Equipment: Equipment that complies with all applicable requirements of and is registered under the Statewide Portable Equipment Registration Program (California Code of Regulations Title 13, Division 3, Chapter 3, Article 5) is exempt from the requirements of Sections 2-1-301 and 302. If the equipment ceases to qualify for this exemption for any reason (for example, if it remains at any fixed location for more than twelve months or otherwise ceases to be portable as defined by the Program), the equipment shall be subject to the requirements of Regulation 2 as if it were a new source.

(Adopted 6/7/95; Amended 10/7/98; 5/17/00)

2-1-106 Limited Exemption, Accelerated Permitting Program: Unless subject to any of the provisions of Sections 2-1-316 through 319, any new source or modification or alteration of an existing source is exempt from the Authority to Construct requirements of Section 2-1-301 if it has received a temporary Permit to Operate under the Accelerated Permitting Program set forth in Section 2-1-302.2.

(Adopted 6/7/95; Amended 10/7/98; 5/17/00; 6/15/05; 12/19/12)

2-1-109 Deleted June 7, 1995

2-1-110 Deleted June 7, 1995

2-1-111 Deleted June 7, 1995

2-1-112 Deleted June 7, 1995

2-1-113 Exemption, Sources and Operations:

113.1 The following sources and operations are exempt from the requirements of Sections 2-1-301 and 302, in accordance with the California Health and Safety Code:

1.1 Single and multiple family dwellings used solely for residential purposes.

1.2 Agricultural sources (as defined in Section 2-1-239) with actual emissions of each regulated air pollutant, excluding fugitive dust and greenhouse gases, less than 50 tons per year. Agricultural sources engaged in composing and other similar biomass processing that primarily process green materials or animal waste products derived from agricultural operations shall not become ineligible for this exemption for processing material from non-agricultural operations as long as the facility processes less than 500 tons per year of such material from non-agricultural operations.

1.3 Any vehicle. Equipment temporarily or permanently attached to a vehicle is not considered to be a part of that vehicle unless the combination is a vehicle as defined in the Vehicle Code. Specialty vehicles may include temporarily or permanently attached equipment including, but are not limited to, the following: oil well production service unit; special construction equipment; and special mobile equipment.

1.4 Tank vehicles with vapor recovery systems subject to state certification, in accordance with the Health and Safety Code.

113.2 The following sources and operations are exempt from the requirements of Sections 2-1-301 and 302:

2.1 Road construction, widening and rerouting.

2.2 Restaurants, cafeterias and other retail establishments for the purpose of preparing food for human consumption.

2.3 Structural changes which do not change the quality, nature or quantity of air contaminant emissions.

2.4 Any abatement device which is used solely to abate equipment that does not require an Authority to Construct or Permit to Operate.

2.5 Architectural and industrial maintenance coating operations that are exclusively subject to Regulation 8, Rules 3 or 48, because coatings are applied to stationary structures, their appurtenances, to mobile homes, to pavements, or to curbs. This does not apply to coatings applied by the manufacturer prior to installation, nor to the coating of components removed from such structures and equipment.

2.6 Portable abatement equipment exclusively used to comply with the tank degassing or vacuum truck control requirements of Regulation 8, Rules 5, 40 or 53.

2.7 Equipment that transports, holds or stores California Public Utilities Commission regulated natural gas, excluding drivers.

2.8 Deleted May 17, 2000

2.9 Deleted May 17, 2000

2.10 Deleted May 17, 2000

2.11 Teaching laboratories used exclusively for classroom experimentation and/or demonstration.

2.12 Laboratories located in a building where the total laboratory floor space within the building is less than 25,000 square feet, or the total number of fume hoods within the building is less than 50, provided that Responsible Laboratory Management Practices, as defined in Section 2-1-224, are used. Buildings connected by passageways and/or corridors shall be considered as separate buildings, provided that structural integrity could be maintained in the absence of the passageways and/or corridors and the buildings have their own separate and independently operating HVAC and fire suppression systems. For the purposes of this subsection, teaching laboratories that are exempt per Section 2-1-113.2.11 are not included in the floor space or fume hood totals. In addition, laboratory units for which the owner or operator of the source can demonstrate that toxic air contaminant emissions would not occur, except under accidental or upset conditions, are not included in the floor space or fume hood totals.

2.13 Maintenance operations on natural gas pipelines and associated equipment, provided that emissions from such operations consist solely of residual natural gas that is vented after the equipment is isolated or shut down.

2.14 [Deleted 12/19/2012]

2.15 Asbestos and asbestos containing material renovation or removal conducted in compliance with Regulation 11, Rule 2 and Regulation 3.

2.16 Closed landfills that have less than 1,000,000 tons of decomposable solid waste in place and that do not have an operating landfill gas collection system.

2.17 Closed landfills that have not accepted waste for at least 30 years and that never had a landfill gas collection system.

2.18 Construction of a building or structure that is not itself a source requiring a permit.

2.19 Vacuum trucks subject to Regulation 8, Rule 53 and processing regulated material as defined in that rule.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00; 11/15/00; 5/2/01; 7/19/06; 4/18/12; 12/06/17)

2-1-114 Exemption, Combustion Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, only if the source does not emit pollutants other than combustion products, and those combustion products are not caused by the combustion of a pollutant generated from another source, and the source does not require permitting pursuant to Section 2-1-319. However, for the purposes of this permit exemption determination, sources subject to Sections 2-1-114.1.2, 2-1-114.2.1, and 2-1-114.2.3 are not subject to Section 2-1-316.

114.1 Boilers, Heaters, Steam Generators, Duct Burners, and Similar Combustion Equipment:

1.1 Any of the above equipment with less than 1 million BTU per hour rated heat input.

1.2 Any of the above equipment with less than 10 million BTU per hour rated heat input if fired exclusively with natural gas (including compressed natural gas), liquefied petroleum gas (e.g. propane, butane, isobutane, propylene, butylenes, and their mixtures), or any combination thereof.

114.2 Internal Combustion Engines and Gas Turbines:

2.1 Internal combustion (IC) engines and gas turbines with a maximum output rating less than or equal to 50 bhp.

2.2 Internal combustion (IC) engines and gas turbines used solely for instructional purposes at research, teaching, or educational facilities.

2.3 Portable internal combustion engines which are at a location for less than 72 consecutive hours.

2.4 Any engine mounted on, within, or incorporated into any vehicle, train, ship, boat, or barge used to provide propulsion for the vehicle, train, ship, boat, or barge.

2.5 Any engine mounted on, within, or incorporated into any vehicle, train, ship, boat, or barge used to provide propulsion for the vehicle, train, ship, boat, or barge and which is also used to supply mechanical or electrical power to ancillary equipment (e.g., crane, drill, winch, etc.) which is affixed to or is a part of the vehicle, train, ship, boat, or barge.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00; 8/1/01, 12/06/17)

2-1-115 Exemption, Particulate Sources at Quarries, Mineral Processing and Biomass Facilities: The following potential $PM_{2.5}$ and PM_{10} sources are exempt from the requirements of sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

115.1 Sources located at quarrying; mineral or ore handling or processing; concrete production; asphaltic concrete production; marine bulk transfer stations; concrete or asphaltic concrete recycling; vehicle shredding; glass manufacturing; handling or processing of cement, coke, lime, flyash, fertilizer, or catalyst; or other similar facility which meets one of the following:

1.1 Mixer and other ancillary sources at concrete or aggregate product production facilities with a maximum rated production capacity less than 15 cubic yards (yd^3) per hour;

1.2 Other source at a facility with a maximum throughput less than 5000 tons per year;

1.3 Operating, loading and unloading a crusher or grinder which processes exclusively material with a moisture content greater than or equal to 20 percent by weight;

1.4 Operating, loading and unloading the following sources which process exclusively material with a moisture content greater than or equal to 5 percent by weight:

1.4.1 Screen or other size classification;

1.4.2 Conveyor, screw, auger, stacker or bucket elevator;

1.4.3 Grizzly, or other material loading or unloading;

1.4.4 Storage silos;

1.4.5 Storage or weigh hopper/bin system.

1.5 Haul or access roads;

1.6 Drilling or blasting.

115.2 Sources located at biomass recycling, composting, landfill, POTW, or related facilities, including, but not limited to, the following:

2.1 Tub grinder powered by a motor with a maximum output rating less than 10 horsepower;

2.2 Hogger, shredder or similar source powered by a motor with a maximum output rating less than 25 horsepower;

2.3 Other biomass processing/handling sources at a facility with a total throughput less than 500 tons per year.

(Amended 6/7/95; 5/17/00)

2-1-116 Exemption, Furnaces, Ovens and Kilns: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

116.1 Porcelain enameling furnaces, porcelain enameling drying ovens, vitreous enameling furnaces or vitreous enameling drying ovens.

116.2 Crucible furnaces, pot furnaces, induction furnaces, cupolas, electric arc furnaces, reverbatories, or blast furnaces with a capacity of 1000 lbs or less each.

116.3 Crucible furnaces, pot furnaces, or induction furnaces for sweating or distilling that process 100 tons per year of all metals or less.

116.4 Drying or heat-treating ovens with less than 10 million BTU per hour capacity provided that a) the oven does not emit pollutants other than combustion products and b) the oven is fired exclusively with natural gas (including compressed natural gas), liquefied petroleum gas (e.g. propane, butane, isobutane, propylene, butylenes, and their mixtures), or any combination thereof.

116.5 Ovens used exclusively for the curing of plastics which are concurrently being vacuum held to a mold, or for the softening and annealing of plastics.

116.6 Ovens used exclusively for the curing of vinyl plastisols by the closed mold curing process.

116.7 Ovens used exclusively for curing potting materials or castings made with epoxy resins.

116.8 Kilns used for firing ceramic ware, heated exclusively by natural gas, liquefied petroleum gas, electricity or any combination thereof.

116.9 Parts cleaning, bake-off, and similar ovens that meet both of the following:

9.1 Oven is equipped with a secondary combustion chamber or abated by a fume incinerator; and

9.2 Internal oven volume is 1 cubic yard or less.

116.10 Electric ovens used exclusively for curing or heat-treating where no significant off-gassing or evaporation of any air contaminants occurs.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00)

2-1-117 Exemption, Food and Agricultural Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

117.1 Smokehouses or barbecue units in which the maximum horizontal inside cross sectional area does not exceed 20 square feet.

117.2 Equipment at facilities other than restaurants, cafeterias or other retail operations, which is used to dry, cook, fry, bake, or grill less than 1000 tons per year of food products.

117.3 Any oven with a total production of yeast leavened bakery products of less than 10,000 pounds per operating day, averaged over any period of seven consecutive days, and which is heated either electrically or exclusively by natural gas firing with a maximum capacity of less than 10 million BTU per hour.

117.4 Equipment used exclusively to grind, blend, package, or store tea, cocoa, spices, or coffee.

117.5 Equipment used to dry, mill, grind, blend, or package less than 1000 tons per year of dry food products such as seeds, grains, corn, meal, flour, sugar, and starch.

117.6 Equipment used to convey, transfer, clean, or separate less than 1000 tons per year of dry food products or waste from food production operations.

117.7 Storage equipment or facilities containing dry food products; which are not vented to the outside atmosphere, or which handle less than 1000 tons per year.

117. 8 Coffee, cocoa and nut roasters with a roasting capacity of less than 15 pounds of beans or nuts per hour; and any stoners or coolers operated in conjunction with these roasters.

117.9 Containers, reservoirs, tanks, or loading equipment used exclusively for the storage or loading of beer, wine or other alcoholic beverages.

117.10 Fermentation tanks for beer or wine. Fermentation tanks used for the commercial production of yeast for sale are not exempt.

117.11 Brewing operations at facilities producing less than 3 million gallons per year of beer.

117.12 Fruit sulfuring operations at facilities producing less than 10 tons per year of sulfured fruits and vegetables.

(Adopted 10/19/83; Amended 4/16/86; 7/1791; 6/7/95; 5/17/00)

2-1-118 Exemption, Surface Preparation and Cleaning Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

118.1 Permanent abrasive blasting source, as defined by Regulation 12, Rule 4, that has a confined volume less than 100 cubic feet (ft^3) and is abated by a particulate filter.

118.2 Blast cleaning equipment using a suspension of abrasive in water.

118.3 Portable abrasive blasting equipment used on a temporary basis within the District.

118.4 Equipment, including solvent cold cleaners using an unheated solvent mixture for surface preparation, cleaning, wipe cleaning, fluxing or stripping by use of solutions with a VOC content less than or equal to 50 grams per liter (0.42 lb/gal).

118.5 Equipment using a heated solvent mixture for steam cleaning, surface preparation, fluxing, stripping, wipe cleaning, washing or drying products, provided that a) only solutions containing less than 2.5 percent VOC (wt) are used; and b) any combustion sources used in the process are exempt under Section 2-1-114.

118.6 Equipment or operations which use unheated solvent and which contain less than 1 gallon of solvent or have a liquid surface area of less than 1 ft^2. This exemption does not apply to solvent stations at semiconductor manufacturing operation fabrication areas or aerospace stripping operations.

118.7 Deleted December 21, 2004

118.8 Batch solvent recycling equipment where all of the following apply:

8.1 Recovered solvent is used primarily on site (more than 50% by volume); and

8.2 Maximum heat input (HHV) is less than 1 million BTU per hour; and

8.3 Batch capacity is less than 150 gallons.

118.9 Wipe cleaning at a facility that meets one of the following:

9.1 net cleanup solvent usage less than 20 gallons per year from all wipe cleaning operations; or

9.2 emission to the atmosphere of less than 150 pounds per year of uncontrolled VOC from all wipe cleaning operations.

At a facility with total wipe cleaning emissions greater than 150 lb/yr, wipe cleaning operations may be grouped per Section 2-1-401.4.

118.10 Any solvent cleaning or surface preparation source which employs only non-refillable hand held aerosol cans.

118.11 Spray gun cleaning performed in compliance with Regulation 8, provided the cleaning is associated with a source, such as a spray booth, subject to the requirements of Section 2-1-301 and 302.

(Adopted 10/19/83; Amended 4/16/86; 8/2/89; 7/17/91; 6/7/95; 5/17/00; 12/21/04)

2-1-119 Exemption, Surface Coating and Printing Equipment: The following equipment and operations are exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

119.1 Any powder coating operation, or radiation cured coating operation where ultraviolet or electron beam energy is used to initiate a reaction to form a polymer network.

119.2 Any coating, adhesive, dipping, laminating, screening, masking, electrodeposition, resist application, or similar source or operation at any facility that is not operated or conducted as part of a graphic arts operation, which:

2.1 Consumes a total of less than 30 gallons of coating, adhesive, laminate or resist per year on a facility wide basis, or emits less than 150 pounds per year of uncontrolled VOC on a facility wide basis, resulting from the application of these materials; or

2.2 Uses exclusively materials that contain less than one percent VOC (wt).

At a facility with emissions from these sources or operations of greater than 150 lb/yr, these sources or operations may be grouped per Section 2-1-401.3.

119.3 Any coating source which employs only non-refillable hand held aerosol cans.

119.4 An oven associated with an exempt coating source, provided that the oven is electrically heated, or the oven is fired exclusively with natural gas, liquefied petroleum gas (e.g. propane, butane, isobutane, propylene, butylenes, and their mixtures) and the maximum firing rate is less than 10 million BTU per hour.

119.5 Any graphic arts operation that emits less than 400 pounds of uncontrolled VOC emissions per month on a facility-wide basis.

(Adopted 10/19/83; Amended 4/16/86; 7/17/91; 6/7/95; 5/17/00; 12/21/04; 11/19/08)

2-1-120 Exemption, Dry Cleaning Equipment: Any dry cleaning facility which uses (gross consumption) less than 200 gallons of petroleum solvent or any other non-halogenated solvent in any single year is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319; the facility is in compliance with the registration requirement in Regulation 8, Rule 17, Section 404; and the equipment does not use solvent that contains perchloroethylene or more than 1% by weight of any other halogenated compound.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00; 3/4/09)

2-1-121 Exemption, Material Working and Handling Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

121.1 Equipment used for buffing, carving, cutting, drilling, grinding, machining, planing, routing, sanding, sawing, shredding, stamping or turning of wood, ceramic artwork, ceramic precision parts, leather, metals, plastics, rubber, fiberboard, masonry, glass, silicon, semiconductor wafers, carbon or graphite, provided that organic emissions from the use of coolant, lubricant, or cutting oil are 5 ton/yr or less.

121.2 Equipment used for pressing or storing sawdust, wood chips or wood shavings.

121.3 Equipment used exclusively to mill or grind coatings and molding compounds in a paste form provided the solution contains less than one percent VOC (wt).

121.4 Tumblers used for the cleaning or deburring of metal products without abrasive blasting.

121.5 Batch mixers with a rated working capacity of 55 gallons or less.

121.6 Mixing equipment provided no material in powder form is added and mixture contains less than one percent VOC (wt).

121.7 Equipment used exclusively for the mixing and blending of materials at ambient temperature to make water based adhesives.

121.8 Equipment used exclusively for the mixing and packaging of lubricants or greases.

121.9 Presses used exclusively for extruding metals, minerals, plastics or wood.

121.10 Presses used for the curing of rubber products and plastic products. The use of mold release products or lubricants is not exempt unless the VOC content of these materials is less than or equal to 1 percent, by weight, or unless the total facility-wide uncontrolled VOC emissions from the use of these materials are less than 150 lb/yr.

121.11 Platen presses used for laminating.

121.12 Roll mills or calendars for rubber or plastics.

121.13 Equipment used exclusively for forging, pressing, rolling, stamping or drawing metals or for heating metals immediately prior to forging, pressing, rolling, stamping or drawing, provided that: (1) maximum fuel use rate is less than 10 million BTU/hr; (2) no lubricant with an initial boiling point less than 400°F is used; and (3) organic emissions are 5 ton/yr or less.

121.14 Atmosphere generators used in connection with metal heat treating processes.

121.15 Equipment used exclusively for the sintering of glass or metals.

121.16 Equipment used exclusively for the melting or applying of wax containing less than one percent VOC (wt).

121.17 Equipment used exclusively for conveying and storing plastic pellets.

121.18 Solid waste transfer stations that receive or load out a total of all material less than 50 tons/day.

121.19 Inactive solid waste disposal sites which do not have an operating landfill gas collection system.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00)

2-1-122 Exemption, Casting and Molding Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

122.1 Molds used for the casting of metals.

122.2 Foundry sand mold forming equipment to which no heat is applied, except processes utilizing organic binders yielding in excess of 0.25% free phenol by weight of sand.

122.3 Shell core and shell-mold manufacturing machines.

122.4 Equipment used for extrusion, compression molding and injection molding of plastics. The use of mold release products or lubricants is not exempt unless the VOC content of these materials is less than or equal to 1 percent, by weight, or unless the total facility-wide uncontrolled VOC emissions from the use of these materials are less than 150 lb/yr.

122.5 Die casting machines.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00)

2-1-123 Exemption, Liquid Storage and Loading Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

123.1 Storage tanks and storage vessels having a capacity of less than 260 gallons.

123.2 Tanks, vessels and pumping equipment used exclusively for the storage or dispensing of any aqueous solution which contains less than 1 percent (wt) organic compounds. Tanks and vessels storing the following materials are not exempt.

2.1 Sulfuric acid with an acid strength of more than 99.0% by weight.

2.2 Phosphoric acid with an acid strength of more than 99.0% by weight.

2.3 Nitric acid with an acid strength of more than 70.0% by weight.
2.4 Hydrochloric acid with an acid strength of more than 30.0% by weight.
2.5 Hydrofluoric acid with an acid strength of more than 30.0% by weight.
2.6 More than one liquid phase, where the top phase contains more than one percent VOC (wt).

123.3 Containers, reservoirs, tanks or loading equipment used exclusively for:
3.1 Storage or loading of liquefied gases.
3.2 Storage or loading of organic liquids or mixtures containing organic liquids; where the initial boiling point of the organics is greater than 302°F and exceeds the actual storage temperature by at least 180°F. This exemption does not apply to the storage or loading of asphalt or asphalt emulsion with a sulfur content equal to or greater than 0.5 wt%.
3.3 The storage or loading of petroleum oils with an ASTM D-93 (PMCC) flash point of 130°F or higher, when stored or loaded at a temperature at least 36°F below the flash point.
3.4 The storage or loading of lubricating oils.
3.5 The storage of fuel oils with a gravity of 40 API or lower and having a capacity of 10,000 gallons or less.
3.6 The storage or loading of liquid soaps, liquid detergents, tallow, or vegetable oils, waxes or wax emulsions.
3.7 The storage of asphalt or asphalt emulsion with a sulfur content of less than 0.5 wt%. This does not include the storage of asphalt cutback with hydrocarbons having an initial boiling point of less than 302°F.
3.8 The storage of wine, beer or other alcoholic beverages.
3.9 The storage of organic salts or solids in an aqueous solution or suspension, provided that no liquid hydrocarbon layer forms on top of the aqueous phase.
3.10 The storage or loading of fuel oils with a gravity of 25 API or lower.
3.11 The storage and/or transfer of an asphalt-water emulsion heated to 150°F or less.

123.4 Tank seal replacement. For any tank subject to Regulation 8, Rule 5, any new seal must comply with the applicable provisions of Regulation 8, Rule 5, and the District must receive written notification of the tank source number and seal type at least three days prior to the installation.

(Adopted 10/19/83; Amended 7/11/84; 7/17/91; 6/7/95; 5/17/00)

2-1-124 Exemption, Semiconductor Manufacturing: Semiconductor fabrication area(s) at a facility which complies with all of the following are exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

124.1 Net solvent usage is less than 20 gallons of VOC per year on a facility wide basis; or uncontrolled VOC emissions to the atmosphere resulting from the usage of solvent are less than 150 pounds per year of VOC on a facility wide basis, and

124.2 Maskant and/or coating usage is less than 30 gallons per year, on a facility wide basis; or uncontrolled VOC emissions from the application of maskant and coatings are less than 150 pounds per year on a facility wide basis.

(Adopted 10/19/83; Amended 1/9/85; 4/16/86; 7/17/91; 6/7/95; 10/20/99; 5/17/00)

2-1-125 Exemption, Printed Circuit Board Manufacturing Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

125.1 Equipment used exclusively for:

1.1 Plating of printed circuit boards.

1.2 Buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding or turning of printed circuit boards.

1.3 Soldering. This section does not exempt fluxing and finger cleaning (see Section 2-1-118.4).

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00)

2-1-126 Exemption, Testing Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

126.1 Equipment used for hydraulic or hydrostatic testing.

126.2 Bench scale laboratory equipment or processes used exclusively for chemical or physical analyses or experimentation, quality assurance and quality control testing, research and development, or similar bench scale equipment, excluding pilot plants.

126.3 Equipment used for inspection of metal products.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00)

2-1-127 Exemption, Chemical Processing Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

127.1 Equipment used exclusively for the dyeing or stripping (bleaching) of textiles provided that only solutions containing less than one percent VOC (wt) are used.

127.2 Photographic process equipment by which an image is reproduced upon material sensitized to radiant energy.

127.3 Containers, reservoirs, or tanks used exclusively for electrolytic plating with, or electrolytic polishing of, or electrolytic stripping of the following metals: aluminum, brass, bronze, cadmium, copper, iron, nickel, tin, zinc and precious metals.

127.4 Containers, reservoirs, or tanks used exclusively for etching (not chemical milling), except where ammonia or ammonium-based etchants are used.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00)

2-1-128 Exemption, Miscellaneous Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

128.1 Comfort air conditioning or comfort ventilating systems which are not designed to remove air contaminants generated by or released from specific units of equipment.

128.2 Refrigeration units except those used as, or in conjunction with, air pollution control equipment.

128.3 Vacuum producing devices in laboratory operations which are used exclusively in connection with other equipment which is exempted by this Rule, and vacuum producing devices which do not remove or convey air contaminants from another source.

128.4 Water cooling towers and water cooling ponds not used for evaporative cooling of process water, or not used for evaporative cooling of water from barometric jets or from barometric condensers.

128.5 Natural draft hoods, natural draft stacks or natural draft ventilators.

128.6 Vacuum cleaning system used exclusively for industrial commercial or residential housekeeping purposes.

128.7 Equipment used to liquefy or separate oxygen, nitrogen or the rare gases from the air.

128.8 Equipment used exclusively to compress or hold dry natural gas, excluding drivers.

128.9 Equipment used exclusively for bonding lining to brake shoes.

128.10 Equipment used exclusively for the manufacture of water emulsions of waxes, greases or oils.

128.11 Brazing, soldering or welding equipment.

128.12 Pharmaceutical manufacturing equipment with annual VOC emissions less than 150 pounds per source. Material working and handling equipment such as mills, grinders, blenders, granulators, tablet presses, capsule fillers, packagers, and conveyors are only exempt if the source also processes less than 100 tons per year of pharmaceutical products.

128.13 Equipment used exclusively to blend or package cosmetics.

128.14 Any wastewater (oil-water) separator, as defined in Regulation 8, Rule 8, which processes less than 200 gallons per day of waste water containing organic liquids.

128.15 Exploratory drilling activities for methane recovery at waste disposal sites, for natural gas or for oil. Production wells for the above operations are not exempt.

128.16 Passive aeration of soil, only if:

16.1 The duration of the passive aeration operation will not exceed three months, and

16.2 The soil is not being used as a cover material at a landfill.

128.17 Ozone generators which produce less than 1 pound per day of ozone.

128.18 Any source or operation which exclusively uses consumer products regulated by the California Air Resources Board (California Code of Regulations Title 17, Article 2, Sections 94507-94517).

128.19 Any source or operation deemed by the APCO to be equivalent to a source or operation which is expressly exempted by Sections 2-1-113 through 128.

128.20 Wastewater pumping stations where no treatment is performed, excluding any drivers.

128.21 Modification, replacement, or addition of components that have only fugitive emissions during routine operation (e.g. valves, flanges, pumps, compressors, relief valves, process drains) at existing permitted equipment at petroleum refineries, chemical plants, bulk terminals or bulk plants, provided that:

21.1 the modification, replacement or addition of the components will not result in any increase in emissions of any source at the facility (other than the fugitive emissions from the components being modified, replaced or added) in such a manner as to result in a modification of such source as defined in Section 2-1-234 (e.g., through debottlenecking of a source);

21.2 the total allowable fugitive emissions from all additional components installed pursuant to this exemption at a given process unit during any consecutive twelve month period do not exceed 10 lb/day (or, for

components that are not associated with a process unit, the total allowable fugitive emissions from all additional components installed at the facility that are not associated with a process unit during any twelve-month period do not exceed 10 lb/day), based on the maximum fugitive emissions rate allowed under District regulations;

21.3 the components installed satisfy the "typical control technology" listed in the BACT/TBACT Workbook;

21.4 the components meet applicable requirements of Regulation 8 rules; and

21.5 fugitive emissions from the components are included when calculating emissions from the equipment on which the components are installed for purposes of applying District regulations to that equipment (e.g., BACT and offsets requirements).

128.22 Fuel cells that use phosphoric acid, molten carbonate, proton exchange membrane, solid oxide or equivalent technologies.

128.23 Structure demolition that does not involve asbestos or asbestos containing materials.

(Adopted 10/19/83; Amended 7/16/86; 7/17/91; 6/7/95; 5/17/00; 11/15/00; 12/21/04)

2-1-129 **Major Facility Review:** Notwithstanding the exemptions listed in this section, every source exempted by this Rule shall be included in any application for a synthetic minor or major facility review permit required by Regulation 2, Rule 6.

(Adopted 12/3/93; Amended 2/1/95; 5/17/00)

2-1-130 **Effect of Explanatory Notes:** The explanatory notes that are included in italics following certain provisions in Regulation 2 are intended to help readers better understand the regulatory context of these provisions. They are not intended to be binding as regulatory requirements. Where such notes are provided, it is the text of the regulatory provision itself, and not the text of the notes, that establishes the binding legal requirements of the provision.

2-1-200 **DEFINITIONS**

2-1-201 [Deleted December 19, 2012]

2-1-202 **Complete Application:** An application that contains all of the information required under Regulation 2-1-402.

(Amended 7/17/91; 11/20/91; 5/17/00; 12/21/04)

2-1-203 **Fugitive Emissions:** Fugitive emissions are all emissions from unintended openings in process equipment, emissions occurring from miscellaneous activities relating to the operation of a facility, and those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening.

(Adopted October 19, 1983)

2-1-204 [Deleted December 19, 2012]

2-1-205 [Deleted December 19, 2012]

2-1-206 [Deleted December 19, 2012]

2-1-207 **Organic Compound, Non-Precursor (NPOC):** The following are considered non-precursor organic compounds:

methane; ethane; methylene chloride (dichloromethane); 1,1,1-trichloroethane (methyl chloroform); 1,1,2-trichloro-1,2,2-trifluoroethane (CFC–113); trichlorofluoromethane (CFC–11); dichlorodifluoromethane (CFC–12); chlorodifluoromethane (HCFC–22); trifluoromethane (HFC–23); 1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC–114); chloropentafluoroethane

(CFC–115); 1,1,1-trifluoro 2,2-dichloroethane (HFC–123); 1,1,1,2-tetrafluoroethane (HFC–134a); 1,1-dichloro 1-fluoroethane (HCFC–141b); 1-chloro 1,1-difluoroethane (HCFC–142b); 2-chloro-1,1,1,2-tetrafluoroethane (HCFC–124); pentafluoroethane (HFC–125); 1,1,2,2-tetrafluoroethane (HFC–134); 1,1,1-trifluoroethane (HFC–143a); 1,1-difluoroethane (HFC–152a); parachlorobenzotrifluoride (PCBTF); cyclic, branched, or linear completely methylated siloxanes; acetone; perchloroethylene (tetrachloroethylene); 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC–225ca); 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC–225cb); 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43–10mee); difluoromethane (HFC–32); ethylfluoride (HFC–161); 1,1,1,3,3,3-hexafluoropropane (HFC–236fa); 1,1,2,2,3-pentafluoropropane (HFC–245ca); 1,1,2,3,3-pentafluoropropane (HFC–245ea); 1,1,1,2,3-pentafluoropropane (HFC–245eb); 1,1,1,3,3-pentafluoropropane (HFC–245fa); 1,1,1,2,3,3-hexafluoropropane (HFC–236ea); 1,1,1,3,3-pentafluorobutane (HFC–365mfc); chlorofluoromethane (HCFC–31); 1 chloro-1-fluoroethane (HCFC–151a); 1,2-dichloro-1,1,2-trifluoroethane (HCFC–123a); 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane ($C_4F_9OCH_3$ or HFE–7100); 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ($(CF_3)_2CFCF_2OCH_3$); 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane ($C_4F_9OC_2H_5$ or HFE–7200); 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ($(CF_3)_2CFCF_2OC_2H_5$); methyl acetate, 1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane (n-$C_3F_7OCH_3$, HFE–7000), 3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl) hexane (HFE–7500), 1,1,1,2,3,3,3-heptafluoropropane (HFC 227ea), methyl formate ($HCOOCH_3$), (1) 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE–7300); propylene carbonate; dimethyl carbonate; and perfluorocarbon compounds which fall into these classes:

(i) Cyclic, branched, or linear, completely fluorinated alkanes;

(ii) Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;

(iii) Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and

(iv) Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

In addition, any compound designated as having a negligible contribution to photochemical reactivity by the U.S. Environmental Protection Agency as published in the Federal Register shall be considered a Non-Precursor Organic Compound.

(Amended 7/17/91; 6/15/94)

2-1-208 **Organic Compound, Precursor (POC):** Any organic compound as defined in Regulation 1-233, excepting the non-precursor organic compounds as defined in Section 2-1-207.

(Adopted 3/17/82; Amended 7/17/91)

2-1-209 [Deleted December 19, 2012]

2-1-210 **Start-Up Period:** The period of time between initial operation and the issuance or denial of a permit to operate of a source or facility.

(Adopted October 19, 1983)

2-1-211 **CEQA:** The California Environmental Quality Act, Public Resources Code Section 21000 *et seq*.

(Adopted July 17, 1991)

2-1-212 **EIR:** Environmental Impact Report, as defined in Public Resources Code Section 21061.

(Adopted 7/17/91; Amended 5/17/00)

2-1-213 **Facility:** Any source, building, structure or installation that emits or may emit any air pollutant; or any aggregation of such sources, buildings, structures or installations that are (i) located on one or more contiguous or adjacent properties; (ii) are under common ownership or control; and (iii) are considered to be in the same major industrial grouping (identified by the first two digits of the applicable code in *The Standard Industrial Classification Manual*). For purposes of this definition:

213.1 A Support Facility as defined in Section 2-1-242 is considered to be in the same major industrial grouping as the facility it supports, regardless of what code may nominally apply under *The Standard Industrial Classification Manual*.

213.2 A source is considered to be under control of the owner or operator of a facility if it is owned, operated or maintained by an agent or contractor acting on behalf of the facility owner or operator, unless it remains at the facility for less than 12 consecutive months (or, in the case of multiple temporary sources that are used in succession at the facility to serve the same function at the same facility source, the total time period that all such temporary sources remain at the facility is less than 12 consecutive months).

(Adopted 11/3/93; Amended 12/21/04; 12/06/17)

2-1-214 **Federally Enforceable:** All limitations and conditions that are enforceable by the Administrator of the U. S. EPA, including but not limited to (i) requirements developed pursuant to 40 CFR Parts 60 (NSPS), 61 (NESHAPS), 63 (HAP), 70 (State Operating Permit Programs) and 72 (Permits Regulation, Acid Rain); (ii) requirements contained in the State Implementation Plan (SIP) that are applicable to the District; (iii) District regulations approved pursuant to 40 CFR Part 51, Subpart I (NSR); (iv) requirements in any operating permit issued under an EPA-approved program that is a part of the SIP and expressly requires adherence to any permit issued under such program, including requirements of any District permit condition (excluding conditions that are not enforceable by the Administrator of the U.S. EPA); and (v) requirements in federal consent decrees that are enforceable by the Administrator of the U.S. EPA.

(Adopted November 3, 1993)

2-1-215 **Hazardous Air Pollutant (HAP):** Any pollutant that is listed pursuant to Section 112(b) of the federal Clean Air Act.

(Adopted 11/3/93; Amended 5/17/00)

2-1-216 [Deleted December 19, 2012]

2-1-217 **Potential to Emit:** The maximum capacity of a source or facility to emit a pollutant based on its physical and operational design. Any physical or operational limitation on the capacity of the source or facility to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as a part of its design only if the limitation, or the effect it would have on emissions, is enforceable by the District or EPA (or both). A source or facility that exceeds an enforceable limitation is considered to have a potential to emit that is unconstrained by any such exceeded limit.

(Adopted 11/3/93; Amended 5/17/00)

2-1-218 **Regulated Air Pollutant:** Except for purposes of major facility review in connection with Regulation 2, Rule 6, for which the definition in Section 2-6-222 applies, a regulated air pollutant is any air pollutant that is subject to a regulation.

(Adopted 11/3/93; Amended 5/17/00)

2-1-219 [Deleted December 19, 2012]

2-1-220 [Deleted December 19, 2012]

2-1-221 **Source:** Any article, machine, equipment, operation, contrivance or related groupings of such which may produce and/or emit air pollutants.

(Adopted June 7, 1995)

2-1-222 **Toxic Air Contaminant (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 6/7/95; Amended 5/17/00; 6/15/05)

2-1-223 **Year, Month and Day:** Unless otherwise specified by regulation or by permit condition, a year shall be any rolling 12-month period, a month shall be a calendar month, and a day shall be a calendar day.

(Adopted June 7, 1995)

2-1-224 **Responsible Laboratory Management Practices:** For the purposes of meeting the laboratory exemption of Section 2-1-113.2.12, Responsible Laboratory Management Practices include all of the following measures for minimizing the emissions of toxic air contaminants:

224.1 Open container procedures involving materials that contain volatile toxic air contaminants (TACs) shall be avoided where feasible.

224.2 Open container storage of volatile hazardous chemical wastes shall be avoided.

224.3 Training for laboratory employees handling hazardous materials shall include information about minimizing the emissions of volatile TACs. These employees shall be directed to avoid open container procedures involving volatile TACs where feasible, and to avoid open container storage of hazardous chemical waste.

224.4 Fume hoods shall be posted with notices reminding employees to avoid open container procedures using volatile TACs where feasible. Laboratories shall be inspected periodically, but not less than annually, to confirm that these notices are present.

224.5 Laboratory fume hoods shall be monitored periodically to assure proper face velocity.

224.6 Evaporation of any hazardous chemical waste containing TACs as a means of disposal shall be expressly forbidden.

(Adopted June 7, 1995)

2-1-225 [Deleted December 19, 2012]

2-1-226 **Statewide Portable Equipment Registration Program**: A uniform system for statewide registration and regulation of portable internal combustion and associated equipment, implemented by the Air Resources Board pursuant to Section 41750 et seq. of the Health and Safety Code.

(Adopted October 7, 1998)

2-1-227 **Substantial Use**: Substantial use of an Authority to Construct consists of one or more of the following: purchase or acquisition of the equipment that constitutes the source; ongoing construction activities other than grading or installation of utilities or foundations; a contract or commitment to complete construction of the source within two years.

(Adopted October 7, 1998)

2-1-228 **Particulate Matter (PM):** Any airborne finely divided solid or liquid material with an aerodynamic diameter smaller than 100 microns.

(Adopted October 7, 1998)

2-1-229 **PM_{10}:** Particulate matter with aerodynamic diameter smaller than or equal to a nominal 10 microns. PM_{10} emissions shall include gaseous emissions from a source or activity that condense to form particulate matter at ambient temperatures.

(Adopted October 7, 1998)

2-1-230 **Functionally Equivalent:** Performing the same, or equivalent, function as the object of comparison. A functionally equivalent replacement source performs the same function for the process as the source being replaced, although emissions and other characteristics may differ. A replacement that performs additional functions is not considered to be functionally equivalent.

(Adopted October 7, 1998)

2-1-231 **Semiconductor Fabrication Area:** A physically identifiable area in a semiconductor manufacturing facility where one or more specific operations in the fabrication of semiconductors or related solid state devices occurs and the equipment used to perform those operations. The semiconductor fabrication area shall not include crystal growth, circuit separation, or encapsulation. All semiconductor fabrication equipment may be grouped into a single fabrication area, or multiple fabrication areas may be established to correspond to product lines or clean room environments.

(Adopted October 20, 1999)

2-1-232 **New Source:** Any source that has not been in existence before, including any source that meets at least one of the following criteria (except sources that lose a permit exemption or exclusion in accordance with Regulation 2-1-424):

232.1 Any source constructed or proposed to be constructed after March 7, 1979, but which never had a valid District authority to construct or permit to operate.

232.2 Any source which was not in operation for a period of one year or more and did not hold a valid District permit to operate during this period of non-operation, occurring after March 7, 1979.

232.3 Any relocation of an existing source to a non-contiguous property, unless such relocation is authorized under a permit to operate at multiple locations pursuant to Section 2-1-413.

232.4 Any replacement of a source, including an identical replacement of a source, occurring after March 7, 1979, regardless of when the original source was constructed.

232.5 Any replacement of an identifiable source within a group of sources permitted together under a single source number for the purpose of District permitting convenience.

232.6 “Rebricking” of a glass furnace where changes to the furnace design result in a change in heat generation or absorption.

(Adopted May 17, 2000; Amended 12/06/17)

2-1-233 **Alter:** To make any physical change, change in the method of operation, or other similar change at an existing source that may affect air pollutant emissions and that does not qualify as a modification under the criteria set forth in Section 2-1-234. The APCO may impose permit conditions in an authority to construct or permit to operate for an alteration to ensure that the change authorized by the authority to construct or permit to operate will not result in a modification under Section 2-1-234. Other forms of the word alter, including altered and alteration, shall be defined based on the meaning of the root word “alter”.

(Adopted 5/17/00; Amended 11/15/00)

2-1-234 **Modify:** To make any physical change, change in method of operation, change in throughput or production, or other similar change at an existing source, that results in an increase in emissions that is either of the following:

234.1 Increase in Potential To Emit: An increase in the source's daily or annual potential to emit, determined according to the definition in Section 2-1-217 and the following requirements.

1.1 Any legally enforceable limitation on a source's operations that has the effect of limiting emissions may be taken into account in determining a source's potential to emit, as provided for in Section 2-2-217. Such limits may include direct limitations on the source's emissions and surrogate limits on operating conditions such as production rate or capacity that have the effect of limiting emissions. An hourly emissions limit may be multiplied by 24 to determine daily potential to emit and a daily emissions limit may be multiplied by 365 to determine annual potential to emit, unless the source cannot operate at its full permitted limit for 24 hours per day or 365 days per year or there is some other reason why short-term permit limits do not accurately represent longer-term potential to emit. A permit limit that applies to combined emissions from multiple sources does not establish an individual source's potential to emit, unless the limit imposes an effective, legally enforceable limitation specifically on the emissions from the individual source.

1.2 For sources whose emissions are not limited by any legally enforceable limitation (or that cannot physically operate to the full extent of such limitation), the source's potential to emit shall be determined by the source's actual physical ability to emit air pollution. A source's potential to emit shall be determined by the most relevant and reliable technical information available regarding the source's operation, which may include design information, engineering specifications, or other information. A source's potential to emit shall take into account any limitation on the effective capacity of the source as a result of the capacity of any upstream or downstream process that acts as a "bottleneck" (i.e., a limit on the ability of the source to operate at maximum capacity).

1.3 For emissions toxic air contaminants and hazardous air pollutants, a change is not a modification unless the increase in the source's potential to emit results in an increase in cancer risk (as defined in Regulation 2-5-206) greater than 1.0 in a million (10^{-6}) or an increase in chronic hazard index (as defined in Regulation 2-5-208) greater than 0.20. An increase in emissions of less than the trigger levels specified in Table 2-5-1 in Regulation 2, Rule 5 shall be presumed not to cause an increase in cancer risk of greater than 1.0 in a million or an increase in chronic hazard index of greater than 0.20.

234.2 Increase Over Actual Emissions Baseline: An increase that is a "major modification" under either of the following definitions:

2.1 Non-Attainment NSR Pollutants: For NOx, VOC, $PM_{2.5}$, and SO_2, a "major modification" as defined in 40 C.F.R. section 51.165(a)(1)(v);

2.2 Other Federal NSR Pollutants: For other pollutants, a "major modification" as defined in 40 C.F.R. section 52.21(b)(2)(i).

The following provisions shall apply for purposes of implementing and applying this Subsection 234.2:

2.3 For purposes of determining whether an increase in emissions constitutes a "major modification" under Subsections 234.2.1 and/or 234.2.2, the definitions in 40 C.F.R. sections 51.165(a)(1)(i)-(xlii) and 52.21(b)(1)-(52), and the applicability provisions in 40 C.F.R. sections 51.165(a)(2)(ii)(A)-(F) and 52.21(a)(2)(ii)-(iv), are incorporated by reference and shall be used in implementing and applying this Subsection 234.2. The term "Administrator" as used in these provisions shall be interpreted to mean the Administrator of the U.S. Environmental Protection Agency in 40 C.F.R. sections 52.21(b)(3), (b)(17), (b)(37)(i), (b)(43), (b)(48)(ii)(*c*), and (b)(49)-(51), and in all referenced provisions in 40 C.F.R. section 51.165; and it shall be interpreted to mean the APCO in all other provisions.

2.4 For any project at a "major stationary source" as defined in 40 C.F.R. sections 51.165(a)(1)(iv) or 52.21(b)(1) that (i) does not result in an increase in potential to emit as specified in subsections 234.1.1 through 234.1.3, and (ii) does not constitute a "major modification" under the definitions in subsections 234.2.1 and 234.2.2 above based on the calculation methods specified in 40 C.F.R. sections 51.165(a)(1)(xxviii)(B)(*1*)-(*3)* and 52.21(b)(41)(ii)(*a*)-(*c*), the owner/operator of such project shall comply with the documentation, monitoring, recordkeeping, and reporting requirements set forth in 40 C.F.R. sections 51.165(a)(6)(i)-(vi) and 52.21(r)(6)(i)-(vi) for each pollutant for which there is a reasonable possibility that the project may result in a significant emissions increase within the meaning of 40 C.F.R. sections 51.165(a)(6)(vi) and 52.21(r)(6)(vi).

2.5 The owner/operator of any project that is required to maintain any documentation pursuant to Subsection 234.2.4 above shall make such documentation available for review upon request by the APCO, EPA, or any member of the public on the same terms as applicable under the requirements contained in 40 C.F.R. section 70.4(b)(3)(viii).

Other forms of the word modify, including modified and modification, shall be defined based on the meaning of the root word "modify".

(Adopted 5/17/00; Amended 11/15/00; 6/15/05; 12/06/17)

2-1-235 [Deleted, December 19, 2012]

2-1-236 [Deleted, December 19, 2012]

2-1-237 **BACT/TBACT Workbook:** District guidelines setting forth emission limitations and/or control technologies constituting BACT and TBACT for a number of source types or categories.

(Adopted June 15, 2005)

2-1-238 **Clean Air Act:** The federal Clean Air Act, as amended in 1990, including the implementing regulations.

(Adopted June 15, 2005)

2-1-239 **Agricultural Source:** A source of air pollution, or group of such sources located on the same property or on contiguous properties under common ownership or control, used in the production of crops or the raising of fowl or animals; but excluding any

source or group of sources at a facility that maintains domesticated animals in corrals, pens, or other restricted areas for commercial purposes, and feeds them by means other than grazing, in numbers equal to or exceeding any of the following thresholds on any day: 1,000 milk-producing dairy cows; 3,500 beef cattle; 7,500 calves, heifers, or other cattle; 100,000 turkeys; 650,000 chickens other than laying hens; 650,000 laying hens; 3,000 swine; 15,000 sheep, lambs, or goats; 2,500 horses; 650,000 ducks; or 30,000 rabbits or other animals.

(Adopted July 19, 2006; Amended 12/06/17)

2-1-240 **Graphic Arts Operation:** Any gravure, flexographic printing, digital printing, screen printing, letterpress, and lithographic printing operation; any associated coating laminating, and adhesive operation to produce a printed product; and the use of solvents for any surface preparation and cleanup for any operation stated above.

(Adopted November 19, 2008)

2-1-241 **$PM_{2.5}$:** Particulate matter with aerodynamic diameter smaller than or equal to a nominal 2.5 microns. $PM_{2.5}$ emissions shall include gaseous emissions from a source or activity that condense to form particulate matter at ambient temperatures.

2-1-242 **Support Facility:** A facility that conveys, stores, or otherwise significantly assists in the production of the principal product of another facility. Per Section 2-1-213, a support facility is considered part of the principal facility that it supports for permitting purposes under Regulation 2.

2-1-243 **Overburdened Community:** An area located (i) within a census tract identified by the California Communities Environmental Health Screening Tool (CalEnviroScreen), Version 4.0, as having an overall CalEnviroScreen score at or above the 70th percentile, or (ii) within 1,000 feet of any such census tract.

2-1-300 STANDARDS

2-1-301 **Authority to Construct:** Any person who, after July, 1972, puts in place, builds, erects, installs, modifies, modernizes, alters or replaces any article, machine, equipment or other contrivance, the use of which may cause, reduce or control the emission of air contaminants, shall first secure written authorization from the APCO in the form of an authority to construct. Routine repairs, maintenance, or cyclic maintenance that includes replacement of components with identical components is not considered to be an alteration, modification or replacement for the purpose of this Section unless the APCO determines the changes to be non-routine. The use or operation of the source shall initiate the start-up period in accordance with Section 2-1-411.

(Amended 3/17/82; 10/19/83; 7/17/91; 5/17/00)

2-1-302 **Permit to Operate:** Before any person, as described in Section 2-1-401, uses or operates any article, machine, equipment or other contrivance, the use of which may cause, reduce or control the emission of air contaminants, such person shall first secure written authorization from the APCO in the form of a permit to operate.

302.1 Permit to Operate, MFR: Any facility subject to the requirements of Regulation 2, Rule 6, Major Facility Review, shall comply with the permitting requirements included in that Rule in addition to securing a permit to operate under this Rule.

302.2 Permit to Operate, Accelerated Permitting Program: Unless subject to any of the provisions of Sections 2-1-316 through 319, a temporary permit to operate may be obtained to authorize operation of a new source or a modification or alteration of an existing source under this Section pending full review for the following categories of operation:

2.1 A new source or a modification of an existing source if the following conditions are satisfied:

1.1 The source will not have the potential to emit POC, NPOC, NOx, SO_2, $PM_{2.5}$, PM_{10}, or CO in an amount of 10 pounds or more on any day, determined without taking into account the effect of any abatement device or equipment; or the source has been pre-certified under Section 2-1-415; and

1.2 The source will not have the potential to emit toxic air contaminants in an amount that exceeds any of the trigger levels set forth in Table 2-5-1 of Regulation 2, Rule 5, determined without taking into account the effect of any abatement device or equipment; and

1.3 The source is not subject to the public notice requirements of Section 2-1-412.

2.2 An abatement device that is a replacement for an existing abatement device, provided that the replacement will not increase the potential to emit any regulated air pollutant from the abatement device and the source(s) whose emissions it abates.

2.3 An alteration of an existing source, as defined in Section 2-1-233.

An applicant seeking a permit for a new, modified or altered source that is in any of the preceding categories may apply for a temporary permit to operate under the Accelerated Permitting Program by submitting (i) a permit application form and source data form(s) properly filled out with all required information; (ii) payment of applicable fees (the minimum permit fee required to install and operate each source); (iii) a statement explaining which of the categories in subsections 2.1 through 2.3 above the source is in; (iv) a certification that the source meets all of the requirements of that category; (v) a certification that the source is not subject to Sections 2-1-316 through 2-1-319; and (vi) a certification that the applicant has reviewed all applicable New Source Performance Standards and has determined that the application will comply. The APCO shall issue a temporary Permit to Operate promptly upon determining that the application contains all of the elements required by (i)-(vi) of the preceding sentence. The owner or operator of the source may begin construction or operation of the source, or of the modification or alteration of the source, immediately upon receipt of the temporary Permit to Operate. The APCO shall complete a full review of the application and take final action in accordance with Section 2-1-408 within the time period provided for in that section. Any applicable offset requirements under Regulation 2, Rule 2, Sections 302 and 303 shall be satisfied before final permit issuance. The temporary Permit to Operate shall cease to be effective upon final action by the APCO under Section 2-1-408 (or if the permit application is canceled or withdrawn prior to such final action). During periods that the source is operating under the temporary Permit to Operate, the operator shall keep records sufficient to demonstrate that emissions do

not exceed applicable qualifying levels for the Accelerated Permitting Program as set forth in subsections 2.1 through 2.3 above.

302.3 Permit to Operate, Temporary Operation: A temporary permit may be obtained to allow an operator to test equipment, processes, or new formulations. A temporary permit may also be obtained for a temporary source which replaces critical equipment during scheduled maintenance. The APCO may issue a non-renewable temporary Permit to Operate a temporary operation at any source, subject to the following:

3.1 The proposed operation will comply with all requirements of Regulation 1 and Regulations 5 through 12.

3.2 The permit shall expire 3 months after issuance.

3.3 The operator shall provide offsets, at a ratio of 1.15 to 1, for all increased emissions of NO_x, POC, SO_2, $PM_{2.5}$, and PM_{10} resulting from the use of the temporary permit.

3.4 The operator shall certify that the temporary operation is for one of the following purposes:

4.1 Equipment testing

4.2 Process testing, including new formulations

4.3 Temporary replacement of an existing permitted source with an identical or functionally equivalent source

3.5 The operator shall comply with the provisions of Regulation 2-2-301, except that the cost-effectiveness analysis shall consider the short duration of the operation.

(Amended 11/3/93; 6/7/95; 10/7/98; 11/15/00)

2-1-303 **Fees:** Persons subject to this Regulation shall pay the fees required, as set forth in Regulation 3.

2-1-304 **Denial, Failure to Comply With Applicable Requirements:** The APCO shall deny an authority to construct or a permit to operate if the APCO finds that the subject of the application would not or does not comply with any emission limitations or other regulations of the District (including but not limited to the BACT and offsets requirements in Regulations 2-2-301 through 2-2-303), or with applicable permit conditions or federal or California laws or regulations, or if any required fees have not been paid. Such denial shall not be based solely on the type of construction or design of equipment.

(Amended March 17, 1982)

2-1-305 **Conformance with Authority to Construct:** A person shall not put in place, build, erect, install, modify, modernize, alter or replace any article, machine, equipment, or other contrivance for which an authority to construct has been issued except in a manner substantially in conformance with the authority to construct. If the APCO finds, prior to the issuance of a permit to operate, that the subject of the application was not built substantially in conformance with the authority to construct, the APCO shall deny the permit to operate.

(Amended December 21, 2004)

2-1-306 **Mandated Reductions Not Applicable:** Emission reductions resulting from requirements of federal, state or District laws, rules or regulations shall not be banked or allowed as emission offsets or emission reduction credits unless a complete application for such banking or emission reduction credits was filed with the District at least 90 days prior to the adoption date of such laws, rules or regulations. Only emission reduction credits exceeding the emission reductions required by measures described in the Air Quality Management Plan or required by permits or orders; and

reductions achieved by measures not specified in the Air Quality Management Plan shall be banked or allowed as emission offsets or emission reduction credits.

(Amended 10/7/81; 7/17/91; 6/15/94)

2-1-307 Failure to Meet Permit Conditions: A person shall not operate any article, machine, equipment or other contrivance, for which an authority to construct or permit to operate has been issued, in violation of any permit condition imposed pursuant to Section 2-1-403.

(Adopted 3/17/82; Amended 7/17/91)

2-1-308 Fugitive Emissions: Fugitive emissions shall be included as emissions from a source or facility except as required under this Regulation.

(Adopted 10/19/83; Amended 7/17/91)

2-1-309 Canceled Application: The APCO may cancel an application for an authority to construct and a permit to operate if, within 90 days after the application was deemed incomplete, the applicant fails to furnish the requested information or pay all appropriate fees. The 90 day period may be extended for an additional 90 days upon receipt of a written request from the applicant and written approval thereof by the APCO. The APCO shall notify the applicant in writing of a cancellation, and the reasons therefore. A cancellation shall become effective 10 days after the applicant has been notified. The cancellation shall be without prejudice to any future applications.

(Adopted April 6, 1988)

2-1-310 Applicability of CEQA: Except for permit applications which will be reviewed as ministerial projects under Section 2-1-311 or which are exempt from CEQA pursuant to Section 2-1-312, all proposed new and modified sources for which an authority to construct must be obtained from the District shall be reviewed in accordance with the requirements of CEQA.

310.1 For those District permit applications which must be reviewed in accordance with the requirements of CEQA, the District will not normally be a Lead Agency under CEQA. Rather, pursuant to CEQA, the Lead Agency will normally be an agency with general governmental powers, such as a city or county, rather than a special purpose agency such as the District.

310.2 The issuance of an authority to construct and of a permit to operate for the same new or modified source or stationary source are considered to be parts of the same project for the purposes of CEQA.

310.3 The APCO shall not authorize, on an interim basis or otherwise, the installation or operation of any proposed new or modified source, the permitting of which is subject to the requirements of CEQA, until all of the requirements of CEQA have been satisfied.

(Adopted 7/17/91; Amended 10/21/92)

2-1-311 Ministerial Projects: An application for a proposed new or modified source or stationary source will be classified as ministerial and will accordingly be exempt from the CEQA requirement of Section 2-1-310 if the District's engineering evaluation and basis for approval or denial of the permit application for the project is limited to the criteria set forth in Section 2-1-428 of this rule and to the specific procedures, fixed standards and objective measurements set forth in the District's Permit Handbook and BACT/TBACT Workbook. The method for determining whether a given permit application will be classified as ministerial is set forth in Section 2-1-427.

(Adopted 7/17/91; Amended 10/7/98)

2-1-312 Other Categories of Exempt Projects: In addition to ministerial projects, the following categories of projects subject to permit review by the District will be exempt

from the CEQA review, either because the category is exempted by the express terms of CEQA (subsections 2-1-312.1 through 312.9) or because the project has no potential for causing a significant adverse environmental impact (subsections 2-1-312.10 and 312.11). Any permit applicant wishing to qualify under any of the specific exemptions set forth in this Section 2-1-312 must include in its permit application CEQA-related information in accordance with subsection 2-1-426.1. In addition, the CEQA-related information submitted by any permit applicant wishing to qualify under subsection 2-1-312.11 must demonstrate to the satisfaction of the APCO that the proposed project has no potential for resulting in a significant environmental effect in connection with any of the environmental media or resources listed in Section II of Appendix I of the State CEQA Guidelines.

312.1 Applications to modify permit conditions for existing or permitted sources or facilities that do not involve any increases in emissions or physical modifications.

312.2 Permit applications to install air pollution control or abatement equipment.

312.3 Permit applications for projects undertaken for the sole purpose of bringing an existing facility into compliance with newly adopted regulatory requirements of the District or of any other local, state or federal agency.

312.4 Permit applications submitted by existing sources or facilities pursuant to a loss of a previously valid exemption from the District's permitting requirements.

312.5 Permit applications submitted pursuant to the requirements of an order for abatement issued by the District's Hearing Board or of a judicial enforcement order.

312.6 Permit applications relating exclusively to the repair, maintenance or minor alteration of existing facilities, equipment or sources involving negligible or no expansion of use beyond that previously existing.

312.7 Permit applications for the replacement or reconstruction of existing sources or facilities where the new source or facility will be located on the same site as the source or facility replaced and will have substantially the same purpose and capacity as the source or facility replaced.

312.8 Permit applications for cogeneration facilities which meet the criteria of Section 15329 of the State CEQA Guidelines.

312.9 Any other project which is exempt from CEQA review pursuant to the State CEQA Guidelines.

312.10 Applications to deposit emission reductions in the emissions bank pursuant to Regulation 2, Rule 4 or Regulation 2, Rule 9.

312.11 Permit applications for a proposed new or modified source or sources or for process changes which will satisfy the “No Net Emission Increase" provisions of District Regulation 2, Rule 2, and for which there is no possibility that the project may have any significant environmental effect in connection with any environmental media or resources other than air quality. Examples of such projects include, but are not necessarily limited to, the following:

11.1 Projects at an existing stationary source for which there will be no net increase in the emissions of air contaminants from the stationary source and for which there will be no other significant environmental effect;

11.2 A proposed new source or stationary source for which full offsets are provided in accordance with Regulation 2, Rule 2, and for which there will be no other significant environmental effect;

11.3 A proposed new source or stationary source at a small facility for which full offsets are provided from a small facility bank established by the APCO pursuant to Regulation 2-4-414, and for which there will be no other significant environmental effect;

11.4 Projects satisfying the "no net emission increase" provisions of District Regulation 2, Rule 2 for which there will be some increase in the emissions of any toxic air contaminant, but for which the District staff's health risk screening analysis shows that the project will not result in a cancer risk (as defined in Regulation 2-5-206) greater than 1.0 in a million (10^{-6}) and will not result in a chronic hazard index (as defined in Regulation 2-5-208) greater than 0.20, and for which there will be no other significant environmental effect.

(Adopted 7/17/91; Amended 5/17/00; 12/21/04; 6/15/05)

2-1-313 Projects Not Exempt From CEQA Review: Notwithstanding the exemptions from CEQA review set forth in Section 2-1-312, such exemptions shall not apply to any project covered by the categories set forth in subsections 2-1-312.1 through 312.9 where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances, or due to cumulative impacts of successive projects of the same type in the same place over time. Such projects shall be reviewed in accordance with the requirements of CEQA.

(Adopted 7/17/91; Amended 6/15/05)

2-1-314 Case-by-Case CEQA Determinations: Notwithstanding the requirement of Section 2-1-311, the District shall, for any permit applications which were deemed complete by the District on or before July 17, 1991, review said permit applications on a case-by-case basis in order to determine whether the District's evaluation of the permit application will involve any element of discretion. If as a result of this case-by-case-review, the District determines that the evaluation of the permit application will not involve any element of discretion on its part, then the application may be treated as a ministerial project so long as all of the following conditions are met:

314.1 The District makes a specific written finding to this effect as part of its determination that the permit application is complete;

314.2 The District will merely apply the law to the facts as presented in the permit application; and

314.3 The District's evaluation of the permit application and its decision regarding whether to issue the permit will be limited to the criteria set forth in Section 2-1-428.

(Adopted July 17, 1991)

2-1-315 Denial, Failure to Mitigate Significant Adverse Environmental Impacts: For any application for which the District is a Lead Agency under CEQA, where significant adverse environmental impacts have been identified in the District's review of, or in the course of the public comment period on, said application, the APCO shall deny an authority to construct to such new or modified stationary source, as proposed, unless:

315.1 The applicant agrees to implement or carry out such available alternatives or mitigation measures which would, to the extent feasible, avoid or substantially lessen any such significant adverse environmental impacts as a condition for issuance of an authority to construct; or

315.2 The APCO finds that any such available, feasible alternatives or mitigation measures are within the responsibility and jurisdiction of another public agency, and such measures have been adopted by such other agency, or can and should be adopted by such other agency; or

315.3 The APCO finds that there are no feasible alternatives or measures to substantially mitigate the unavoidable adverse environmental effects associated with the project, but that the benefits of the project outweigh such unavoidable adverse environmental effects, and the APCO states in writing the reasons and overriding considerations to support the issuance of the authority to construct based on the Final EIR and other information in the record notwithstanding the unavoidable adverse environmental effects associated with the project.

(Adopted November 20, 1991)

2-1-316 New or Modified Sources of Toxic Air Contaminants or Hazardous Air Pollutants: Notwithstanding any exemption contained in Section 2-1-103 or Section 114 through 128, any new or modified source meeting any of the following criteria shall be subject to the requirements of Regulation 2, Rule 1, Section 301 and/or 302.

316.1 If a new or modified source emits one or more toxic air contaminants in quantities that exceed the trigger levels listed in Table 2-5-1 of Regulation 2-5 and the source did not have a valid exemption from Regulation 2-1-302 when the source was constructed or modified, then the source shall be subject to the requirements of Sections 2-1-301 and 302, unless the owner or operator of the source can demonstrate to the satisfaction of the APCO that the source:

1.1 Will comply with the TBACT requirement of Regulation 2-5-301 (if applicable); and

1.2 Will comply with the project risk limits of Regulation 2-5-302 (if applicable).

316.2 If a new or modified source, or group of related sources in a proposed construction or modification will emit 2.5 or more tons per year of any single hazardous air pollutant or 6.25 or more tons per year of any combination of hazardous air pollutants, then the source or group of sources shall be subject to the requirements of Sections 2-1-301 and 302.

(Adopted 4/16/86; Amended 7/17/91;Renumbered and Amended 6/7/95; Amended 5/17/00; 6/15/05)

2-1-317 Public Nuisance Sources: Notwithstanding any exemption contained in Section 2-1-103 or Section 114 through 128, any new or modified source meeting any of the following criteria shall be subject to the requirements of Regulation 2, Rule 1, Section 301 and/or 302. If any exempt source receives two or more public nuisance violations, under Regulation 1, Section 301 or Section 41700 of the California Health & Safety Code, within any consecutive 180-day period, then the source shall be subject to the requirements of Section 2-1-301 and 302. Such a source will be treated as loss of exemption source under Section 2-1-414, and will be subject to the annual permit to operate fee specified in Regulation 3. This section does not apply to a source that is exempt per section 2-1-113.

(Adopted 6/7/95; Amended 5/17/00)

2-1-318 Hazardous Substances: Notwithstanding any exemption contained in Section 2-1-103 or Section 114 through 128, any new or modified source meeting any of the following criteria shall be subject to the requirements of Regulation 2, Rule 1, Section 301 and/or 302. If a new or modified source at a facility in one of the 28 categories listed in Section 169(1) of the Clean Air Act that emits 100 tons per year of any PSD

Pollutant as defined in Section 2-2-223, or at a facility not listed in any such category that emits 250 tons per year or more of any PSD Pollutant as defined in Section 2-2-223, emits any of the following air contaminants in excess of the quantities listed below, then it is subject to the requirements of Sections 2-1-301 and 302.

318.1 0.6 ton per year of lead,

318.2 0.007 ton per year of asbestos (excepting demolition, renovation, and waste disposal),

318.3 0.0004 ton per year of beryllium,

318.4 0.1 ton per year of mercury,

318.5 1 ton per year of vinyl chloride,

318.6 3 tons per year of fluorides,

318.7 7 tons per year of sulfuric acid mist, and

318.8 10 tons per year of reduced sulfur compounds (including hydrogen sulfide).

(Adopted 10/19/83; Renumbered and Amended 6/7/95; Amended 5/17/00)

2-1-319 Source Expressly Subject to Permitting Requirements: Notwithstanding any exemption contained in Section 2-1-103 or Sections 2-1-114 through 2-1-128, any source meeting any of the following criteria shall be subject to the requirements of Section 2-1-302:

319.1 The emission rate of any regulated air pollutant (except greenhouse gases) from the source is greater than 5 tons per year, after abatement.

319.2 The source is subject to the requirements of Section 2-1-316, 317, or 318.

(Adopted May 17, 2000)

2-1-320 Compliance With Material Representations Made In Connection With Permit Applications: In addition to the explicit conditions contained in an authority to construct and/or permit to operate, the owner and operator of a source of air pollutant emissions shall construct and operate the source in conformance with any representations made or information submitted to the APCO in connection with the application for such authority to construct and/or permit to operate, provided such representations or information were material to the APCO's decision to issue the authority to construct and/or permit to operate. Construction or operation of the source not in conformance with such material representations or information shall be a violation of this Regulation.

2-1-321 Compliance With Provisions of State Implementation Plan and Other Requirements of Local, California and Federal Law: Issuance of an authority to construct and/or permit to operate for a facility under this Rule shall not relieve the owner and operator of the facility from the responsibility to comply fully with all applicable provisions of the state implementation plan for California and all other requirements under local, California and federal law.

2-1-400 ADMINISTRATIVE REQUIREMENTS

2-1-401 Persons Affected: Any person who has been granted or requires an authority to construct shall secure a permit to operate. Any person who is not required to obtain an authority to construct and who is required to obtain a permit to operate shall secure a permit to operate. In addition, the following shall apply for a permit to operate for any source which is not subject to an exemption per Sections 2-1-103, 105, or 113 through 2-1-129:

401.1 On or before July 1, 1980, persons who operate a facility causing emissions of 2.5 tons per year or more of a regulated air pollutant.

401.2 On or before July 1, 1980, persons who operate gasoline terminals, bulk plants and facilities that dispense gasoline for sale or dispense more than 60,000 gallons of gasoline per year.

401.3 Persons who operate coating, adhesive, dipping, laminating, printing, screening, masking, electrodeposition, resist application, or similar source or equipment at any facility whose coating, adhesive, dipping, laminating, printing, screening, masking, electrodeposition, resist application, or similar source or equipment consume greater than 30 gallons of coating and emit 150 pounds of VOC per year or more on a facility wide basis, resulting from the applications of coatings. Upon request of the applicant, the APCO may group coating operations which individually emit less than 150 lb/yr into a single facility-wide source, or other convenient grouping.

401.4 Persons who operate surface preparation and cleaning equipment or operations which use unheated solvent solutions containing more than 10 percent VOC and which contain more than 1 gallon of solvent or have a liquid surface area of more than 1 $ft.^2$, including wipe cleaning operations with a net solvent usage greater than 20 gallons per year, and that emit 150 pounds of VOC per year or more, on a facility-wide basis. Upon request of the applicant, the APCO may group wipe cleaning operations into a single facility-wide source, or other convenient groupings.

401.5 Persons who plan to modify an existing source or install a new source which qualifies for the Accelerated Permitting Program in Section 2-1-106 shall first submit a complete permit application, in accordance with Section 2-1-302.2.

401.6 Persons who operate a source that is subject to either loss of exemption or exclusion per section 2-1-414 or 2-1-424.

401.7 Persons who operate a source constructed after July 1, 1972.

401.8 On or before July 1, 2005, any person who operates a crematorium for the cremation of human remains.

(Amended 4/16/86; 1/7/87; 7/17/91; 6/7/95; 10/7/98; 5/17/00; 12/21/04)

2-1-402 Applications: Every application for an authority to construct or a permit to operate shall be submitted to the APCO on the forms specified, and shall contain all of the following information:

402.1 Sufficient information for the APCO to determine the emissions from the sources that are the subject of the application, and to quantify emissions from the sources of any emission reduction credits that will be relied upon as part of the application.

402.2 Any information requested by the APCO in order to determine the air quality impact from sources that are the subject of the application.

402.3 All applicable fees, as described in Regulation 3.

402.4 If the application is subject to the New Source Review requirements of Regulation 2, Rule 2, all information required under Section 2-2-401.

402.5 CEQA-related information that satisfies the requirements of Section 2-1-426.

402.6 A certification stating whether the source triggers the requirements of Section 2-1-412.

402.7 A specific designation of any information contained in the application that the applicant asserts is trade secret pursuant to Section 6254.7 of the Government Code. The applicant shall submit two copies of each page containing trade secret information. One copy shall be clearly labeled “Trade Secret,” and each trade secret item shall be clearly marked. The second

copy shall be clearly labeled “Public Copy,” and each trade secret item shall be redacted. The applicant shall include, for each item which it asserts to be a trade secret, a statement signed by a responsible representative of the applicant identifying that portion of Government Code Section 6254.7(d) upon which the assertion is based and a brief statement setting forth the basis for this assertion.

402.8 Any other information requested by the APCO as necessary to determine whether the new, modified or altered source will comply with applicable regulatory requirements.

The application must contain sufficient information to enable the APCO to make a decision or a preliminary decision on the application and/or on any exemptions authorized by this Regulation. The APCO may consult with appropriate local and regional agencies to determine whether the application conforms with adopted plans and with local permit requirements.

2-1-403 **Permit Conditions:** Except as to permit applications reviewed in accordance with Section 2-1-311, the APCO may impose any permit condition that ~~he~~ the APCO deems reasonably necessary to insure compliance with federal or California law or District regulations. For any permit application which was reviewed as a ministerial project in accordance with Section 2-1-311, the APCO shall only impose permit conditions as set forth in the District's Permit Handbook for the type of source being permitted. The APCO may require the installation of devices for measurement or analysis of source emissions or ground-level concentrations of air contaminants.

(Amended 7/17/91; 10/7/98)

2-1-404 **Changes in Throughput and Hours of Operation:** After a permit to operate has been issued, in accordance with subsections 2-1-401.1 through 401.4, changes in hours of operation, fuels, process materials or throughput are allowed only if emissions resulting from such changes are not of such quantity as would cause denial of an authority to construct after an air quality permit analysis made pursuant to the provisions of Rule 2 of this Regulation. "Change" is the use of a process or fuel not used in the prior 12 months, or a throughput level higher than the highest level in the prior 12 months or total monthly operating hours higher than any month in the prior 12 months.

404.1 The holder of a permit to operate shall advise the APCO not more than 30 days after any changes in hours of operation, fuels, process materials or throughput which might increase emissions.

404.2 The APCO shall act to revoke the permit to operate of any person who fails to comply with the requirements of this Section.

(Amended July 17, 1991)

2-1-405 **Posting of Permit to Operate:** A copy of the permit to operate, including all relevant permit conditions, shall be accessible to personnel who operate the equipment for which the permit has been issued. These documents shall be included on site in the operator’s manual, or shall be accessible to the operators electronically.

(Amended 5/17/00; 11/15/00)

2-1-406 **Transfer:** An authority to construct or a permit to operate shall not be transferable from one facility to another. An authority to construct or a permit to operate shall not be transferable from one person to another without obtaining written permission of the APCO.

2-1-407 **Authority to Construct Expiration:** An authority to construct shall expire two years after the date of issuance, unless the authority to construct has been renewed. Upon receipt of a written request and any required fees prior to the expiration of the

authority to construct, the APCO shall renew the authority to construct in writing if the APCO determines that the renewal complies with this section and that the holder of the authority to construct is not violating any provision or condition of the authority. If the APCO does not act on such a request prior to expiration of the authority to construct, the authority shall remain in effect until the APCO has acted to approve or deny the renewal request (up to a maximum of an additional 12 months).

407.1 The following requirements shall apply to renewals:

1.1 Except as provided in Sections 2-1-407.2 and 407.3, an authority to construct may be renewed one time for an additional two years.

1.2 Except for renewals pursuant to Section 2-1-407.3, renewal is contingent upon meeting the current BACT and offset requirements of Regulation 2-2-301, 302 and 303.

1.3 Except as provided in Sections 2-1-407.2 and 407.3, an authority to construct that has been renewed shall expire four years after the date of original issuance.

407.2 If the authority to construct was issued pursuant to an environmental impact report (EIR) that explicitly covered a construction period longer than four years, the authority to construct shall, upon request by the applicant, be renewed for additional two-year terms throughout the construction period covered by the EIR.

407.3 If substantial use of the authority to construct has begun, either during the initial term or during a renewal term, the authority to construct shall, upon request by the applicant, be renewed for additional two-year terms until the permit to operate is issued, or, if a term of less than two years is requested, for such term as is requested.

(Amended 7/17/91; Amended 10/7/98; 6/1/05)

2-1-408 Final Action on Applications: The APCO shall take final action on an application as follows. ~~Except for applications subject to Section 2-1-412, the publication and public notice requirements of Section 2-2-404 or Section 2-10-402, or to the provisions of Rule 6 of this Regulation, the APCO shall notify the applicant in writing of approval, approval with conditions, or denial of the application within 35 working days of receipt of a completed application, unless the time is extended with the written consent of the applicant.~~

408.1 The APCO shall approve, approve with conditions, or deny the application: (i) within 90 days after the Date of Completion; or (ii) if the application is subject to a public notice and comment requirement under Regulation 2 and/or if the application involves a facility subject to Regulation 2, Rule 6 (Major Facility Review) within 180 days after the Date of Completion.

~~Notwithstanding this 35-working-day limit, the APCO shall not take final action for any project for which an Environmental Impact Report or a Negative Declaration has been prepared until a Final EIR for that project has been certified or a Negative Declaration for that project has been approved, and the APCO has considered the information in that Final EIR or Negative Declaration. For cases in which the 35-working-day time period has elapsed, the APCO shall take final action on the application within 30 days after the certification of the Final EIR or approval of the Negative Declaration, or after final resolution of any appeals from such certification or approval. This subsection shall not apply to any project that is exempt from the District's CEQA requirements pursuant to Section 2-1-311 or 2-1-312. Any substantive~~

~~change to an application which occurs after the evaluation period has begun shall allow the APCO to start a new completeness review period, and to reset the 35 working day limit after the application has been deemed complete.~~

408.2 If the application is subject to the environmental review requirements of CEQA, the deadlines in Section 2-1-408.1 shall be extended until 60 days after an environmental review document satisfying the CEQA environmental review requirements has been certified, adopted, or otherwise finalized.

408.3 The APCO shall notify the applicant in writing of the final action.

408.4 Any of the deadlines specified in this Section may be extended by written consent of the applicant.

408.5 Any substantive change to an application shall require submittal of a new application, which shall reset the deadlines specified in this Section.

(Amended 11/1/89; 7/17/91; 11/20/91; 11/3/93; 6/7/95; 10/7/98; 12/21/04; 7/19/06)

2-1-409 Regulations in Force Govern: The decision as to whether an authority to construct shall be granted or denied shall be based on federal, state and District BACT, offset, TBACT, and project risk regulations or standards in force on the date the application is declared by the APCO to be complete.

(Amended June 15, 2005)

2-1-410 Appeal: The following actions of the APCO may be appealed:

410.1 In accordance with Section 42302 of the Health and Safety Code an applicant for an authority to construct which has been denied may request, within 30 days after receipt of the written notice to deny, the Hearing Board of the District to hold a hearing on whether or not the authority to construct was properly denied.

410.2 In accordance with Section 42302.1 of the Health and Safety Code, within 30 days of any decision of the APCO, pertaining to the issuance of an authority to construct, any aggrieved person who, in person or through a representative, appeared, submitted written testimony, or otherwise participated in the action before the District may request the Hearing Board of the District to hold a public hearing to determine whether the authority to construct was properly issued or for an order modifying or reversing that decision. Such appeals shall be filed in writing and contain a summary of the issues to be raised. The Hearing Board shall consider the appeal at a public hearing within 30 days of the filing of the appeal. The Hearing Board may reverse or modify the decision of the APCO if it determines that the decision was erroneous.

410.3 In accordance with Section 40724.6(g) of the Health and Safety Code, a permitholder of a large confined animal facility may appeal any District determination or decision made under Regulation 2, Rule 10, in accordance with Section 2-1-410.2.

(Amended 7/17/91; 11/20/91; 5/17/00; 7/19/06)

2-1-411 Permit to Operate, Final Action: The APCO shall take final action to approve, approve with conditions, or disapprove a permit to operate a source subject to this rule within 90 days after the initial date of the start-up period of the new or modified source, unless such time period is extended with the written concurrence of the APCO and the applicant. An authority to construct authorizes operation of the source during the start-up period. All conditions, specific or implied, of the authority to construct are in effect during the entire start-up period.

411.1 Notwithstanding the above, final action taken on permits issued pursuant to Rule 6 of this Regulation shall be in accordance with the provisions of Section 2-6-410.

411.2 A permit approved under this section must be signed by the permit holder or by a person authorized to sign on behalf of the permit holder.

(Adopted 10/19/83; Amended 7/17/91; 11/3/93; 10/7/98; 12/21/04)

2-1-412 Public Notice, Schools & Overburdened Communities: Prior to approving an application for an authority to construct or permit to operate for (i) a new or modified source located within 1000 feet of the outer boundary of a K-12 schoolsite and which results in the increase in emissions of any substance into the ambient air which has been identified by the California Air Resources Board or the APCO as a toxic air contaminant or a hazardous air contaminant or which is on the list required to be prepared pursuant to subdivision (a) of Section 25532 or Section 44321 subsections (a) to (f) inclusive of the Health and Safety Code, or (ii) a new or modified source located within an Overburdened Community as defined in Section 2-1-243 and for which a Health Risk Assessment is required pursuant to Section 2-5-401, the APCO shall:

412.1 Prepare a public notice in which the proposed new or modified source, and the proposed emissions, are fully described.

412.2 Distribute the notice, prepared in accordance with subsection 2-1-412.1 at the expense of the applicant, to the parents or guardians of children enrolled in any school within one-quarter mile of the source and to each address within a radius of 1000 feet of the source. ~~This notice shall be distributed at least 30 days prior to the date final action on the application is to be taken by the APCO.~~ The APCO shall review and consider all comments received during the 30 days after the notice is distributed, and shall include written responses to the comments in the permit application file prior to taking final action on the application.

412.3 Failure of any person to receive the notice shall not affect the validity of the authority to construct or permit to operate issued by the APCO, if the APCO or applicant responsible for giving the notice has made a good faith effort to follow the procedures for giving the notice prescribed by law.

(Adopted 11/1/89; Amended 10/7/98; 5/17/00)

2-1-413 Permits for Operation of Equipment at Multiple Locations Within the District: Any person required to obtain an authority to construct and/or permit to operate under Sections 2-1-301 and/or 302 for a source that may be operated at multiple locations within the District can apply for a single multiple-location permit that will allow the source to operate at more than one location in the District. The APCO shall issue the permit, upon payment of standard filing, initial and permit to operate fees as set forth in Regulation 3, if the source satisfies all of the following requirements:

413.1 The source will not emit more than 10 tons per year of any regulated air pollutant, including POC, CO, NOx, $PM_{2.5}$, PM_{10}, NPOC or SO_2, but excluding greenhouse gases. For $PM_{2.5}$ and PM_{10}, fugitive particulate emissions from haul road traffic shall not be counted toward the annual limit.

413.2 The source will comply with all applicable provisions of Regulation 2, Rule 5.

413.3 The source will not be operated within 1000 feet of the outer boundary of any K-12 school site, unless the applicable notice requirements of Health and Safety Code Section 42301.6 have been met.

413.4 Operation of the source will not cause a public nuisance per Regulation 1-301.

413.5 The operation must be exempt from CEQA, or must be covered by a chapter in the District's Permit Handbook.

413.6 The equipment will not cause a Synthetic Minor Facility to exceed a federally enforceable emission limit.

413.7 The source will not remain at the same facility for more than 12 consecutive months following initial operation (or, in the case a source that is used in seasonal operations that last less than 12 months, for more than the full length of a normal operating season). If multiple temporary sources are used in succession at the facility to serve the same function at the same facility source, the total time period that all such temporary sources remain at the facility is counted towards the 12-month (or operating season) limit.

If the source no longer satisfies any of these requirements, it shall be subject to the requirements of Regulation 2, Rules 1, 2, and 5, as if it were a new source.

(Adopted June 7, 1995; Amended 12/06/17)

2-1-414 Loss of Exemption, Public Nuisance: Any source subject to Section 2-1-317 shall be subject to permit conditions deemed necessary by the District to minimize the potential for future violations. If the owner/operator can demonstrate that the source has neither received a public nuisance violation nor received a confirmed complaint for a two year period after the permit was issued, then the owner/operator may submit a written petition to the APCO to remove the permit requirement. Such a petition is subject to APCO approval.

(Adopted June 7, 1995)

2-1-415 Source Pre-Certification Procedure: Any person may submit a written request to pre-certify a source as complying with applicable BACT requirements, for the purposes of qualifying the source for the Accelerated Permitting Program under Section 2-1-302.2.1.1. Such a request will be evaluated within 60 days of receipt of the information listed below. The APCO may also independently pre-certify a source. The APCO shall maintain a list of pre-certified equipment, and shall make this list available to industry through the Public Information & Education Division. A pre-certification request shall include all of the following:

415.1 A complete description of the source, including make, model number, rated capacity and emission calculations at maximum operating rate;

415.2 Applicable BACT requirements;

415.3 Proposed permit conditions governing operation of the source; and

415.4 Applicable fees, as described in Regulation 3, Section 323.

(Adopted June 7, 1995)

2-1-416 Temporary Amnesty for Unpermitted Sources: The APCO has the authority to declare an amnesty period, during which the District may waive all or part of the penalty fees, including late fees and retroactive permit fees, for sources that are currently operating without valid Permits to Operate.

(Adopted 6/7/95; 12/21/04)

2-1-420 Suspension: The APCO may suspend a permit if, within a reasonable time, the holder of the permit willfully fails or refuses to furnish requested information, analyses, plans or specifications relating to emissions from the source for which the permit was issued. The APCO shall serve notice in writing of a suspension, and the reasons therefor, on the holder of the permit. A suspension shall become effective 5 days after notice has been served.

2-1-421 **Appeal from Suspension:** Within 10 days after the receipt of the notice of suspension, the permit holder may request the Hearing Board to hold a hearing to determine whether or not the permit was properly suspended.

2-1-422 **Revocation:** The APCO may request the Hearing Board to hold a hearing to determine whether an authority to construct and/or permit to operate should be revoked if it is found that the holder of an authority to construct or permit to operate is violating any applicable order, rule or regulation of the District, or is violating any provision or condition of the authority to construct or permit to operate.

(Amended May 17, 2000)

2-1-423 **Hearings:** Within 30 days after receipt of requests submitted pursuant to Sections 2-1-421 and 422, the Hearing Board shall hold a hearing as provided by Section 42308 of the California Health and Safety Code and may take action as authorized by Section 42309 of the California Health and Safety Code.

(Amended July 17, 1991)

2-1-424 **Loss of Exemption or Exclusion:** Any person who operates a source that does not require a District permit because of a regulatory exemption or exclusion, but which becomes subject to a District permit requirement because it loses its exemption or exclusion as a result of changes in federal, California or District laws or regulations, shall submit a complete permit application, as defined Section 2-1-202, for the subject source within 90 days of written notification by the APCO of the need for a permit. A person who holds a valid permit to operate for the subject source need not reapply.

(Adopted 4/16/86; Amended 6/7/95; 10/7/98; 7/19/06; 12/06/17)

2-1-425 **Sources of Toxic Air Contaminants:** Any person who does not hold a valid permit to operate in accordance with Section 2-1-401 and emits, in quantities determined to be appropriate by the APCO, any toxic air contaminant, shall within 90 days of written notice by the APCO of the need for a permit to operate, complete a permit application for the subject source, in accordance with the applicable requirements of Section 2-1-202 or Section 2-1-302.2.

(Amended June 7, 1995)

2-1-426 **CEQA-Related Information Requirements:** Unless a project for which an authority to construct is sought is exempt from the District's CEQA requirements pursuant to Section 2-1-311 or 2-1-312 of this Rule, applicants for authorities to construct shall provide, as part of a complete application, the following CEQA-related information:

426.1 A preliminary environmental study which shall describe the proposed project and discuss any potential significant adverse environmental impacts, alternatives to the project, and any necessary mitigation measures to minimize adverse impacts. The preliminary environmental study shall include all activities involved in the project and shall not be limited to those activities affecting air quality. In preparing the preliminary environmental study, the applicant may utilize the Environmental Information Form in Appendix H of the State CEQA Guidelines or an equivalent format specified by the APCO. (see also Appendix G, Significant Effects.) The preliminary environmental study shall list all other local, state and federal governmental agencies that require permits for the project and indicate any environmental documentation required by such agencies; or

426.2 When an agency other than the District is to be the Lead Agency under CEQA, either:

2.1 A Draft or Final Environmental Impact Report prepared by or under the supervision of the Lead Agency; or

2.2 A contract for the preparation of a Draft Environmental Impact Report executed by the Lead Agency together with the Initial Study prepared by the Lead Agency; or

2.3 A Negative Declaration prepared by the Lead Agency; or

2.4 A Notice of Preparation of a Draft EIR prepared by the Lead Agency;

2.5 A copy of the Initial Study prepared by the Lead Agency, or

2.6 A commitment in writing from another agency indicating that it has assumed the role of Lead Agency for the project in question.

(Adopted 11/20/91; Amended 10/7/98)

2-1-427 Procedure for Ministerial Evaluations: The District shall review each permit application prior to finding that it is complete in order to determine whether its evaluation of the permit application is covered by the specific procedures, fixed standards and objective measurements set forth in the District's Permit Handbook and BACT/TBACT Workbook. If the District determines that its evaluation of the permit application is covered by specific procedures, fixed standards and objective measurements set forth in the District's Permit Handbook and BACT/TBACT Workbook, the District's evaluation of that permit application will be classified as ministerial and the engineering evaluation of the permit application by the District will be limited to the use of said specific procedures, fixed standards and objective measurements. For such projects, the District will merely apply the law to the facts as presented in the permit application, and the District's decision regarding whether to issue the permit will be based only on the criteria set forth in Section 2-1-428 and in the District's Permit Handbook and BACT/TBACT Workbook.

(Adopted 11/20/91; Amended 10/7/98)

2-1-428 Criteria for Approval of Ministerial Permit Applications: If the District classifies a permit application as ministerial pursuant to Section 2-1-427, and as a result of its evaluation of that permit application, the District determines that all of the following criteria are met, the issuance by the District of an Authority to Construct for the proposed new or modified source will be a mandatory ministerial duty.

428.1 The proposed new or modified source will comply with all applicable provisions of the District's Rules and Regulations and with all applicable provisions of state and federal law and regulations which the District has the duty to enforce;

428.2 The emissions from the proposed project can be calculated using standardized emission factors from published governmental sources, District source test results, established formulas from published engineering and scientific handbooks, material safety data sheets or other similar published literature, manufacturer’s warranties or other fixed standards as set forth in the District's Permit Handbook and BACT/TBACT Workbook;

428.3 Where Best Available Control Technology is required, BACT for the proposed new or modified source can be determined based on the latest edition of the ARB’s BACT/LAER Clearinghouse, on the District's own compilations of BACT levels for specific types of sources as set forth in the District's Permit Handbook and BACT/TBACT Workbook or on a more stringent BACT level proposed by the project proponent; and

428.4 If the proposed new or modified source involves the shutdown of an existing source, the Reasonably Available Control Technology applicable to the source to be shut down can be determined from existing provisions of the District's Rules and Regulations or from the District's own compilations of

BACT levels for specific types of sources as set forth in District's Permit Handbook and BACT/TBACT Workbook.

428.5 For proposed new and modified sources that are subject to Regulation 2, Rule 5, the project meets the project risk requirement of Regulation 2-5-302.

428-6 Where Best Available Control Technology for Toxics (TBACT) is required pursuant to Regulation 2-5-301, TBACT for the proposed new or modified source can be determined based on TBACT determinations in the District's BACT/TBACT Workbook, an EPA MACT standard, a CARB ATCM, or a more stringent TBACT level proposed by the applicant that is applicable to the specific source type or source category being evaluated.

In addition, when the District has issued an authority to construct for a proposed new or modified source as a ministerial project, the issuance of the permit to operate for that source will also be a mandatory ministerial duty if the source will meet all the conditions imposed in connection with the issuance of the authority to construct and all applicable laws, rules and regulations enforced by the District.

(Adopted 11/20/91; Amended 10/7/98; 6/15/05)

2-1-429 Federal Emissions Statement: The owner or operator of any facility that emits or may emit oxides of nitrogen or volatile organic compounds shall provide the APCO with a written statement, in such form as the APCO prescribes, showing actual emissions of oxides of nitrogen and volatile organic compounds from that facility. At a minimum the emission statement shall contain all of the information contained in the Air Resources Board's Emission Inventory Turn Around Document as described in Instructions for the Emission Data System Review and Update Report. The statement shall also contain a certification by a responsible official of the company or facility that the information contained in the statement is accurate to the best knowledge of the individual certifying the statement. Effective November 1, 1994, the statement shall be submitted to the District each year with the annual permit renewal. The APCO may waive this requirement for any class or category of facilities that emit less that 25 tons per year of oxides of nitrogen and volatile organic compounds, each taken separately, if the District provides the Air Resources Board with emission inventories of facilities emitting greater than 10 tons per year of either oxides of nitrogen or volatile organic compounds based on the use of emission factors acceptable to the Air Resources Board and the U.S. Environmental Protection Agency (EPA). A current list of classes and categories of facilities for which this requirement has been waived by the APCO will be kept by the District and made available upon request. Also, for purposes of reporting emission data to the Air Resources Board and to the EPA, the District will provide calendar year and peak ambient ozone season data determined through weighted averaging of current and prior year (if available) company/facility reported certified information. This Section is required by the provisions of Section 182(a)(3)(B) of the Clean Air Act.

(Adopted 11/4/92; Amended 6/15/94; 6/7/95; 12/21/04)

2-1-430 Maintenance of the Permit Handbook and BACT/TBACT Workbook: The APCO shall publish and maintain the Permit Handbook and BACT/TBACT Workbook as needed to reflect the current procedure for review and issuance of permits, and the most recent determination of BACT/TBACT for a given source category.

(Adopted October 7, 1998)

2-1-431 Date of Completion: The APCO shall deem an application to be complete on the date that the information and fees required to complete the application were received by the District.

(Adopted May 17, 2000)

2-1-432 **Determination of Complete Application:** Except for an application which is subject to the publication and public comment requirements of Section 2-2-404, the APCO shall determine whether an application for an authority to construct is complete not later than 30~~15 working~~ days following receipt of the application, or after a longer time period agreed upon by both the applicant and the APCO. If the APCO determines that the application is not complete, the applicant shall be notified in writing of the decision, specifying the information that is required. Upon receipt of any resubmittal of the application a new 30-~~15 working~~ day period to determine completeness shall begin. For an application which is subject to the publication and public comment requirements of Section 2-2-404 or Section 2-10-402, the completeness review period(s) shall be 60~~30~~ days. The application shall be deemed complete on the date of receipt of all information required for completeness. Upon determination that the application is complete, the APCO shall notify the applicant in writing. If applicable, such written notification shall include the District's determination that its evaluation of the application will be covered by the specific procedures, fixed standards and objective measurements set forth in the District's Permit Handbook and that the District's evaluation of that permit application will be classified as ministerial and will accordingly be exempt from CEQA review. Thereafter only information regarding offsets, or information to clarify, correct or otherwise supplement the information submitted in the application may be requested.

(Adopted 12/ 21/04; Amended 6/19/06)

2-1-500 **MONITORING AND RECORDS**

2-1-501 **Monitors:** Continuous emission monitors required pursuant to Section 2-1-403 shall comply with the provisions of Volume V of the Manual of Procedures.

(Adopted March 17, 1982)

2-1-502 **Burden of Proof:** Any person asserting that a source is exempt from the requirements of Regulation 2, Rule 1, Section 301 and/or 302, shall, upon the request of the APCO, provide substantial credible evidence proving to the APCO that the source meets all requirements necessary to qualify for the exemption.

(Adopted May 17, 2000)

2-1-600 **MANUAL OF PROCEDURES**

2-1-601 **Engineering Permitting Procedures:** The specific procedures for the engineering evaluation of particular types of sources as well as specific fixed standards and objective measurements upon which the District will rely in its evaluation of ministerial permit applications are set forth in the District's Permit Handbook and BACT/TBACT Workbook.

(Adopted 7/17/91; Amended 10/7/98)

2-1-602 **CEQA Guidelines:** The District's Guidelines for Environmental Processes under CEQA for those cases in which the District assumes the role of Lead Agency are set forth in Volume VII to the District's Manual of Procedures and in the Permit Handbook.

(Adopted 11/20/91; Amended 6/7/95)

2-1-603 **Particulate Matter Measurements:** $PM_{2.5}$ and PM_{10} shall be measured as prescribed in EPA Methods 201A and 202 (for measurements of emissions from specific sources) and in 40 C.F.R. Parts 50, 53 and 58 (for measurements of ambient concentrations). If such test methods cannot be used because the physical

characteristics of the emissions being measured render such methods inappropriate (e.g., because of the emissions' high moisture content or high temperature), then another appropriate test method may be used upon prior written approval of the APCO and EPA.

(Adopted December 19, 2012)

2-1-604 Determining Compliance With Historical PM_{10} and $PM_{2.5}$ Emission Limits: For purposes of determining a source's compliance with any PM_{10} or $PM_{2.5}$ emission limit established as a permit condition pursuant to Regulation 2 prior to August 31, 2016, the condensable portion of the source's PM_{10} or $PM_{2.5}$ emissions shall not be included, unless there is an affirmative indication that such condensable portion was intended to be included at the time the permit condition was adopted.

(Adopted December 19, 2012)

2-1-605 Finality of Historical PM_{10} and $PM_{2.5}$ Regulatory Determinations: Regulatory determinations regarding the applicability of or compliance with any of the requirements of Regulation 2 made before August 31, 2016, shall be final and shall not be invalid because they did not take into account the condensable portion of a source's $PM_{2.5}$ or PM_{10} emissions. Such historical determinations include (but are not limited to) prior determinations whether BACT and offsets requirements apply, prior determinations of the amount of a facility's cumulative increase, and prior determinations whether Title V permit requirements applied to a facility's operation. All such determinations made on or after August 31, 2016, shall include the condensable portion per the requirements of Sections 2-1-229 and 2-1-241, including (but not limited to) determinations regarding whether an existing facility's ongoing operations are subject to any applicable operating requirements such as Title V Major Facility Review requirements.

(Adopted December 19, 2012)

Regulation 2, Rule 1
Permit / Exemption Flow Chart

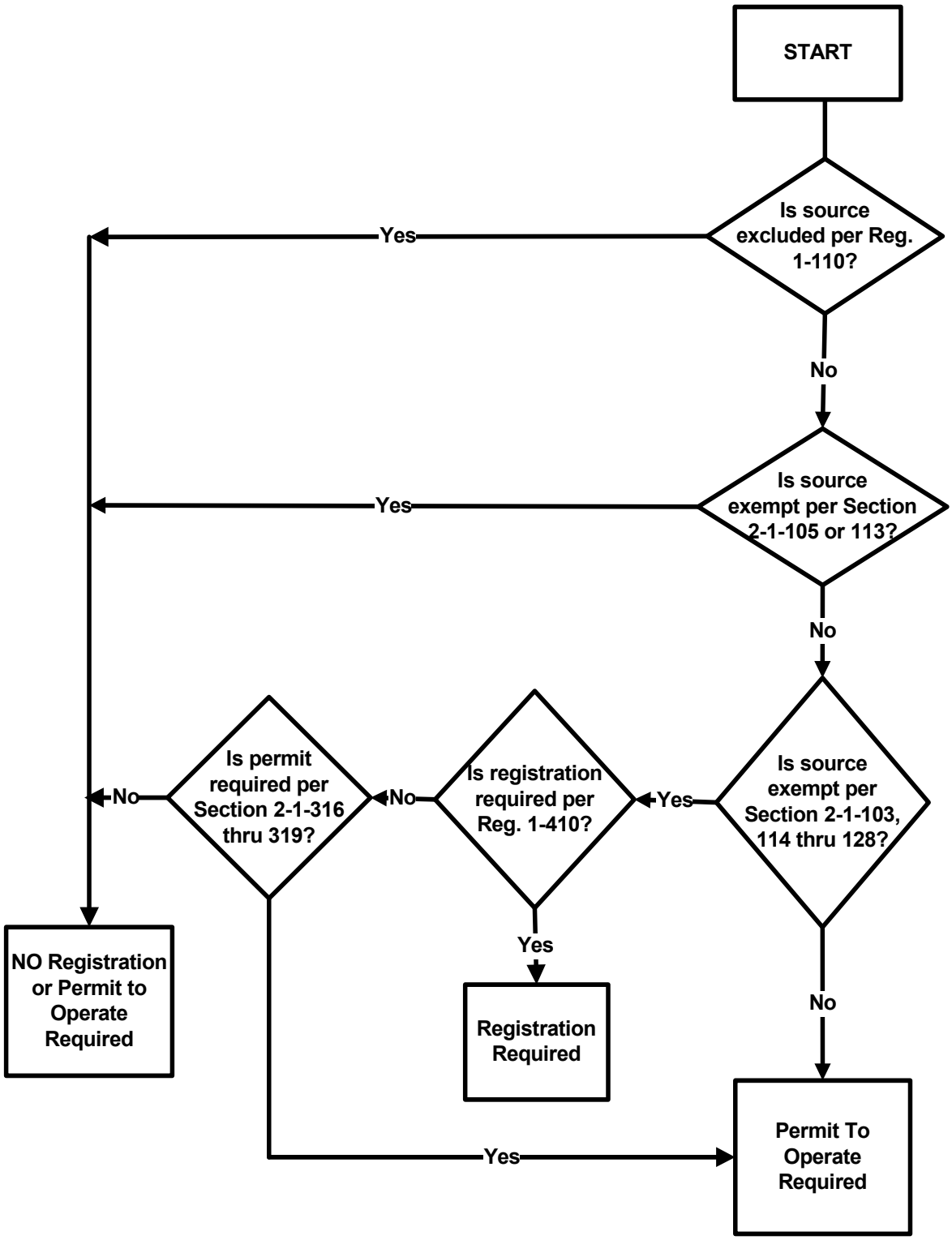

Figure 2-1-101

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

APPENDIX B

Proposed Amendments to Rule 2-5: New Source Review of Toxic Air Contaminants

REGULATION 2
PERMITS
RULE 5
NEW SOURCE REVIEW OF TOXIC AIR CONTAMINANTS

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REGULATION 2
PERMITS
RULE 5
NEW SOURCE REVIEW OF TOXIC AIR CONTAMINANTS

(Adopted June 15, 2005)

2-5-100 GENERAL

2-5-101 Description: The purpose of this rule is to provide for the review of new and modified sources of toxic air contaminant (TAC) emissions in order to evaluate potential public exposure and health risk, to mitigate potentially significant health risks resulting from these exposures, and to provide net health risk benefits by improving the level of control when existing sources are modified or replaced. The rule applies to a new or modified source of toxic air contaminants that is required to have an authority to construct or permit to operate pursuant to Regulation 2, Rule 1. New and modified sources with Hazardous Air Pollutant emissions may also be subject to the Maximum Achievable Control Technology (MACT) requirement of Regulation 2, Rule 2, Section 317.

2-5-102 Applicability and Circumvention: This rule applies to the following:

102.1 A new or modified source of toxic air contaminants for which an application is submitted on or after July 1, 2005;

102.2 A source of toxic air contaminants constructed or modified after January 1, 1987 for which no authority to construct or permit to operate has been issued by the District and for which the District Rules and Regulations and Risk Management Policy in effect at the time of construction or modification required an authority to construct or permit to operate.

(Renumbered December 7, 2016)

2-5-110 Exemption, Low Emission Levels: A project (and each new or modified source included in this project) shall not be subject to this rule if, for each toxic air contaminant, total project emissions are below the acute and chronic trigger levels listed in Table 2-5-1 Toxic Air Contaminant Trigger Levels. For the purposes of Regulation 2-1-316, a source shall not be subject to the Section 2-5-401 HRA requirements of this rule if, for each toxic air contaminant, the emissions from the source are below the acute and chronic trigger levels listed in Table 2-5-1.

(Adopted 6/15/05, Amended 12/7/16)

2-5-111 Limited Exemption, Emergency Standby Engines: This rule shall not apply to toxic air contaminant emissions occurring from emergency use of emergency standby engines (as defined in Regulation 9, Rule 8, Section 231 or the applicable CARB ATCM); or from initial start-up testing; or from emission testing of emergency standby engines required by the APCO.

(Amended January 6, 2010)

2-5-112 Deleted

(Renumbered December 7, 2016)

2-5-113 Deleted~~Exemption, Small Internal Combustion Engines and Gas Turbines:~~ ~~Internal combustion engines and gas turbines with a maximum output rating less than or equal to 50 horsepower shall not be subject to this rule.~~

(Adopted December 7, 2016)

2-5-114 Limited Exemption, Modified Source with No Increase in Toxicity Weighted Emissions: The provisions of Section 2-5-401 shall not apply to a modified source, if the post-modification toxicity weighted emissions are less than or equal to the pre-modification toxicity weighted emissions. Emissions from modified sources shall be calculated in accordance with Section 2-5-601.3.

(Adopted December 7, 2016)

2-5-115 Limited Exemption, Contemporaneous Health Risk Reduction Projects: Contemporaneous Health Risk Reduction Projects are exempt from the provisions of Section 2-5-302, provided such projects comply with the requirements of Sections 2-5-303 and 2-5-406.

2-5-200 DEFINITIONS

2-5-201 Acute Hazard Index, or Acute HI: Acute hazard index is the sum of the individual acute hazard quotients for toxic air contaminants identified as affecting the same target organ or organ system.

2-5-202 Acute Hazard Quotient, or Acute HQ: Acute hazard quotient is the ratio of the estimated short-term average concentration of the toxic air contaminant to its acute reference exposure level (estimated for inhalation exposure).

2-5-203 Airborne Toxic Control Measure, or ATCM: A recommended method and, where appropriate, a range of methods, established by the California Air Resources Board (CARB) pursuant to the Tanner Act, California Health and Safety Code beginning at Section 39650, that reduces, avoids, or eliminates the emissions of a toxic air contaminant.

2-5-204 Air Toxics Hot Spots Program: The Air Toxics "Hot Spots" Information and Assessment Act of 1987, California Health and Safety Code beginning at Section 44300.

2-5-205 Best Available Control Technology for Toxics, or TBACT: For any new or modified source of toxic air contaminants, except cargo carriers, the most stringent of the following emission controls, provided that under no circumstances shall the controls be less stringent than the emission control required by any applicable provision of federal, State or District laws, rules, regulations or requirements:

205.1 The most effective emission control device or technique which has been successfully utilized for the type of equipment comprising such a source; or

205.2 The most stringent emission limitation achieved by an emission control device or technique for the type of equipment comprising such a source; or

205.3 Any control device or technique or any emission limitation that the APCO has determined to be technologically feasible for the type of equipment comprising such a source, while taking into consideration the cost of achieving emission reductions, any non-air quality health and environmental impacts, and energy requirements; or

205.4 The most stringent emission control for a source type or category specified as MACT by U.S. EPA, or specified in an ATCM by CARB.

2-5-206 Cancer Risk: An estimate of the chance that an individual may develop cancer as a result of exposure to emitted carcinogens at a given receptor location, and considering, where appropriate, Age Sensitivity Factors to account for inherent increased susceptibility to carcinogens during infancy and childhood.

(Amended 1/6/10; 12/7/16)

2-5-207 Carcinogen: For the purpose of this rule, a carcinogen is any compound for which Cal/EPA's Office of Environmental Health Hazard Assessment (OEHHA) has established a cancer potency factor for use in the Air Toxics Hot Spots Program.

2-5-208 Chronic Hazard Index, or Chronic HI: Chronic hazard index is the sum of the individual chronic hazard quotients for toxic air contaminants identified as affecting the same target organ or organ system.

2-5-209 Chronic Hazard Quotient, or Chronic HQ: Chronic hazard quotient is the ratio of the estimated annual average exposure of the toxic air contaminant to its chronic reference exposure level (estimated for inhalation and non-inhalation exposures).

2-5-210 Health Risk: The potential for adverse human health effects resulting from exposure to emissions of toxic air contaminants and ranging from relatively mild temporary conditions, such as eye or throat irritation, shortness of breath, or headaches, to permanent and serious conditions, such as birth defects, cancer or damage to lungs, nerves, liver, heart, or other organs. Measures of health risk include cancer risk, chronic hazard index, and acute hazard index.

2-5-211 Health Risk Assessment, or HRA: An analysis that estimates the potential for increased likelihood of health risk for individuals in the affected population that may be exposed to emissions of one or more toxic air contaminants, determined in accordance with Section 2-5-603.

(Amended December 7, 2016)

2-5-212 **Maximally Exposed Individual, or MEI:** A person that may be located at the receptor location where the highest exposure to toxic air contaminants emitted from a given source or project is predicted, as shown by an APCO-approved HRA. MEI locations are typically determined for maximum cancer risk, chronic hazard index and acute hazard index based on exposure to residential, worker, and student receptors.

(Amended 1/6/10; 12/7/16)

2-5-213 **Maximum Achievable Control Technology, or MACT:** An emission standard promulgated by U.S. EPA pursuant to Section 112(d) of the Clean Air Act.

2-5-214 **Modified Source of Toxic Air Contaminants:** An existing source that undergoes a physical change, change in method of operation, or increase in throughput or production that results or may result in any of the following:

214.1 An increase in the daily or annual emission level of any toxic air contaminant, or the production rate or capacity that is used to estimate toxic air contaminant emission levels, above emission or production levels approved by the District in any authority to construct.

214.2 An increase in the daily or annual emission level of any toxic air contaminant, or the production rate or capacity that is used to estimate toxic air contaminant emission levels, above levels contained in a permit condition in any current permit to operate or major facility review permit.

214.3 For a source that has never been issued a District authority to construct and that does not have conditions limiting daily or annual toxic air contaminant emissions, an increase in the daily or annual emission level of any toxic air contaminant, or the production rate or capacity that is used to estimate the emission level, above the lower of the authorized capacity as established pursuant to Section 2-5-214.3.1 or the functional capacity as established pursuant to 2-5-214.3.2:

3.1 The authorized capacity is the highest of the following:

3.1.1 The highest attainable design capacity, as shown in pre-construction design drawings, including process design drawings and vendor specifications.

3.1.2 The capacity listed in the District permit to operate.

3.1.3 The highest documented actual levels attained by the source prior to July 1, 2005.

3.2 The functional capacity is the capacity of the source as limited by the capacity of any upstream or downstream process that acts as a bottleneck (a grandfathered source with an emission increase due to debottlenecking is considered to be modified).

For the purposes of applying Section 2-5-214.3, only increases in annual emission levels shall be considered for storage vessels.

214.4 The emission of any toxic air contaminant not previously emitted in a quantity that would result in a cancer risk greater than 1.0 in a million (10^{-6}) or a chronic hazard index greater than 0.20.

For the purposes of applying this definition, a daily capacity may be converted to an annual capacity or limit by multiplication by 365 days/year.

2-5-215 **New Source of Toxic Air Contaminants:** A source of toxic air contaminant emissions, except a source that loses a permit exemption or exclusion in accordance with Regulations 2-1-424 or 2-1-425, that is one or more of the following:

215.1 A source constructed or proposed to be constructed that never had a valid District authority to construct or permit to operate.

215.2 A source that has not been in operation for a period of one year or more and that has not held a valid District permit to operate during this period of non-operation.

215.3 A relocation of an existing source, except for a portable source, to a non-contiguous property.

215.4 A replacement of a source, including an identical replacement of a source, regardless when the original source was constructed.

215.5 A replacement of an identifiable source within a group of sources permitted together under a single source number for the purpose of District permitting convenience.

215.6 A "rebricking" of a glass furnace where changes to the furnace design result in a change in heat generation or absorption.

2-5-216 **Project:** Any source, or group of sources, at a facility that: (a) is part of a proposed construction or modification, (b) is subject to the requirements of Regulation 2-1-301 or 302, and (c) emits one or more toxic air contaminants. All new or modified sources of TACs included in a single permit application will be considered as a project, except that a modified source that meets the requirements of Section 2-5-114 may be excluded from the project. In addition, in order to discourage circumvention that might be achieved by breaking a project into smaller pieces and submitting more than one permit application over a period of time, a project shall include those new or modified sources of TACs at a facility that have been permitted within the five~~three~~-year period immediately preceding the date a complete application is received, and any projects at that facility where an Authority to Construct has been issued and has not expired, unless the applicant demonstrates to the satisfaction of the APCO that construction or modification of the sources included in the current application was neither (1) a reasonably foreseeable consequence of the previous project, nor (2) a critical element or integral part of the previous project.

(Amended 1/6/10; 12/7/16)

2-5-217 **Project Risk:** The health risk resulting from the emissions of toxic air contaminants from a given project, as indicated by an HRA for the MEI.

(Amended December 7, 2016)

2-5-218 **Receptor Location:** A location where an individual may live (residential receptor) or work (worker receptor) or otherwise reasonably be expected to be exposed (e.g., student receptor) to toxic air contaminants for the particular chronic or acute exposures being evaluated in an HRA. Locations include (a) locations outside of the property boundary of the facility being evaluated and (b) locations inside the property boundary where a person may reside (e.g., at military base housing, prisons, or universities). The APCO shall consider the potential for public exposure in determining appropriate receptor locations.

(Amended 1/6/10; 12/7/16)

2-5-219 **Reference Exposure Level, or REL:** The air concentration or exposure level for a specified exposure duration at or below which adverse non-cancer health effects are not anticipated to occur in the general human population.

2-5-220 **Residential Receptor:** Any receptor location where an individual may reside for a period of six months or more out of a year.

2-5-221 **Source Risk:** The health risk resulting from the emissions of all toxic air contaminants from a new or modified source of toxic air contaminants, as indicated by an HRA for the MEI.

(Amended December 7, 2016)

2-5-222 **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 Toxic Air Contaminant Trigger Levels.

(Amended December 7, 2016)

2-5-223 **Trigger Level:** The emission threshold level for each TAC, as identified in Table 2-5-1 Toxic Air Contaminant Trigger Levels, below which the resulting health risks are not expected to cause, or contribute significantly to, adverse health effects.

(Amended December 7, 2016)

2-5-224 **Worker Receptor:** Any receptor location that is an occupational setting or place where an individual may work and that is located outside of the boundary of the facility being evaluated.

2-5-225 **K-12 School:** Any public or private school used for purposes of the education of more than 12 children at the school in kindergarten or any of grades 1 to 12, inclusive, but does not include any private school in which education is primarily conducted in private homes. The term may include any building or structure, playground, athletic field, or other area of school property, but does not include unimproved school property.

(Adopted January 6, 2010)

2-5-226 **Student Receptor:** A location of a child at a K-12 school.

(Adopted January 6, 2010)

2-5-227 **Deleted.** ~~**Priority Community:** An area, designated by the APCO, where levels of toxic air contaminants are higher than other areas and where people may be particularly vulnerable and may bear disproportionately higher adverse health effects.~~

(Adopted January 6, 2010)

2-5-228 **Contemporaneous Health Risk Reduction Project:** A project that includes new or modified sources of toxic air contaminants and that also includes contemporaneous shut-downs or alterations of other existing permitted sources at the same facility that result in contemporaneous reductions of toxic air contaminant emissions.

(Adopted December 7, 2016)

2-5-229 **Net Project Risk:** The net change in health risk at a receptor location resulting from the emissions of toxic air contaminants from new or modified sources and the reductions in emissions of toxic air contaminants due to contemporaneous shut-downs or alterations of existing permitted equipment.

(Adopted December 7, 2016)

2-5-230 **Essential Public Service:** A police or firefighting facility, a hospital or other medical emergency facility, or a building designated as an emergency shelter location.

2-5-300 STANDARDS

2-5-301 **Best Available Control Technology for Toxics (TBACT) Requirement:** The applicant shall apply TBACT to any new or modified source of TACs where the source risk is a cancer risk greater than 1.0 in one million (10^{-6} or 1.0E-6), and/or a chronic hazard index greater than 0.20.

(Amended December 7, 2016)

2-5-302 **Project Risk Requirement:** The APCO shall deny an Authority to Construct or Permit to Operate for any new or modified source of TACs if the project risk exceeds any of the following project risk limits:

302.1 A~~a~~ cancer risk of 10.0 in one million (10 x 10^{-6} or 10E-6~~10^{-5} or 1.0E-5~~); or for a project located within an Overburdened Community as defined in Regulation 2-1-243 (other than a project at an Essential Public Service), a cancer risk of 6.0 in one million (6.0 x 10^{-6} or 6.0E-6);

302.2 A~~a~~ chronic hazard index of 1.0;

302.3 A~~a~~n acute hazard index of 1.0.

(Amended December 7, 2016)

2-5-303 **Net Project Risk Requirement:** The APCO shall deny an Authority to Construct or Permit to Operate for any new or modified source of TACs if the net project risk at any receptor exceeds any of the following net project risk limits:

302.1 A~~a~~ cancer risk of 10.0 in one million (10 x 10^{-6} or 10E-6~~10^{-5} or 1.0E-5~~); or for a project located within an Overburdened Community as defined in Regulation 2-1-243 (other than a project at an Essential Public Service), a cancer risk of 6.0 in one million (6.0 x 10^{-6} or 6.0E-6);

302.2 A~~a~~ chronic hazard index of 1.0;

302.3 A~~a~~n acute hazard index of 1.0.

(Adopted December 7, 2016)

2-5-400 ADMINISTRATIVE REQUIREMENTS

2-5-401 **Health Risk Assessment (HRA) Requirements:** An application for an Authority to Construct or Permit to Operate for any project subject to this rule shall contain an HRA conducted in accordance with Section 2-5-603 or the information necessary for the APCO to conduct an HRA. The APCO shall prepare an HRA where the applicant submits none. The APCO shall notify the applicant if the results of an HRA completed by the APCO indicate that the project, as proposed, would not meet the requirements of this rule. The applicant shall be given the opportunity to perform a more refined HRA, modify the project, or submit any required plans or information, as necessary to comply with the requirements of this rule.

(Amended December 7, 2016)

2-5-402 **Health Risk Assessment Guidelines:** The APCO shall publish Health Risk Assessment Guidelines that specify the procedures to be followed for estimating health risks including acute hazard index, chronic hazard index, and cancer risk. These guidelines will generally conform to the Health Risk Assessment Guidelines adopted by Cal/EPA's Office of Environmental Health Hazard Assessment (OEHHA) for use in the Air Toxics Hot Spots Program. The Health Risk Assessment Guidelines and Table 2-5-1 will be periodically updated, typically within one year of any significant revision to OEHHA's Health Risk Assessment Guidelines, including any new or revised health effects value.

(Amended December 7, 2016)

2-5-403 **BACT/TBACT Workbook:** The APCO shall publish and periodically update a BACT/TBACT Workbook specifying the requirements for commonly permitted sources. TBACT will be determined for a source by using the workbook as a guidance document or, on a case-by-case basis, using the most stringent definition of Section 2-5-205.

2-5-404 **Deleted.** ~~**Designation of Priority Communities:** The APCO shall publish and periodically update a list of the areas that have been designated as priority communities along with the selection criteria and analyses used in designating these communities.~~

(Adopted January 6, 2010)

2-5-405 **Deleted.** ~~**Cumulative Impact Summary for Priority Communities:** The APCO shall publish and periodically update a cumulative impact summary report that describes the cumulative impacts of toxicity weighted emission increases and reductions in each priority community occurring after January 1, 2010.~~

(Adopted January 6, 2010)

2-5-406 **Applicability Criteria and Administrative Procedures for Contemporaneous Health Risk Reduction Projects:** An applicant that is requesting to use the Section 2-5-115 Limited Exemption for Contemporaneous Health Risk Reduction Projects shall demonstrate to the satisfaction of the APCO that the project meets all of the applicability criteria in Section 2-5-406.1. The applicant shall also comply with all of the procedural requirements in Section 2-5-406.2.

406.1 Contemporaneous health risk reduction projects are limited to projects that include a modified source of toxic air contaminants that meets the following criteria:

1.1 The modified source was installed and operating at the facility prior to January 1, 1987.

1.2 The modified source currently has a valid District operating permit and has maintained a valid District operating permit since the source was first permitted by the District.

1.3 The modified source does not qualify for the Regulation 2-5-114 Limited Exemption for sources with no increases in toxicity weighted emissions.

1.4 The modified source is causing the project to exceed the project risk limits of Section 2-5-302 due to the elimination of the January 1, 1987 baseline for modified sources.

406.2 An application for a contemporaneous health risk reduction project shall contain the following:

2.1 A written request to use the Regulation 2-5-115 Limited Exemption for Contemporaneous Health Risk Reduction Projects.

2.2 A demonstration that the project includes a modified source of toxic air contaminants that meets all of the Section 2-5-406.1 applicability criteria.

2.3 Identification of all sources, source locations, stack parameters or other air dispersion modeling input information for the sources that will be shut-down or altered to reduce toxic air contaminant emissions.

2.4 Throughput rates, sources test data, emission factors, and any other information necessary to characterize the current actual baseline TAC emission rates for each source that will be shut-down or altered to

generate TAC emission reductions with emission reductions calculated in accordance with Section 2-5-602.

2.5 A certification that the TAC emission reductions calculated above will be contemporaneous because the emission reductions will be completed within no later than 90 days after the initial start-up date for any new or modified sources in the project.

2.6 A post-project health risk assessment for the project that includes an HRA for the new and modified sources in the project and that demonstrates that the modified source has met Section 2-5-406.1.4, and identification of each receptor location that is resulting in a project risk above the Section 2-5-302 thresholds.

2.7 A pre-project health risk assessment for the sources that will shut-down or altered based on the baseline TAC emissions calculated pursuant to section 2-5-602 that includes each receptor location with project risk excesses.

2.8 A comparison of the post-project and pre-project health risks for each receptor location, which did not comply with the Section 2-5-302 project risk limits, that demonstrates compliance with the net project risk limits in Section 2-5-303 for each of these receptor locations.

(Adopted December 7, 2016)

2-5-500 MONITORING AND RECORDS

2-5-501 Monitoring Requirements: The APCO may impose any reasonable monitoring or record keeping requirements deemed necessary to ensure compliance with this rule.

2-5-600 MANUAL OF PROCEDURES

2-5-601 Emission Calculation Procedures: The APCO shall determine annual TAC emissions (expressed as pounds per year), to be used for comparison with chronic trigger levels and in estimating cancer risk and chronic hazard index, and one-hour TAC emissions (expressed as pounds per hour), to be used for comparison with acute trigger levels and in estimating acute hazard index as follows:

601.1 Emission calculations shall include emissions resulting from routine operation of a source or emissions that are reasonably predictable, including, but not limited to continuous and intermittent releases and predictable process upsets or leaks, subject to enforceable limiting conditions.

601.2 Emission calculations for a new source shall be based on the maximum emitting potential of the new source or the maximum permitted emission level of the new source, approved by the APCO, subject to enforceable limiting conditions.

601.3 Emission calculations for a modified source shall be based on:

3.1 For post-modification emissions, the maximum emitting potential of the modified source or the maximum permitted emission level of the modified source, approved by the APCO, subject to enforceable limiting conditions.

3.2 For pre-modification emissions, the adjusted baseline emission rate for each TAC, as calculated using the methodology in Section 2-5-602.

3.3 For the purposes of Section 2-5-114, toxicity weighted emissions shall be calculated for each case, post-modification and pre-modification, in accordance with Section 2-5-604.

601.4 Emission calculations for a project shall be performed by summing the emissions from all new sources of TACs and the post-modification emissions from all modified sources of TACs that are considered part of the project pursuant to Section 2-5-216.

(Amended 1/6/10; 12/7/16)

2-5-602 Baseline Emission Calculation Procedures: The following methodology shall be used to calculate baseline emissions for modified sources of TACs:

602.1 For a source that has, contained in a permit condition, an emission cap or emission rate limit, the baseline throughput and baseline emission rate (expressed in the units of mass of emissions per unit of throughput) shall be based on the levels allowed by the permit condition.

602.2 For sources without an emission cap or emission rate limit, baseline throughput and emission rate shall be determined as follows:

2.1 The baseline period consists of the 3-year period immediately preceding the date that the application is complete (or shorter period if the source is less than 3 years old or longer period if the applicant demonstrates to the District's satisfaction that a longer period is appropriate when considering such factors as operational problems and economic conditions). The applicant must have sufficient verifiable records of the source's operation or credible engineering analyses that substantiate to the District's satisfaction the emission rate and throughput during the entire baseline period.

2.2 Baseline throughput is ~~either~~ the lowest of:

2.2.1 Actual average throughput during the baseline period~~, if throughput is not limited by permit condition~~; or

2.2.2 Authorized capacity as defined in Regulation 2-5-214.3.1; or ~~Maximum throughput as allowed by permit conditions on the date the application is complete.~~

2.2.3 Functional capacity as defined in Regulation 2-5-214.3.2.

2.3 Baseline emission rate (expressed in the units of mass of emissions per unit of throughput) is the average actual emission rate during the baseline period. Periods where the actual emission rate exceeded regulatory or permitted limits shall be excluded from the average.

602.3 The adjusted baseline emission rate shall be determined by adjusting the baseline emission rate downward, if necessary, to comply with the most stringent emission rate or emission limit from a MACT, ATCM, or District rule or regulation that is applicable to the type of source being evaluated and that is in effect, has been adopted by U.S. EPA, CARB, or the District, or is contained in the most recently adopted Clean Air Plan for the District.

602.4 The adjusted baseline emissions shall be the adjusted baseline emission rate multiplied by the baseline throughput.

2-5-603 Health Risk Assessment Procedures: Each HRA shall be prepared following the District's Health Risk Assessment Guidelines.

(Amended December 7, 2016)

2-5-604 Calculation Procedures for Toxicity Weighted Emissions: Emission increases and reductions shall be determined on a toxicity weighted basis for carcinogens and noncarcinogens. The annual-average emission rate of each carcinogen shall be multiplied by its Cancer Potency **(**CP) Weighting Factor; the products shall be summed to calculate the total weighted carcinogenic emission rate. The annual-average emission rate of each noncarcinogen shall be divided by its Chronic Reference Exposure Level (CREL) Weighting Factor; the quotients shall be summed to calculate the total weighted noncarcinogenic emission rate. CP and CREL Weighting Factors are identified in Table 2-5-1.

(Adopted 1/6/10; Amended 12/7/16)

Table 2-5-1 Toxic Air Contaminant Trigger Levels

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m³)	Chronic Inhalation REL [10] (µg/m³)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Acetaldehyde	75-07-0	~~1.0E+00~~ 2.1E-01	2.9E+01	1.4E+02	1.0E-02	4.7E+02	1.4E+02 3.0E+02 (8-Hour)		1.0E-02	
Acetamide	60-35-5		4.1E+00		7.0E-02				7.0E-02	
Acrolein	107-02-8	~~5.5E-03~~ 1.1E-03	1.4E+01	3.5E-01		2.5E+00	3.5E-01 7.0E-01 (8-Hour)			
Acrylamide	79-06-1		6.4E-02		4.5E+00				4.5E+00	
Acrylic acid	79-10-7	~~1.3E+01~~ 2.7E+00				6.0E+03				
Acrylonitrile	107-13-1		2.9E-01	5.0E+00	1.0E+00		5.0E+00		1.0E+00	
Allyl chloride	107-05-1		1.4E+01		2.1E-02				2.1E-02	
Aminoanthraquinone, 2-	117-79-3		8.7E+00		3.3E-02				3.3E-02	
Ammonia	7664-41-7	~~7.1E+00~~ 1.4E+00	7.7E+03	2.0E+02		3.2E+03	2.0E+02			
Aniline	62-53-3		5.0E+01		5.7E-03				5.7E-03	
Arsenic and compounds (inorganic) [4]	7440-38-2	~~4.4E-04~~ 8.8E-05	1.6E-03	1.4E-04	1.8E+02	2.0E-01	1.5E-02 1.5E-02 (8-Hour)	3.5E-06	1.2E+01	1.5E+00
arsine	7784-42-1	~~4.6E-04~~	~~6.0E-01~~	1.4E-02		2.0E-01	1.5E-02			

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m³)	Chronic Inhalation REL [10] (µg/m³)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
		~~8.8E-05~~	~~5.8E-01~~				1.5E-02 (8-Hour)			
Asbestos [5]	1332-21-4		1.3E-03		2.2E+02				2.2E+02	
Benzene	71-43-2	~~6.0E-02~~ 1.2E-02	2.9E+00	3.0E+00	1.0E-01	2.7E+01	3.0E+00 3.0E+00 (8-Hour)		1.0E-01	
Benzidine (and its salts)	92-87-5		5.7E-04		5.0E+02				5.0E+02	
benzidine based dyes			5.7E-04		5.0E+02				5.0E+02	
direct black 38	1937-37-7		5.7E-04		5.0E+02				5.0E+02	
direct blue 6	2602-46-2		5.7E-04		5.0E+02				5.0E+02	
direct brown 95 (technical grade)	16071-86-6		5.7E-04		5.0E+02				5.0E+02	
Benzyl chloride	100-44-7	~~5.3E-01~~ 1.1E-01	1.7E+00		1.7E-01	2.4E+02			1.7E-01	
Beryllium and compounds [4]	7440-41-7		3.4E-02	7.0E-03	8.4E+00		7.0E-03	2.0E-03	8.4E+00	
Bis (2-chloroethyl) ether (Dichloroethyl ether)	111-44-4		1.1E-01		2.5E+00				2.5E+00	
Bis (chloromethyl) ether	542-88-1		6.2E-03		4.6E+01				4.6E+01	
Butadiene, 1,3-	106-99-0	~~1.5E+00~~ 2.9E-01	4.8E-01	2.0E+00	6.0E-01	6.6E+02	2.0E+00 9.0E+00 (8-Hour)		6.0E-01	

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m^3)	Chronic Inhalation REL [10] (µg/m^3)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Cadmium and compounds [4]	7440-43-9		1.9E-02	1.0E-02	1.5E+01		2.0E-02	5.0E-04	1.5E+01	
Caprolactam	105-60-2	~~1.1E-01~~ 2.2E-02	8.5E+01	2.2E+00		5.0E+01	2.2E+00 7.0E+00 (8-Hour)			
Carbon disulfide	75-15-0	~~1.4E+01~~ 2.7E+00	3.1E+04	8.0E+02		6.2E+03	8.0E+02			
Carbon tetrachloride (Tetrachloromethane)	56-23-5	~~4.2E+00~~ 8.4E-01	1.9E+00	4.0E+01	1.5E-01	1.9E+03	4.0E+01		1.5E-01	
Carbonyl sulfide	463-58-1	2.9E-01	3.9E+02			6.6E+02	1.0E+01 1.0E+01 (8-Hour)			
Chlorinated paraffins	108171-26-2		3.2E+00		8.9E-02				8.9E-02	
Chlorine	7782-50-5	~~4.6E-01~~ 9.3E-02	7.7E+00	2.0E-01		2.1E+02	2.0E-01			
Chlorine dioxide	10049-04-4		2.3E+01	6.0E-01			6.0E-01			
Chloro-o-phenylenediamine, 4-	95-83-0		1.8E+01		1.6E-02				1.6E-02	
Chlorobenzene	108-90-7		3.9E+04	1.0E+03			1.0E+03			
Chloroform	67-66-3	~~3.3E-01~~ 6.6E-02	1.5E+01	3.0E+02	1.9E-02	1.5E+02	3.0E+02		1.9E-02	
Chloropicrin	76-06-2	~~6.4E-02~~ 1.3E-02	1.5E+01	4.0E-01		2.9E+01	4.0E-01			

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m^3)	Chronic Inhalation REL [10] (µg/m^3)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Chloro-o-toluidine, p-	95-69-2		1.1E+00		2.7E-01				2.7E-01	
Chromium, (hexavalent, 6+) [4]	18540-29-9		5.1E-04	2.0E-01	5.6E+02		2.0E-01	2.0E-02	5.1E+02	5.0E-01
barium chromate [4]	10294-40-3		2.5E-03	4.1E-02	1.2E+02		2.0E-01	2.0E-02	5.1E+02	5.0E-01
calcium chromate [4]	13765-19-0		1.5E-03	6.7E-02	1.9E+02		2.0E-01	2.0E-02	5.1E+02	5.0E-01
lead chromate [4]	7758-97-6		3.2E-03	3.2E-02	9.1E+01		2.0E-01	2.0E-02	5.1E+02	5.0E-01
sodium dichromate [4]	10588-01-9		1.3E-03	7.9E-02	2.2E+02		2.0E-01	2.0E-02	5.1E+02	5.0E-01
strontium chromate [4]	7789-06-2		2.0E-03	5.1E-02	1.4E+02		2.0E-01	2.0E-02	5.1E+02	5.0E-01
Zinc chromate	13530-65-9		1.8E-03	5.7E-02	1.6E+02		2.0E-01	2.0E-02	5.1E+02	5.0E-01
Chromium trioxide (as chromic acid mist) [4]	1333-82-0		9.7E-04	1.0E-03	2.9E+02		2.0E-03	2.0E-02	5.1E+02	5.0E-01
Cobalt	7440-48-4		1.1E-02		2.7E+01				2.7E+01	
Copper and compounds	7440-50-8	~~2.2E-01~~ 4.4E-02				1.0E+02				
Cresidine, p-	120-71-8		1.9E+00		1.5E-01				1.5E-01	
Cresols (m-, o-, p-)	1319-77-3		2.3E+04	6.0E+02			6.0E+02			
Cupferron	135-20-6		1.3E+00		2.2E-01				2.2E-01	
Cyanide and compounds (inorganic)	57-12-5	~~7.5E-01~~ 1.5E-01	3.5E+02	9.0E+00		3.4E+02	9.0E+00			
hydrogen cyanide (hydrocyanic acid)	74-90-8	~~7.5E-01~~ 1.5E-01	3.5E+02	9.0E+00		3.4E+02	9.0E+00			
Diaminoanisole, 2,4-	615-05-4		1.2E+01		2.3E-02				2.3E-02	

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m^3)	Chronic Inhalation REL [10] (µg/m^3)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Diaminotoluene, 2,4-	95-80-7		7.2E-02		4.0E+00				4.0E+00	
Dibromo-3-chloropropane, 1,2- (DBCP)	96-12-8		4.1E-02		7.0E+00				7.0E+00	
Dichlorobenzene, 1,4-	106-46-7		7.2E+00	8.0E+02	4.0E-02		8.0E+02		4.0E-02	
Dichlorobenzidine, 3,3-	91-94-1		2.4E-01		1.2E+00				1.2E+00	
Dichloroethane, 1,1- (Ethylidene dichloride)	75-34-3		5.0E+01		5.7E-03				5.7E-03	
Dichloroethylene, 1,1- [see vinylidene chloride]										
Diesel exhaust particulate matter [6]			2.6E-01	5.0E+00	1.1E+00		5.0E+00		1.1E+00	
Diethanolamine	111-42-2		1.2E+02	3.0E+00			3.0E+00			
Di(2-ethylhexyl)phthalate (DEHP) [4]	117-81-7		2.9E+01		1.0E-02				8.4E-03	8.4E-03
Dimethylaminoazobenzene, p-	60-11-7		6.2E-02		4.6E+00				4.6E+00	
Dimethyl formamide, N,N-	68-12-2		3.1E+03	8.0E+01			8.0E+01			
Dinitrotoluene, 2,4-	121-14-2		9.2E-01		3.1E-01				3.1E-01	
Dioxane, 1,4- (1,4-diethylene dioxide)	123-91-1	~~6.6E+00~~ 1.3E+00	1.1E+01	3.0E+03	2.7E-02	3.0E+03	3.0E+03		2.7E-02	
Epichlorohydrin (1-chloro-2,3-epoxypropane)	106-89-8	~~2.9E+00~~ 5.8E-01	3.6E+00	3.0E+00	8.0E-02	1.3E+03	3.0E+00		8.0E-02	

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m³)	Chronic Inhalation REL [10] (µg/m³)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Epoxybutane, 1,2-	106-88-7		7.7E+02	2.0E+01			2.0E+01			
Ethyl benzene	100-41-4		3.3E+01	2.0E+03	8.7E-03		2.0E+03		8.7E-03	
Ethyl chloride (chloroethane)	75-00-3		1.2E+06	3.0E+04			3.0E+04			
Ethylene dibromide (1,2-dibromoethane)	106-93-4		1.1E+00	8.0E-01	2.5E-01		8.0E-01		2.5E-01	
Ethylene dichloride (1,2-dichloroethane)	107-06-2		4.0E+00	4.0E+02	7.2E-02		4.0E+02		7.2E-02	
Ethylene glycol	107-21-1		1.5E+04	4.0E+02			4.0E+02			
Ethylene glycol butyl ether – EGBE [see Glycol ethers]										
Ethylene oxide (1,2-epoxyethane)	75-21-8		9.2E-01	3.0E+01	3.1E-01		3.0E+01		3.1E-01	
Ethylene thiourea	96-45-7		6.4E+00		4.5E-02				4.5E-02	
Fluorides [4]		~~5.3E-01~~ 1.1E-01	5.7E+01	1.5E+00		2.4E+02	1.3E+01	4.0E-02		
hydrogen fluoride (hydrofluoric acid) [4]	7664-39-3	~~5.3E-01~~ 1.1E-01	5.8E+01	1.5E+00		2.4E+02	1.4E+01	4.0E-02		
Formaldehyde	50-00-0	~~1.2E-01~~ 2.4E-02	1.4E+01	9.0E+00	2.1E-02	5.5E+01	9.0E+00 9.0E+00 (8-Hour)		2.1E-02	
Glutaraldehyde	111-30-8		3.1E+00	8.0E-02			8.0E-02			

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m³)	Chronic Inhalation REL [10] (µg/m³)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Glycol ethers										
ethylene glycol butyl ether – EGBE (2-butoxy ethanol; butyl cellosolve)	111-76-2	~~3.1E+01~~ 2.1E+00	3.2E+3	8.2E+01		~~1.4E+04~~ 4.7E+03	8.2E+01 1.6E+02 (8-Hour)			
ethylene glycol ethyl ether – EGEE (2-ethoxy ethanol; cellosolve)	110-80-5	~~8.2E-01~~ 1.6E-01	2.7E+03	7.0E+01		3.7E+02	7.0E+01			
ethylene glycol ethyl ether acetate – EGEEA (2-ethoxyethyl acetate; cellosolve acetate)	111-15-9	~~3.1E-01~~ 6.2E-02	1.2E+04	3.0E+02		1.4E+02	3.0E+02			
ethylene glycol methyl ether – EGME (2-methoxy ethanol; methyl cellosolve)	109-86-4	~~2.1E-01~~ 4.1E-02	2.3E+03	6.0E+01		9.3E+01	6.0E+01			
ethylene glycol methyl ether acetate – EGMEA (2-methoxyethyl acetate; methyl cellosolve acetate)	110-49-6		3.5E+03	9.0E+01			9.0E+01			
Hexachlorobenzene	118-74-1		1.6E-01		1.8E+00				1.8E+00	
Hexachlorocyclohexanes (mixed or technical grade) [4]	608-73-1		3.3E-02		8.6E+00				4.0E+00	4.0E+00

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m³)	Chronic Inhalation REL [10] (µg/m³)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Hexachlorocyclohexane, alpha- [4]	319-84-6		3.3E-02		8.6E+00				4.0E+00	4.0E+00
Hexachlorocyclohexane, beta- [4]	319-85-7		3.3E-02		8.6E+00				4.0E+00	4.0E+00
Hexachlorocyclohexane, gamma- (lindane) [4]	58-89-9		1.2E-01		2.4E+00				1.1E+00	1.1E+00
1,6-Hexamethylene Diisocyanate (monomer)	822-06-0	1.3E-04	1.2E+00	3.0E-02		3.0E-01	3.0E-02 6.0E-02 (8-Hour)			
Hexane, n-	110-54-3		2.7E+05	7.0E+03			7.0E+03			
Hydrazine	302-01-2		1.7E-02	2.0E-01	1.7E+01		2.0E-01		1.7E+01	
Hydrochloric acid (hydrogen chloride)	7647-01-0	~~4.6E+00~~ 9.3E-01	3.5E+02	9.0E+00		2.1E+03	9.0E+00			
Hydrogen cyanide (hydrocyanic acid) [see cyanide & compounds]										
Hydrogen fluoride (hydrofluoric acid) [see fluorides & compounds]										
Hydrogen selenide [see selenium compounds]										
Hydrogen sulfide	7783-06-4	~~9.3E-02~~ 1.9E-02	3.9E+02	1.0E+01		4.2E+01	1.0E+01			

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m³)	Chronic Inhalation REL [10] (µg/m³)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Isophorone	78-59-1		7.7E+04	2.0E+03			2.0E+03			
Isopropyl alcohol (isopropanol)	67-63-0	~~7.1E+00~~ 1.4E+00	2.7E+05	7.0E+03		3.2E+03	7.0E+03			
Lead and compounds (inorganic) [4]	7439-92-1		2.9E-01		9.8E-01				4.2E-02	8.5E-03
lead acetate [4]	301-04-2		4.6E-01		6.2E-01				4.2E-02	8.5E-03
lead phosphate [4]	7446-27-7		3.8E-01		7.5E-01				4.2E-02	8.5E-03
lead subacetate [4]	1335-32-6		3.8E-01		7.5E-01				4.2E-02	8.5E-03
Lindane [see hexachlorocyclohexane, gamma]										
Maleic anhydride	108-31-6		2.7E+01	7.0E-01			7.0E-01			
Manganese and compounds	7439-96-5		3.5E+00	9.0E-02			9.0E-02 1.7E-01 (8-Hour)			
Mercury and compounds (inorganic) [4]	7439-97-6	~~1.3E-03~~ 2.7E-04	2.1E-01	5.4E-03		6.0E-01	3.0E-02 6.0E-02 (8-Hour)	1.6E-04		
mercuric chloride [4]	7487-94-7	~~1.8E-03~~ 2.7E-04	~~2.8E-01~~ 2.1E-01	4.0E-03		6.0E-01	3.0E-02 6.0E-02 (8-Hour)	1.6E-04		

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m^3)	Chronic Inhalation REL [10] (µg/m^3)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Methanol (methyl alcohol)	67-56-1	~~6.2E+01~~ 1.2E+01	1.5E+05	4.0E+03		2.8E+04	4.0E+03			
Methyl bromide (bromomethane)	74-83-9	~~8.6E+00~~ 1.7E+00	1.9E+02	5.0E+00		3.9E+03	5.0E+00			
Methyl chloroform (1,1,1-trichloroethane)	71-55-6	~~1.5E+02~~ 3.0E+01	3.9E+04	1.0E+03		6.8E+04	1.0E+03			
Methyl ethyl ketone (MEK) (2-butanone)	78-93-3	~~2.9E+01~~ 5.8E+00				1.3E+04				
Methyl isocyanate	624-83-9		3.9E+01	1.0E+00			1.0E+00			
Methyl tertiary-butyl ether (MTBE)	1634-04-4		1.6E+02	8.0E+03	1.8E-03		8.0E+03		1.8E-03	
Methylene bis (2-chloroaniline), 4,4'- (MOCA)	101-14-4		1.9E-01		1.5E+00				1.5E+00	
Methylene chloride (dichloromethane)	75-09-2	~~3.1E+01~~ 6.2E+00	8.2E+01	4.0E+02	3.5E-03	1.4E+04	4.0E+02		3.5E-03	
Methylene dianiline, 4,4'- (and its dichloride) [4]	101-77-9		2.6E-02	2.0E+01	1.1E+01		2.0E+01		1.6E+00	1.6E+00
Methylene diphenyl isocyanate	101-68-8	5.3E-03	~~2.7E+01~~ 3.1E+00	~~7.0E-01~~ 8.0E-02		1.2E+01	~~7.0E-01~~ 8.0E-02 1.6E-01 (8-Hour)			

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m³)	Chronic Inhalation REL [10] (µg/m³)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Michler's ketone (4,4 bis (dimethylamino) benzophenone)	90-94-8		3.3E-01		8.6E-01				8.6E-01	
Naphthalene [see polycyclic aromatic hydrocarbons]										
Nickel and compounds [4] *(values also apply to:)*	7440-02-0	~~3.1E-05~~ 8.8E-05	3.1E-01	1.4E-02	9.1E-01	2.0E-01	1.4E-02 6.0E-02 (8-Hour)	1.1E-02	9.1E-01	
nickel acetate [4]	373-02-4	~~9.3E-05~~ 2.7E-04	9.5E-01	4.7E-03	9.1E-01	2.0E-01	1.4E-02 6.0E-02 (8-Hour)	1.1E-02	9.1E-01	
nickel carbonate [4]	3333-39-3	~~6.3E-05~~ 1.8E-04	6.4E-01	6.9E-03	9.1E-01	2.0E-01	1.4E-02 6.0E-02 (8-Hour)	1.1E-02	9.1E-01	
nickel carbonyl [4]	13463-39-3	~~9.0E-05~~ 2.6E-04	9.1E-01	4.8E-03	9.1E-01	2.0E-01	1.4E-02 6.0E-02 (8-Hour)	1.1E-02	9.1E-01	
nickel hydroxide [4]	12054-48-7	~~4.9E-05~~ 1.4E-04	5.0E-01	8.9E-03	9.1E-01	2.0E-01	1.4E-02 6.0E-02 (8-Hour)	1.1E-02	9.1E-01	

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m³)	Chronic Inhalation REL [10] (µg/m³)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
nickelocene [4]	1271-28-9	~~6.3E-05~~ 1.8E-04	6.4E-01	6.9E-03	9.1E-01	2.0E-01	1.4E-02 6.0E-02 (8-Hour)	1.1E-02	9.1E-01	
nickel oxide [4]	1313-99-1	~~5.6E-05~~ 1.1E-04	4.0E-01	7.9E-02	9.1E-01	2.0E-01	1.4E-02 6.0E-02 (8-Hour)	1.1E-02	9.1E-01	
nickel refinery dust from the pyrometallurgical process [4]		~~3.1E-05~~ 8.8E-05	3.1E-01	1.4E-02	9.1E-01	2.0E-01	1.4E-02 6.0E-02 (8-Hour)	1.1E-02	9.1E-01	
nickel subsulfide [4]	12035-72-2	~~1.3E-04~~ 3.6E-04	1.3E+00	3.4E-03	9.1E-01	2.0E-01	1.4E-02 6.0E-02 (8-Hour)	1.1E-02	9.1E-01	
Nitric acid	7697-37-2	~~1.9E-01~~ 3.8E-02				8.6E+01				
Nitrosodi-n-butylamine, N-	924-16-3		2.6E-02		1.1E+01				1.1E+01	
Nitrosodi-n-propylamine, N-	621-64-7		4.1E-02		7.0E+00				7.0E+00	
Nitrosodiethylamine, N-	55-18-5		8.0E-03		3.6E+01				3.6E+01	
Nitrosodimethylamine, N-	62-75-9		1.8E-02		1.6E+01				1.6E+01	
Nitrosodiphenylamine, N-	86-30-6		3.2E+01		9.0E-03				9.0E-03	
Nitroso-n-methylethylamine, N-	10595-95-6		1.3E-02		2.2E+01				2.2E+01	

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m^3)	Chronic Inhalation REL [10] (µg/m^3)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Nitrosomorpholine, N-	59-89-2		4.3E-02		6.7E+00				6.7E+00	
Nitrosopiperidine, N-	100-75-4		3.0E-02		9.4E+00				9.4E+00	
Nitrosopyrrolidine, N-	930-55-2		1.4E-01		2.1E+00				2.1E+00	
Nitrosodiphenylamine, p-	156-10-5		1.3E+01		2.2E-02				2.2E-02	
Ozone	10028-15-6	~~4.0E-01~~ 8.0E-02				1.8E+02				
Pentachlorophenol	87-86-5		1.6E+01		1.8E-02				1.8E-02	
Perchloroethylene (tetrachloroethylene)	127-18-4	~~4.4E+01~~ 8.8E+00	1.4E+01	3.5E+01	2.1E-02	2.0E+04	3.5E+01		2.1E-02	
Phenol	108-95-2	~~1.3E+01~~ 2.6E+00	7.7E+03	2.0E+02		5.8E+03	2.0E+02			
Phosgene	75-44-5	~~8.8E-03~~ 1.8E-03				4.0E+00				
Phosphine	7803-51-2		3.1E+01	8.0E-01			8.0E-01			
Phosphoric acid	7664-38-2		2.7E+02	7.0E+00			7.0E+00			
Phthalic anhydride	85-44-9		7.7E+02	2.0E+01			2.0E+01			
PCBs (polychlorinated biphenyls) [4]	1336-36-3		3.9E-03		7.4E+01				2.0E+00	2.0E+00

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m^3)	Chronic Inhalation REL [10] (µg/m^3)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Polychlorinated dibenzo-p-dioxins (PCDDs), poly-chlorinated dibenzofurans (PCDFs), and dioxin-like polychlorinated biphenyls (PCBs) (as 2,3,7,8-PCDD equivalent) [4, 7]	See Footnote 7		4.4E-08	7.6E-08	6.5E+06		4.0E-05	1.0E-08	1.3E+05	1.3E+05
Polycyclic aromatic hydrocarbons (PAH) (as B(a)P-equivalent) [4, 8]	See Footnote 8		3.3E-03		8.6E+01				3.9E+00	1.2E+01
Naphthalene	91-20-3		2.4E+00	9.0E+00	1.2E-01		9.0E+00		1.2E-01	
Potassium bromate	7758-01-2		5.8E-01	1.7E+00	4.9E-01		1.7E+00		4.9E-01	
Propane sultone, 1,3-	1120-71-4		1.2E-01		2.4E+00				2.4E+00	
Propylene (propene)	115-07-1		1.2E+05	3.0E+03			3.0E+03			
Propylene glycol monomethyl ether	107-98-2		2.7E+05	7.0E+03			7.0E+03			
Propylene oxide	75-56-9	~~6.8E+00~~ 1.4E+00	2.2E+01	3.0E+01	1.3E-02	3.1E+03	3.0E+01		1.3E-02	
Selenium and compounds [4]	7782-49-2		8.0E+00	2.1E-01			2.0E+01	5.0E-03		
hydrogen selenide	7783-07-5	~~1.1E-02~~ 2.2E-03				5.0E+00				
selenium sulfide [4]	7446-34-6		~~1.5E+01~~ 8.0E+00	1.1E-01			2.0E+01	5.0E-03		

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m³)	Chronic Inhalation REL [10] (µg/m³)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Silica (crystalline, respirable)	7631-86-9		1.2E+02	3.0E+00			3.0E+00			
Sodium hydroxide	1310-73-2	~~1.8E-02~~ 3.5E-03				8.0E+00				
Styrene	100-42-5	~~4.6E+01~~ 9.3E+00	3.5E+04	9.0E+02		2.1E+04	9.0E+02			
Sulfates		~~2.6E-01~~ 5.3E-02				1.2E+02				
~~Sulfuric acid and oleum~~	~~7664-93-9~~	~~2.6E-01~~	~~3.9E+01~~	~~1.0E+00~~		~~1.2E+02~~	~~1.0E+00~~			
Sulfuric acid	7664-93-9	~~2.6E-01~~ 5.3E-02	3.9E+01	1.0E+00		1.2E+02	1.0E+00			
sulfur trioxide	7446-11-9	~~2.6E-01~~ 5.3E-02	3.9E+01	1.0E+00		1.2E+02	1.0E+00			
Oleum	8014-95-7	~~2.6E-01~~ 5.3E-02	~~3.9E+01~~	~~1.0E+00~~		1.2E+02	~~1.0E+00~~			
Tertiary Butyl Acetate (TBAc)	540-88-5		6.1E+01		4.7E-03				4.7E-03	5.0E-03
Tetrachloroethane, 1,1,2,2-	79-34-5		1.4E+00		2.0E-01				2.0E-01	
Thioacetamide	62-55-5		4.7E-02		6.1E+00				6.1E+00	
Toluene	108-88-3	~~8.2E+01~~ 2.2E+00	~~1.2E+04~~ 1.6E+04	~~3.0E+02~~ 4.2E+02		~~3.7E+04~~ 5.0E+03	~~3.0E+02~~ 4.2E+02 8.3E+02 (8-Hour)			

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m³)	Chronic Inhalation REL [10] (µg/m³)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
Toluene diisocyantates	26471-62-5	8.8E-04	~~2.7E+00~~ 3.1E-01	~~7.0E-02~~ 8.0E-03	3.9E-02	2.0E+00	~~7.0E-02~~ 8.0E-03 1.5E-02 (8-Hour)		3.9E-02	
toluene-2,4-diisocyanate	584-84-9	8.8E-04	2.7E+00 3.1E-01	~~7.0E-02~~ 8.0E-03	3.9E-02	2.0E+00	~~7.0E-02~~ 8.0E-03 1.5E-02 (8-Hour)		3.9E-02	
toluene-2,6-diisocyanate	91-08-7	8.8E-04	~~2.7E+00~~ 3.1E-01	~~7.0E-02~~ 8.0E-03	3.9E-02	2.0E+00	~~7.0E-02~~ 8.0E-03 1.5E-02 (8-Hour)		3.9E-02	
Trichloroethane, 1,1,1 (see methyl chloroform)										
Trichloroethane, 1,1,2- (vinyl trichloride)	79-00-5		5.0E+00		5.7E-02				5.7E-02	
Trichloroethylene	79-01-6		4.1E+01	6.0E+02	7.0E-03		6.0E+02		7.0E-03	
Trichlorophenol, 2,4,6-	88-06-2		4.1E+00		7.0E-02				7.0E-02	
Triethylamine	121-44-8	~~6.2E+00~~ 1.2E+00	7.7E+03	2.0E+02		2.8E+03	2.0E+02			
Urethane (ethyl carbamate)	51-79-6		2.9E-01		1.0E+00				1.0E+00	
Vanadium Compounds										

Chemical	CAS Number [1]	Acute (1-hr. max.) Trigger Level [2, 3] (lb/hour)	Chronic Trigger Level [2] (lb/year)	CREL Weighting Factor [9]	CP Weighting Factor [9]	Acute Inhalation REL [10] (µg/m^3)	Chronic Inhalation REL [10] (µg/m^3)	Chronic Oral REL [10] (mg/kg-day)	Inhalation Cancer Potency Factor [10] (mg/kg-day)$^{-1}$	Oral Cancer Potency Factor [10] (mg/kg-day)$^{-1}$
vanadium (fume or dust)	7440-62-2	~~6.6E-02~~ 1.3E-02				3.0E+01				
vanadium pentoxide	1314-62-1	~~6.6E-02~~ 1.3E-02				3.0E+01				
Vinyl acetate	108-05-4		7.7E+03	2.0E+02			2.0E+02			
Vinyl chloride (chloroethylene)	75-01-4	~~4.0E+02~~ 8.0E+01	1.1E+00		2.7E-01	1.8E+05			2.7E-01	
Vinylidene chloride (1,1-dichloroethylene)	75-35-4		2.7E+03	7.0E+01			7.0E+01			
Xylenes (mixed isomers)	1330-20-7	~~4.9E+01~~ 9.7E+00	2.7E+04	7.0E+02		2.2E+04	7.0E+02			
m-xylene	108-38-3	~~4.9E+01~~ 9.7E+00	2.7E+04	7.0E+02		2.2E+04	7.0E+02			
o-xylene	95-47-6	~~4.9E+01~~ 9.7E+00	2.7E+04	7.0E+02		2.2E+04	7.0E+02			
p-xylene	106-42-3	~~4.9E+01~~ 9.7E+00	2.7E+04	7.0E+02		2.2E+04	7.0E+02			

(Adopted 6/15/05; Amended 1/6/10, 12/7/16

1 Chemical Abstract Number (CAS):
CAS numbers are not available for many chemical groupings and mixtures.

2 Trigger Levels:

All trigger levels are presented in scientific notation (i.e., exponential form based on powers of the based number 10.) For example: 4.9E+01 is equivalent to $4.9X10^{1}$, or 49; 6.6E-02 is equivalent to $6.6X10^{-2}$, or 0.066; and 5.8E+00 is equivalent to $5.8X10^{0}$, or 5.8.

3 Averaging Period for Non-Cancer Acute Trigger Levels:
The averaging period for non-cancer acute trigger levels is a one-hour exposure.

4 Chemicals for Which Multi-Pathway Risks are Assessed:
Trigger levels are adjusted to include the impact from default non-inhalation pathways.

5 Asbestos:
The units for the inhalation cancer potency factor for asbestos are $(100\ PCM\ fibers/m^3)^{-1}$. A conversion factor of 100 fibers/0.003 μg can be multiplied by a receptor concentration of asbestos expressed in $\mu g/m^3$. Unless other information necessary to estimate the concentration ($fibers/m^3$) of asbestos at receptors of interest is available, an inhalation cancer potency factor of $220\ (mg/kg\text{-}day)^{-1}$ is available.

6 Diesel Exhaust Particulate Matter:
Diesel exhaust particulate matter should be used as a surrogate for all TAC emissions from diesel-fueled compression-ignition internal combustion engines. However, diesel exhaust particulate matter should not be used for other types of diesel-fueled combustion equipment, such as boilers or turbines. For equipment other than diesel-fueled compression-ignition internal combustion engines, emissions should be determined for individual TACs and compared to the appropriate trigger level for each TAC.

7 Polychlorinated Dibenzo-p-Dioxins (PCDDs), Polychlorinated Dibenzofurans (PCDFs), and Dioxin-like Polychlorinated Biphenyls (PCBs):
These substances are PCDDs, PCDFs, and dioxin-like PCBs for which OEHHA has adopted the World Health Organization (WHO_{97}) Toxicity Equivalency Factor (TEF) scheme for evaluating cancer risk due to exposure to samples containing mixtures of PCDDs, PCDFs, and dioxin-like PCBs. PCDDs, PCDFs, and dioxin-like PCBs should be evaluated as PCDD-equivalent. This evaluation process consists of multiplying individual PCDD-, PCDF-, and dioxin-like PCB-specific emission levels with their corresponding TEFs listed below. The sum of these products is the PCDD-equivalent and should be compared to the PCDD-equivalent trigger level.

PCDD	CAS Number	TEF
2,3,7,8-tetrachlorodibenzo-p-dioxin	1746-01-6	1.0
1,2,3,7,8-pentachlorodibenzo-p-dioxin	40321-76-4	1.0
1,2,3,4,7,8-hexachlorodibenzo-p-dioxin	39227-28-6	0.1
1,2,3,6,7,8-hexachlorodibenzo-p-dioxin	57653-85-7	0.1
1,2,3,7,8,9-hexachlorodibenzo-p-dioxin	19408-74-3	0.1
1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin	35822-46-9	0.01
1,2,3,4,6,7,8,9-octachlorodibenzo-p-dioxin	3268-87-9	0.0003

PCDF	CAS Number	TEF
2,3,7,8-tetrachlorodibenzofuran	5120-73-19	0.1
1,2,3,7,8-pentachlorodibenzofuran	57117-41-6	0.03

2,3,4,7,8-pentachlorodibenzofuran	57117-31-4	0.3
1,2,3,4,7,8-hexachlorodibenzofuran	70648-26-9	0.1
1,2,3,6,7,8-hexachlorodibenzofuran	57117-44-9	0.1
1,2,3,7,8,9-hexachlorodibenzofuran	72918-21-9	0.1
2,3,4,6,7,8-hexachlorodibenzofuran	60851-34-5	0.1
1,2,3,4,6,7,8-heptachlorodibenzofuran	67562-39-4	0.01
1,2,3,4,7,8,9-heptachlorodibenzofuran	55673-89-7	0.01
1,2,3,4,6,7,8,9-octachlorodibenzofuran	39001-02-0	0.0003

Dioxin-like PCBs (coplanar PCBs)	CAS Number	TEF
PCB 77 (3,3'4,4'-tetrachlorobiphenyl)	32598-13-3	0.0001
PCB 81 (3,4,4',5-tetrachlorobiphenyl)	70362-50-4	0.0003
PCB 105 (2,3,3'4,4'-pentachlorobiphenyl)	32598-14-4	0.00003
PCB 114 (2,3,4,4'5-pentachlorobiphenyl)	74472-37-0	0.00003
PCB 118 (2,3',4,4',5-pentachlorobiphenyl)	31508-00-6	0.00003
PCB 123 (2',3,4,4',5-pentachlorobiphenyl)	65510-44-3	0.00003
PCB 126 (3,3',4,4',5-pentachlorobiphenyl)	57465-28-8	0.1
PCB 156 (2,3,3',4,4',5-hexachlorobiphenyl)	38380-08-4	0.00003
PCB 157 (2,3,3',4,4',5'-hexachlorobiphenyl)	69782-90-7	0.00003
PCB 167 (2,3',4,4',5,5'-hexachlorobiphenyl)	52663-72-6	0.00003
PCB 169 (3,3',4,4',5,5'-hexachlorobiphenyl)	32774-16-6	0.03
PCB 170 (2,2',3,3',4,4',5-heptachlorobiphenyl)	35065-30-6	0
PCB 180 (2,2',3,4,4',5,5'-heptachlorobiphenyl)	35065-29-3	0
PCB 189 (2,3,3',4,4',5,5'-heptachlorobiphenyl)	39635-31-9	0.00003

8 Polycyclic Aromatic Hydrocarbons (PAHs):

These substances are PAH-derivatives that have OEHHA-developed Potency Equivalency Factors (PEFs). PAHs should be evaluated as benzo(a)pyrene-equivalents. This evaluation process consists of multiplying individual PAH-specific emission levels with their corresponding PEFs listed below. The sum of these products is the benzo(a)pyrene-equivalent level and should be compared to the benzo(a)pyrene equivalent trigger level.

PAH or derivative	CAS Number	PEF
benz(a)anthracene	56-55-3	0.1
benzo(b)fluoranthene	205-99-2	0.1
benzo(j)fluoranthene	205-82-3	0.1
benzo(k)fluoranthene	207-08-9	0.1
benzo(a)pyrene	50-32-8	1.0
chrysene	218-01-9	0.01
dibenz(a,j)acridine	224-42-0	0.1
dibenz(a,h)acridine	226-36-8	0.1
dibenz(a,h)anthracene	53-70-3	1.05
7H-dibenzo(c,g)carbazole	194-59-2	1.0
dibenzo(a,e)pyrene	192-65-4	1.0

dibenzo(a,h)pyrene	189-64-0	10
dibenzo(a,i)pyrene	189-55-9	10
dibenzo(a,l)pyrene	191-30-0	10
7,12-dimethylbenz(a)anthracene	57-97-6	64
indeno(1,2,3-cd)pyrene	193-39-5	0.1
5-methylchrysene	3697-24-3	1.0
3-methylcholanthrene	56-49-5	5.7
5-nitroacenaphthene	602-87-9	0.03
1-nitropyrene	5522-43-0	0.1
4-nitropyrene	57835-92-4	0.1
1,6-dinitropyrene	42397-64-8	10
1,8-dinitropyrene	42397-65-9	1.0
6-nitrocrysene	7496-02-8	10
2-nitrofluorene	607-57-8	0.01

9 **CREL (chronic Reference Exposure Level) and CP (Cancer Potency) Weighting Factors:** These factors are to be used for purposes of calculating toxicity weighted emissions. Factors were developed assuming multi-pathway exposure where applicable, and continuously operating sources for residential receptor exposure.

10 **Health Effects Values:** All reference exposure levels (RELs) and cancer potency factors (CPFs) are the health effects values for the California Air Toxics Hot Spots Program that have been approved by the Cal/EPA Office of Environmental Health Hazard Assessment (OEHHA) as of ~~March 31, 2016~~ June 30, 2021.

(Adopted 6/15/05; Amended 1/6/10, 12/7/16)

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

APPENDIX C

Proposed Amendments to the Bay Area Air Quality Management District Health Risk Assessment Guidelines

BAAQMD

Air Toxics ~~NSR~~ Control Programs

Health Risk Assessment Guidelines

~~December 2016~~December 2021

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
375 BEALE STREET, SUITE 600
SAN FRANCISCO, CA 94105

BAAQMD Air Toxics ~~NSR~~ Control Programs

Health Risk Assessment Guidelines

1. INTRODUCTION

This document describes the Bay Area Air Quality Management District's guidelines for conducting health risk assessments. Any health risk assessment (HRA) that is required pursuant to Regulation 2 Permits, Rule 1 General Requirements or Rule 5 New Source Review of Toxic Air Contaminants or that is required to assess the applicability of Regulation 11, Rule 18 Reduction of Risk from Air Toxic Emissions at Existing Facilities shall be conducted in accordance with these Air District HRA Guidelines.

In accordance with Regulation 2-5-402, the Air District HRA Guidelines generally conform to the Health Risk Assessment Guidelines adopted by Cal/EPA's Office of Environmental Health Hazard Assessment (OEHHA) for use in the Air Toxics Hot Spots Program ~~for all types of facilities except gasoline dispensing facilities (GDFs)~~. In addition, these guidelines are in accordance with State "Risk Management Guidance for Stationary Sources of Air Toxics" developed by the California Air Resources Board (ARB) and the California Air Pollution Control Officers Association (CAPCOA).

~~The Air District is delaying implementation of OEHHA's 2015 HRA Guidelines for gasoline dispensing facilities while further research is conducted on the potential impacts of OEHHA's 2015 HRA Guidelines on gasoline dispensing facilities. The Air District HRA Guidelines for gasoline dispensing facilities are described in Section 2.2.~~

The Air District will periodically update these Air District HRA Guidelines to clarify procedures or incorporate other revisions to regulatory guidelines.

2. PROCEDURES

The procedures described below constitute the Regulation 2-5-603 Health Risk Assessment Procedures.

2.1 Procedures for All Facilities ~~Other Than Gasoline Dispensing Facilities~~

All HRAs for stationary source facilities ~~other than gasoline dispensing facilities~~ shall be completed by following the procedures described in the OEHHA Health Risk Assessment Guidelines for the Air Toxics Hot Spots Program adopted by OEHHA on March 6, 2015 and using the recommended breathing rates described in the ARB/CAPCOA Risk Management Guidance for Stationary Sources of Air Toxics adopted by ARB on July 23, 2015.

The OEHHA HRA Guidelines contain several sections which identify (a) the overall methodology, (b) the exposure assessment assumptions and procedures, and (c) the health effects data (cancer potency factors and reference exposure levels).

A summary of OEHHA's HRA Guidelines and an index of the relevant documents are located at:

~~http://www.oehha.ca.gov/air/hot_spots/index.html~~https://oehha.ca.gov/air/air-toxics-hot-spots

OEHHA's risk assessment methodology (February 2015) is located at:

~~http://www.oehha.ca.gov/air/risk_assess/index.html~~https://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0

The exposure assessment and stochastic technical support document (August 2012) is located at:

~~http://www.oehha.ca.gov/air/exposure_assess/index.html~~https://oehha.ca.gov/air/crnr/notice-adoption-technical-support-document-exposure-assessment-and-stochastic-analysis-aug

The Technical Support Document for Cancer Potency Factors: Methodologies for Derivation, Listing of Available Values, and Adjustments to Allow for Early Life Stage Exposures (May 2009) is located at:

~~http://www.oehha.ca.gov/air/hot_spots/tsd052909.html~~https://oehha.ca.gov/air/crnr/technical-support-document-cancer-potency-factors-2009

The Technical Support Document for the Derivation of Noncancer Reference Exposure Levels (June 2008) is located at:

~~http://www.oehha.ca.gov/air/hot_spots/rels_dec2008.html~~https://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-technical-support-document-derivation

The ARB/CAPCOA Risk Management Guidance for Stationary Sources of Air Toxics (July 23, 2015) provides guidance on managing potential health risks from sources subject to California air toxics programs and updates the Risk Management Policy for Inhalation Risk Assessments. It is located at:

http://www.arb.ca.gov/toxics/rma/rmaguideline.htm

Sections 2.1.1 through 2.1.6 below clarify and highlight some of the exposure assessment procedures including exposure assumptions (e.g., breathing rate and exposure duration), health effect values, and calculation procedures to be used for conducting Air District HRAs.

2.1.1 Clarifications of Exposure Assessment Procedures

This section clarifies and highlights some of the exposure assessment procedures that should be followed when conducting an Air District HRA.

2.1.1.1 Breathing Rate

On July 23, 2015, ARB adopted "Risk Management Guidance for Stationary Sources of Air Toxics", which includes an updated Risk Management Policy for Inhalation Risk Assessments. For the HRA methodology used in the Air Toxics NSR Program, the Air District has conformed with these State guidelines and adopted the exposure assessment recommendations made by ARB and CAPCOA. The policy considers the new science while providing a reasonable estimate of potential cancer risk for use in risk assessments for risk management decisions. This policy recommends using a combination of the 95th percentile and 80th percentile daily breathing rates as the minimum exposure inputs for risk management decisions. Specifically, the policy recommends using the 95th percentile rate for age groups less than 2 years old and the 80th percentile rate for age groups that are greater than or equal to 2 years old.

To assess potential inhalation exposure to offsite workers, OEHHA recommends assuming a breathing rate of 230 L/kg-8 hours. This value represents the 95th percentile 8-hour breathing rate based on moderate activity of 16-70 years-old age range.

To assess exposure to children at schools and daycare facilities, OEHHA recommends using the 95th percentile moderate intensity breathing rates from Table 5.8 of OEHHA's HRA Guidelines. As a default, the Air District recommends using the breathing rate for 2<16 years (520 L/kg-8 hours) for children at schools. For a more refined analysis, the Air District will allow the use of breathing rates for other age ranges that are tailored to the ages of the children in the specific school under evaluation.

2.1.1.2 Exposure Frequency

Based on OEHHA recommendations, the Air District will estimate cancer risk to residential receptors assuming exposure occurs 24 hours per day for 350 days per year. For a worker receptor, exposure is assumed to occur 250 days per year. However, for some professions (e.g., teachers) a different schedule may be more appropriate. For children at school sites, exposure is assumed to occur 180 days (or 36 weeks) per year.

2.1.1.3 Exposure Duration

Based on OEHHA recommendations, the Air District will estimate cancer risk to residential receptors based on a 30-year exposure duration. Although 9-year and 70-year exposure scenarios may be presented for information purposes, risk management decisions will be made based on 30-year exposure duration for residential receptors.

For worker receptors, risk management decisions will be made based on OEHHA's recommended exposure duration of 25 years.

As a default, cancer risk estimates for children at school sites will be calculated based on a 9-year exposure duration, such as for a K-8 school. However, this exposure duration may be refined based on the specific school under evaluation (i.e. 6 years for a K-5 elementary school, 4 years for a 9-12 high school, or 3 years for a 6-8 middle school). For any analyses using an alternative to the 9-year default duration for school children, the breathing rate assumptions must also be adjusted in accordance with the ages of the children in the school.

2.1.2 Health Effects Values

Chemical-specific health effects values have been consolidated and are presented in Regulation 2, Rule 5, Table 2-5-1 Toxic Air Contaminant Trigger Levels for use in conducting HRAs. The Air District has added the 8-hour reference exposure levels (RELs) adopted by OEHHA to this table. The Air District will periodically update this table to include OEHHA's revisions to health effects values.

2.1.3 Cancer Risk Calculations

In accordance with OEHHA's 2015 HRA Guidelines, cancer risk estimates should incorporate age sensitivity factors (ASFs) and fraction of time at home (FAH) adjustment factors. Air District HRAs should follow OEHHA's recommended cancer risk calculation procedures as presented in Section 8.2 of OEHHA's 2015 HRA Guidelines.

For residential exposures, the cancer risk calculations should include the most sensitive age groups: from third trimester of pregnancy to 30 years of age for a 30-year exposure duration. For worker receptors, assume working begins at age 16 years.

2.1.3.1 Fraction of Time at Home (FAH)

For the initial cancer risk estimate, assume the fraction of time at home factors are equal to one (FAH = 1.0) for the following age groups: 3rd trimester to < 2 years and 2 to < 16 years. Use this initial analysis to assess if there are any schools within cancer risk isopleths of one in a million or greater. If there are no schools within one in a million or greater cancer risk isopleths, the cancer risk analysis may be refined by using the appropriate age-specific FAH factors as identified in Table 8.4 of the 2015 OEHHA Guidelines:

- FAH = 0.85 for age group: 3rd trimester to < 2 years;
- FAH = 0.72 for age group: 2 to < 16 years;
- FAH = 0.73 for age group: 16 to 70 years.

2.1.3.2 Short-Term Projects

In the 2015 HRA Guidelines, OEHHA recommends using actual project duration for short-term projects~~,~~ but cautions that the risk manager should consider a lower cancer risk threshold for very short-term projects, because a higher exposure over a short period of time may pose a greater risk than the same total exposure spread over a much longer period of time. To ensure that short-term projects do not result in unanticipated higher cancer impacts due to short-duration high-exposure rates, the Air District recommends that the cancer risk be evaluated assuming that the average daily dose for short-term exposure lasts a minimum of three years for projects lasting three years or less. For residential exposures, the cancer risk calculations should include the most sensitive age groups (beginning with the third trimester of pregnancy) and should use the 95th percentile breathing rates. The Air District recommends following OEHHA guidelines for other aspects of short-term projects. In summary, the Air District recommends:

- use of actual emission rates over a minimum 3-year duration for cancer risk assessments involving projects lasting 3 years or less, and
- use of actual project duration for cancer risk assessments on projects lasting longer than 3 years.

2.1.4 Noncancer Health Impacts

In accordance with OEHHA's 2015 HRA Guidelines, noncancer health impacts should be calculated using the hazard index approach. Air District HRAs should follow OEHHA's recommended calculation procedures for noncancer health impacts, as presented in Section 8.3 of OEHHA's 2015 HRA Guidelines.

Regarding Section 8.3.5 of OEHHA's 2015 HRA Guidelines, the Air District does not require inclusion of the contribution of background criteria pollutants to respiratory health effects for Air District HRAs.

2.1.5 Spatial Averaging

Typically, HRA results for an individual receptor have been based on air dispersion modeling results at a single point or location. In the 2015 OEHHA Guidelines (Section 4.7.3), OEHHA provides a refinement option that takes into account that people move around within their property or workplace and do not normally remain at a single fixed point for the entire exposure duration. This spatial averaging refinement may be used for any chronic analysis in an Air District HRA. Spatial averaging is not appropriate for an acute analysis.

After the points of interest have been identified by the air dispersion modeling analysis, the ground level air concentration for each maximum impact point may be refined by using the arithmetic mean of the receptor concentrations identified within a spatial average grid instead of the single maximum impact point concentration. The modeler shall generally center the spatial average grid around the maximum impact point, but the modeler shall also consider facility boundaries, possible receptor locations, and predominant wind direction. This grid shall be of an appropriate shape, shall be no larger than 400 square meters, with a grid resolution spacing no greater than ~~and shall have a receptor spacing within the grid of no less than~~ 5 meters. Grid shape, size, and location are subject to Air District approval.

2.1.6 Stochastic Risk Assessment

For a stochastic, multipathway risk assessment, the potential cancer risk should be reported for the full distribution of exposure from all exposure pathways included in the risk assessment. For risk management decisions, the potential cancer risk from a stochastic, multipathway risk assessment should be based on the 95th percentile cancer risk.

~~2.2 Procedures for Gasoline Dispensing Facilities~~

~~Any HRA for a gasoline dispensing facility shall be completed by following the procedures described in the OEHHA Health Risk Assessment Guidelines for the Air Toxics Hot Spots Program that were adopted by OEHHA on October 3, 2003 and any State risk assessment and risk management policies and guidelines in effect as of June 1, 2009.~~

~~The 2003 OEHHA Health Risk Assessment Guidelines contain several sections which identify (a) the overall methodology, (b) the exposure assessment assumptions and procedures, and (c) the health effects data (cancer potency factors, chronic reference exposure levels, and acute reference exposure levels).~~

~~A summary of OEHHA's 2003 Health Risk Assessment Guidelines and an index of the relevant documents are located at:~~

http://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk

OEHHA's 2003 risk assessment methodology is located at:

http://oehha.ca.gov/media/downloads/crnr/hraguidefinal.pdf

The exposure assessment and stochastic technical support document (Part IV of OEHHA's Risk Assessment Guidelines) is located at:

http://oehha.ca.gov/media/downloads/crnr/stoch4f.pdf

The Technical Support Document for Cancer Potency Factors: Methodologies for Derivation, Listing of Available Values, and Adjustments to Allow for Early Life Stage Exposures (June 2009) is located at:

http://oehha.ca.gov/media/downloads/crnr/tsdcancerpotency.pdf

The Technical Support Document for the Derivation of Noncancer Reference Exposure Levels (June 2008) is located at:

http://oehha.ca.gov/media/downloads/crnr/noncancertsdfinal.pdf

Sections 2.2.1 through 2.2.4 below clarify and highlight some of the exposure assessment procedures including exposure assumptions (e.g., breathing rate and exposure duration) and health effect values to be used for conducting HRAs for gasoline dispensing facilities.

2.2.1 Clarifications of Exposure Assessment Procedures

This section clarifies and highlights some of the exposure assessment procedures that should be followed when conducting an HRA for a gasoline dispensing facility.

2.2.1.1 Breathing Rate

On October 9, 2003, a statewide interim Risk Management Policy for inhalation-based residential cancer risk was adopted by the California Air Resources Board (ARB) and Cal/EPA's OEHHA (http://www.arb.ca.gov/toxics/rmpolicy.pdf). For the HRA methodology used in the Air Toxics NSR Program for gasoline dispensing facilities, the Air District has conformed with these State guidelines and adopted the interim exposure assessment recommendations made by ARB and OEHHA. The Air District will continue to use this interim recommendation for gasoline dispensing facilities even though newer guidance has been adopted by ARB and OEHHA. The interim policy recommended, where a single cancer risk value for a residential receptor is needed or prudent for risk management decision-making, the potential cancer risk estimate for the inhalation exposure pathway be based on the breathing rate representing the 80th percentile value of the breathing rate range of values (302 L/kg-day).

To assess potential inhalation exposure to offsite workers, OEHHA recommended assuming a breathing rate of 149 L/kg-day. This value corresponds to a 70 kg worker breathing 1.3 m^3/hour (breathing rate recommended by USEPA as an hourly average for outdoor workers) for an eight-hour day.

For children, OEHHA recommended assuming a breathing rate of 581 L/kg-day to assess potential risk via the inhalation exposure pathway. This value represents the upper 95% percentile of daily breathing rates for children.

2.2.1.2 Exposure Time and Frequency

Based on OEHHA's 2003 HRA Guidelines, the Air District will estimate cancer risk to residential receptors for gasoline dispensing facilities assuming exposure occurs 24 hours per day for 350 days per year. For a worker receptor, exposure is assumed to occur 8 hours per day for 245 days per year. However, for some professions (e.g., teachers) a different schedule may be more appropriate. For children at school sites, exposure is assumed to occur 10 hours per day for 180 days (or 36 weeks) per year.

2.2.1.3 Exposure Duration

Based on OEHHA's 2003 HRA Guidelines, the Air District will estimate cancer risk to residential receptors for gasoline dispensing facilities based on a 70-year lifetime exposure. Although 9-year and 30-year exposure scenarios may be presented for information purposes, risk management decisions will be made based on 70-year exposure duration for residential receptors. For worker receptors for gasoline dispensing facilities, risk management decisions will be made based on OEHHA's 2003 recommended exposure duration of 40 years. Cancer risk estimates for children at school sites will be calculated based on a 9-year exposure duration.

2.2.2 Health Effects Values

Chemical-specific health effects values have been consolidated and are presented in Regulation 2, Rule 5, Table 2-5-1 Toxic Air Contaminant Trigger Levels for use in conducting HRAs. Toxicity criteria summarized in Table 2-5-1 represent health effects values that were adopted by OEHHA/ARB as of March 31, 2016.

2.2.3 Cancer Risk Calculations

In accordance with OEHHA's revised health risk assessment guidelines (specifically, OEHHA's Technical Support Document (TSD) for Cancer Potency Factors, adopted June 1, 2009), calculation of cancer risk estimates for gasoline dispensing facilities should incorporate age sensitivity factors (ASFs).

The revised TSD for Cancer Potency Factors provides updated calculation procedures used to consider the increased susceptibility of infants and children to carcinogens, as compared to adults. The calculation procedure below includes the use of age-specific weighting factors in calculating cancer risks from exposures of infants, children and

adolescents, to reflect their anticipated special sensitivity to carcinogens. OEHHA recommended weighting cancer risk by a factor of 10 for exposures that occur from the third trimester of pregnancy to 2 years of age, and by a factor of 3 for exposures that occur from 2 years through 15 years of age. These weighting factors should be applied to all carcinogens emitted from gasoline dispensing facilities. For estimating cancer risk for residential receptors, the incorporation of the ASFs results in a cancer risk adjustment factor of 1.7. For estimating cancer risk for student receptors, an ASF of 3 should be applied. For estimating cancer risk for worker receptors, an ASF of 1 should be applied.

The cancer risk adjustment factors for gasoline dispensing facilities were developed based on the following:

Receptor	**Age Groups**	**ASF**	**Duration**	**Cancer Risk Adjustment Factor**
Resident	Third trimester to age 2 years	10	2.25/70	0.32
	Age 2 to age 16 years	3	14/70	0.6
	Age 16 to 70 years	1	54/70	0.77
				1.7
Student	Age 2 to age 16 years	3	9 years	***3***
Worker	Age 16 to 70 years	1	40 years	***1***

Since the exposure duration for a student receptor (9 years), and worker receptor (40 years), falls within a single age group, the student cancer risk adjustment factor is 3 and the worker cancer risk adjustment factor is 1.

Cancer risk adjustment factors should be used to calculate all cancer risk estimates for gasoline dispensing facilities.

Below is the equation for calculating cancer risk estimates for gasoline dispensing facilities:

Cancer Risk = Dose * Cancer Risk Adjustment Factor * Cancer Potency Factor

2.2.4 Noncancer Health Impacts

In accordance with OEHHA's 2003 HRA Guidelines, noncancer health impacts should be calculated using the hazard index approach. Air District HRAs should follow OEHHA's recommended calculation procedures for noncancer health impacts, as presented in Section 8.3 of OEHHA's 2003 HRA Guidelines, using the RELs identified in Table 2-5-1.

~~Regarding Section 8.3.A of OEHHA's 2003 HRA Guidelines, the Air District does not require inclusion of the contribution of background criteria pollutants to respiratory health effects for Air District HRAs.~~

3. Assessment of Acrolein Emissions

CARB has issued advisories regarding acrolein emissions data determined using CARB Method 430 (M430): http://www.arb.ca.gov/ei/acrolein.htm. The CARB advisories state that acrolein emissions data determined using CARB Method 430 are suspect and should be flagged as non-quantitative. Although acrolein emission factor data is available for several types of stationary combustion sources, this data was developed based on source tests that utilized CARB Method 430 or equally inaccurate test methods; therefore, the validity of this acrolein emission factor data is suspect. In addition, the tools the Air District needs to implement and enforce acrolein emission limits are not available due to the lack of an ARB approved acrolein test method for stationary sources.

In consideration of this information, the Air District has determined that acrolein emissions may be included in Air District HRAs for screening or informational purposes, but the Air District will exclude acrolein emissions from the final HRA results on which risk management decisions will be based.

References

~~*1 "Air Toxics "Hot Spots" Program Risk Assessment Guidelines, The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments," OEHHA, August, 2003*~~

~~*2 "Air Toxics "Hot Spots" Program Risk Assessment Guidelines, Part IV. Technical Support Document for Exposure Assessment and Stochastic Analysis", OEHHA, September, 2000*~~

~~3~~1 *"Air Toxics Hot Spots Program Risk Assessment Guideline; Technical Support Document for Cancer Potency Factors: Methodologies for derivation, listing of available values, and adjustments to allow for early life stage exposures", OEHHA, May, 2009*

~~4~~2 *"Air Toxics Hot Spots Program Risk Assessment Guidelines; Technical Support Document for the Derivation of Noncancer Reference Exposure Levels", OEHHA, June, 2008*

~~5~~3 *"Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values", California Air Resources Board, updated ~~March 28, 2016~~October 2, 2020*

~~6~~4 *"Air Toxics Hot Spots Program Risk Assessment Guidelines; Guidance Manual for Preparation of Health Risk Assessments", OEHHA, February, 2015*

~~7~~5 *"Air Toxics Hot Spots Program Risk Assessment Guidelines; Technical Support Document for Exposure Assessment and Stochastic Analysis", OEHHA, August, 2012*

~~8~~6 *"Risk Management Guidance for Stationary Sources of Air Toxics", Air Resources Board and California Air Pollution Control Officers Association, July 23, 2015*

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

APPENDIX D

Maps of Overburdened Communities

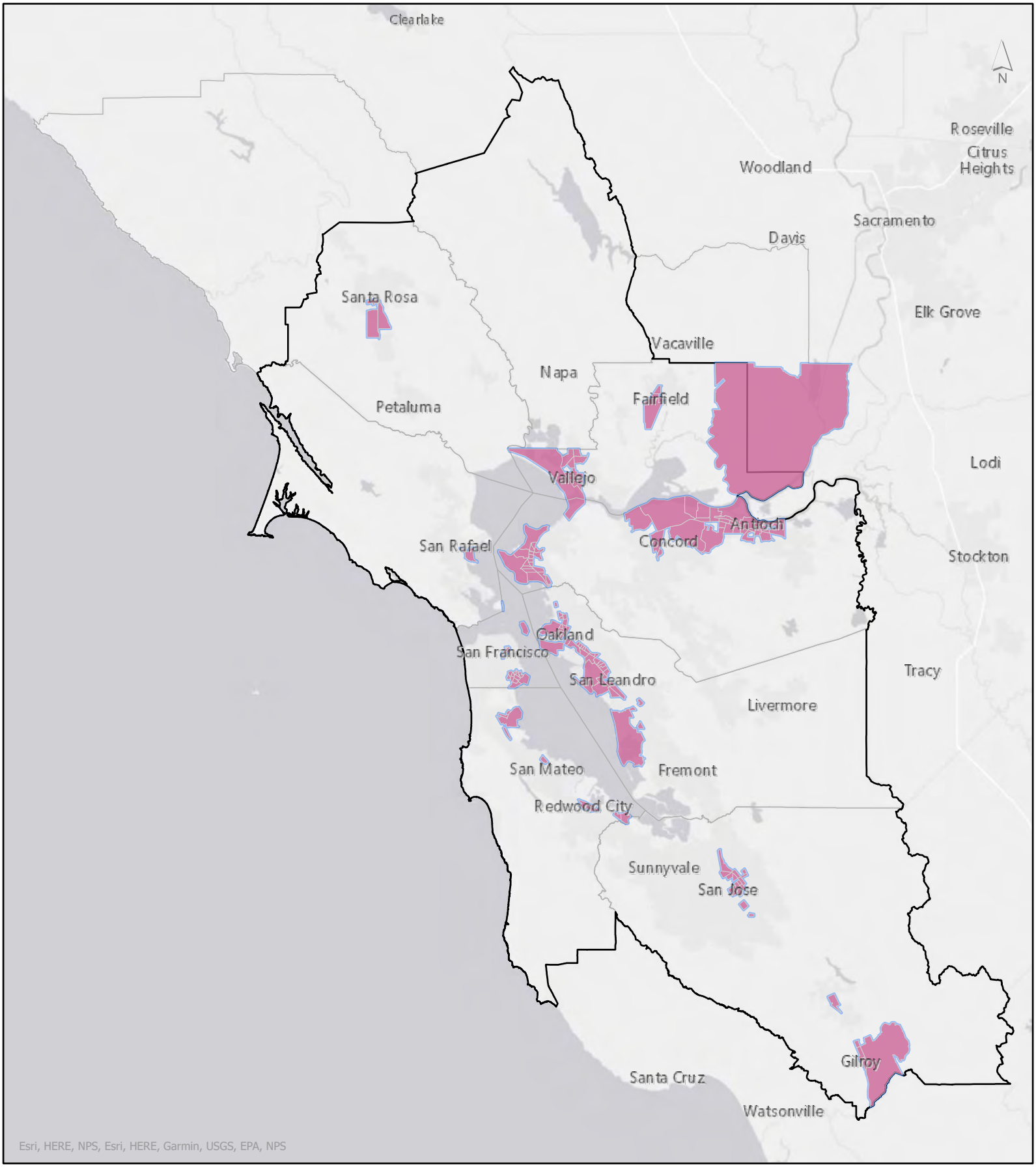
CalEnviroScreen
Version 4.0
Results - San Francisco Bay Area

Top 30% CalEnviroScreen Scores

Percentile

< 70

70 - 100



Bay Area Air Quality Management District

BAAQMD Jurisdiction

1000 ft. Buffer

0 5 10 20 Miles

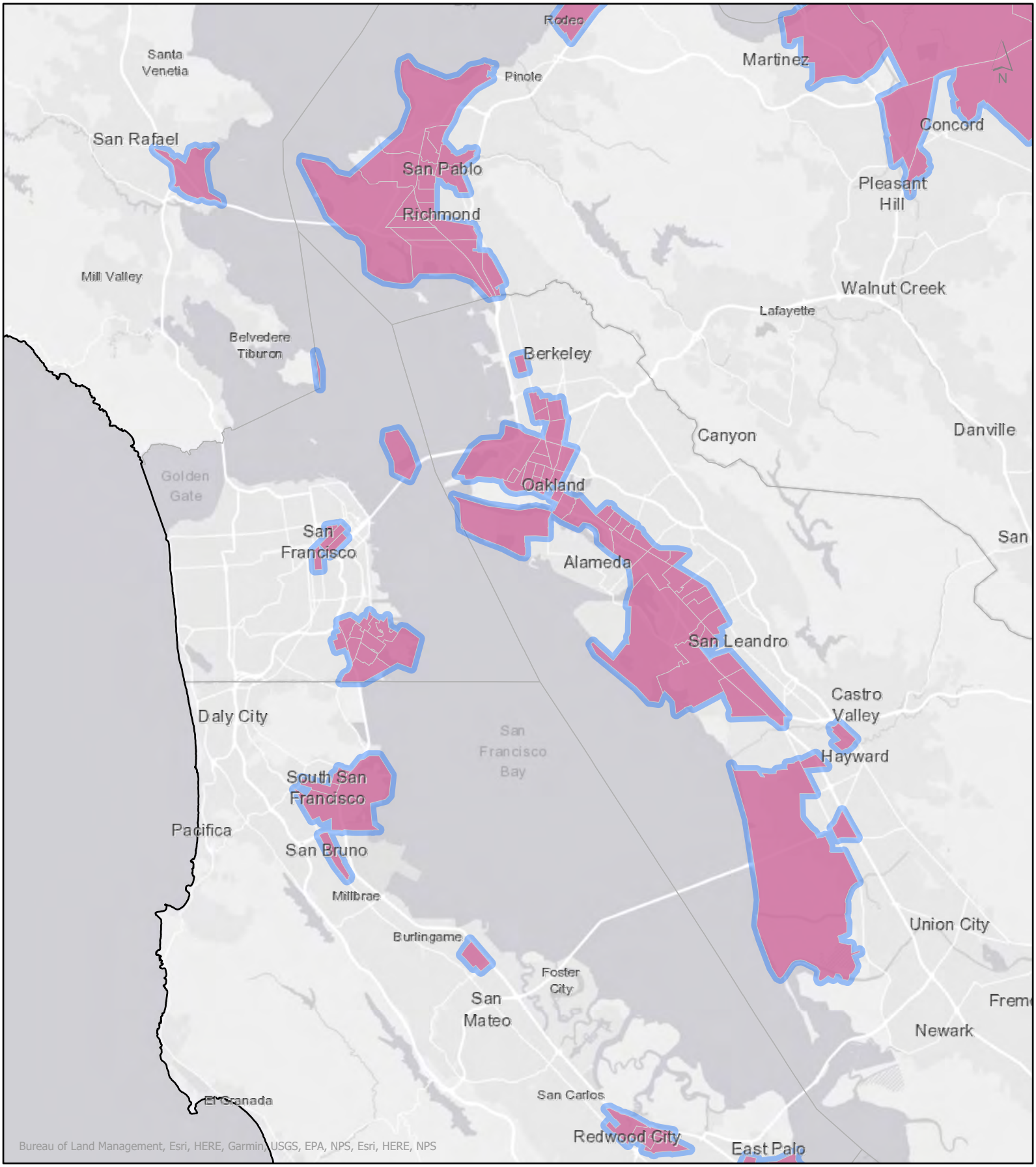
CalEnviroScreen
Version 4.0
Results - SF Bay Area Central Region

Top 30% CalEnviroScreen Scores

Percentile

< 70

70 - 100



Bay Area Air Quality Management District

BAAQMD Jurisdiction

1000 ft. Buffer

0 1.25 2.5 5 Miles

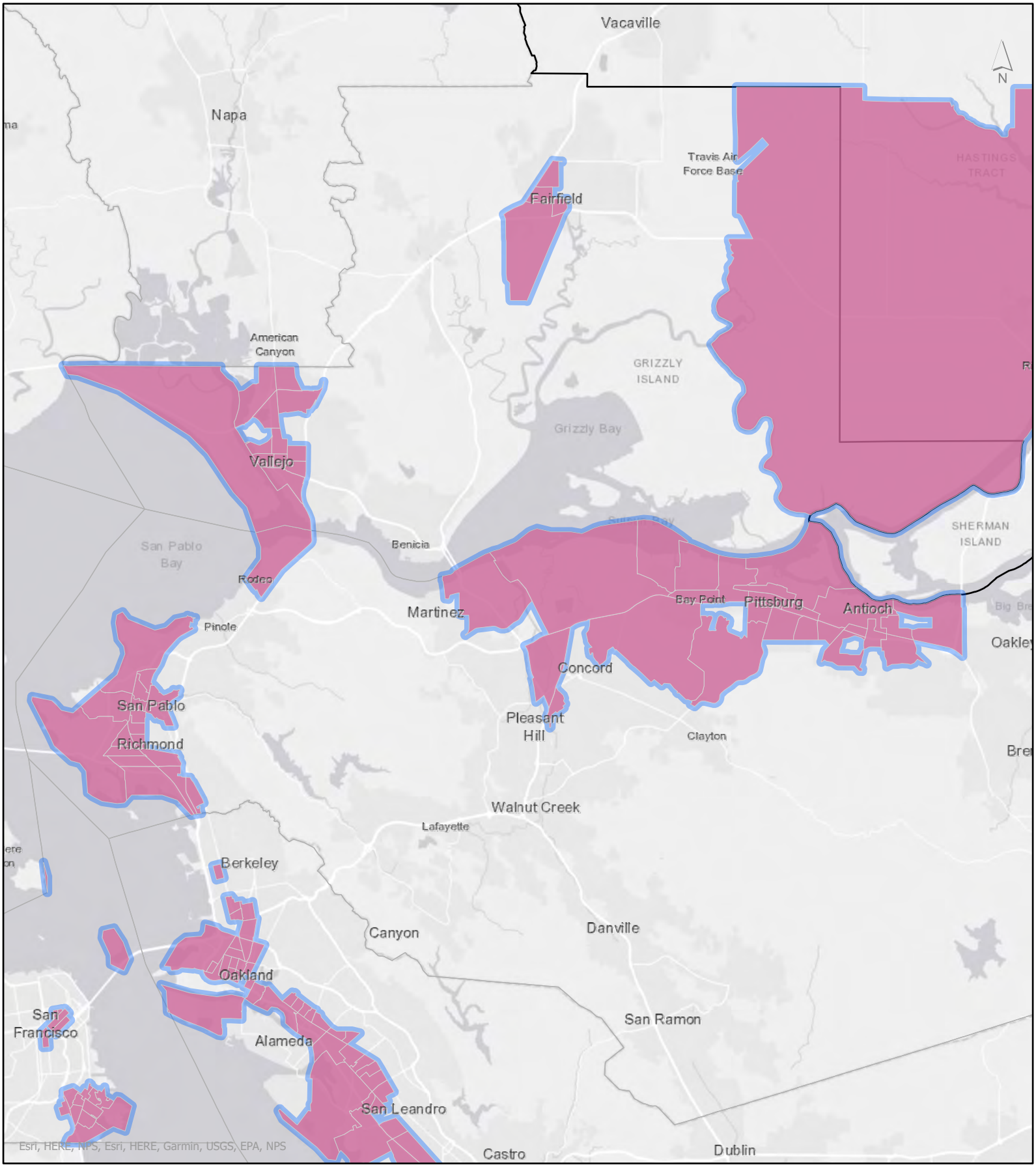
CalEnviroScreen
Version 4.0
Results - San Pablo/Carquinez/Suisun

Top 30% CalEnviroScreen Scores

Percentile

< 70

70 - 100



Bay Area Air Quality Management District

BAAQMD Jurisdiction

1000 ft. Buffer

0 1.5 3 6 Miles

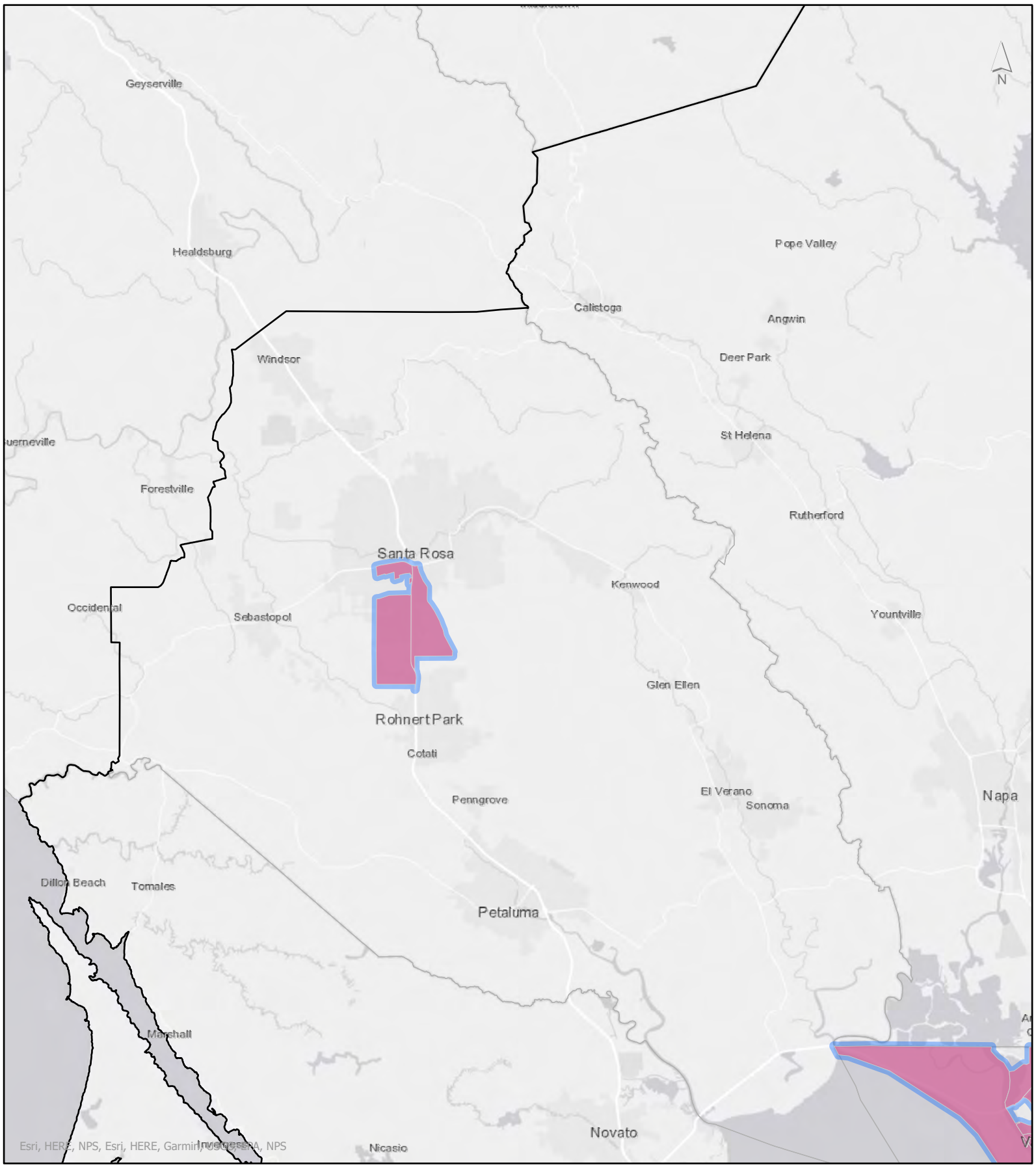
CalEnviroScreen Version 4.0 Results - North Bay

Top 30% CalEnviroScreen Scores

Percentile

< 70

70 - 100



Bay Area Air Quality Management District

BAAQMD Jurisdiction

1000 ft. Buffer

0 1.5 3 6 Miles

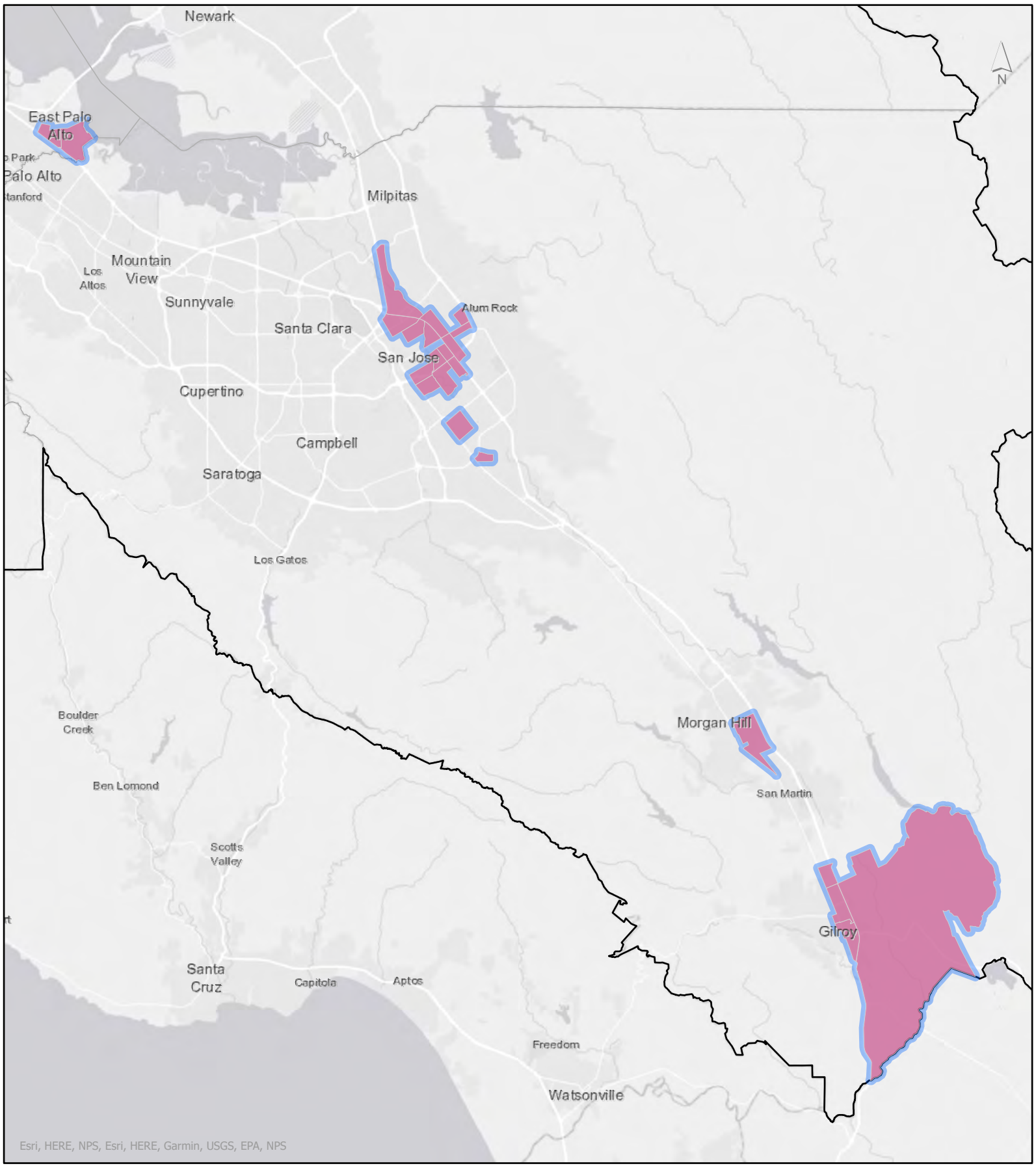
CalEnviroScreen Version 4.0 Results - South Bay

Top 30% CalEnviroScreen Scores

Percentile

< 70

70 - 100



Bay Area Air Quality Management District

BAAQMD Jurisdiction

1000 ft. Buffer

0 1.5 3 6 Miles

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

APPENDIX E

CEQA Initial Study and Negative Declaration

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

California Environmental Quality Act

Initial Study and Draft Negative Declaration

Proposed Amendments to Regulation 2, Rule 1 Permits: General Requirements

Proposed Amendments to Regulation 2, Rule 5 Permits: New Source Review of Toxic Air Contaminants

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October 2021

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CHAPTER 1
Introduction

The Bay Area Air Quality Management District (Air District, BAAQMD, or District) is proposing amendments to its permitting regulation (Regulation 2: Permits) to make the rules within it more health protective, with an emphasis on improving air quality at the local level. Modifications are proposed to Regulation 2, Rule 1: General Requirements (Rule 2-1) and Regulation 2, Rule 5: New Source Review of toxic Air Contaminants (Rule 2-5). Under the California Environmental Quality Act (CEQA), the Air District is required to consider the potential for any significant adverse environmental impacts to result from the proposed amendments to Rule 2-1 and 2-5. Air District staff have, therefore, directed the preparation of this Initial Study pursuant to CEQA.

As explained in detail in Chapter 3, the Initial Study has found that the proposed amendments will not have any significant adverse environmental impacts. Air District staff is, therefore, proposing that the District's Board of Directors adopt a Negative Declaration under CEQA pursuant to Section 15074 of the CEQA Guidelines.

The Air District is publishing this Initial Study and draft Negative Declaration concurrently with the proposed amendments and detailed Final Staff Report explaining in more detail what the proposed amendments will entail. The public should review this Initial Study and proposed Negative Declaration in conjunction with those other documents in order to obtain a full understanding of the proposed amendments and their potential for adverse environmental impacts.

1.1 PURPOSE OF THIS DOCUMENT

The Initial Study is a preliminary assessment of the potential environmental impacts of the proposed project. The purpose of the Initial Study is to determine whether a Negative Declaration or Environmental Impact Report (EIR) must be prepared (CEQA Guidelines §15365). If the Initial Study determines that there is substantial evidence that any aspect of the project either individually or cumulatively, may cause a significant effect on the environment, then an EIR must be prepared. If the Initial Study determines that there is no substantial evidence that the project or any of its aspects may cause a significant effect on the environment, then a Negative Declaration should be prepared (CEQA Guidelines §15063(b)). As explained herein, this Initial Study has reached the second conclusion: that there is no substantial evidence that the proposed amendments to Rules 2-1 and 2-5 will have any significant adverse effect on the environment. Accordingly, the Air District has prepared a draft Negative Declaration. The Initial Study provides the documentation for the finding in the draft Negative Declaration that the project will not have a significant impact on the environment (CEQA Guidelines§15063(c)(5)).

The Negative Declaration is a written statement by the lead agency describing why the proposed project will not have a significant effect on the environment and, therefore, does not require the preparation of an EIR (CEQA Guidelines §15371). A Negative Declaration is prepared by Air District staff based on the analysis in the Initial Study, and then is proposed

for adoption by the District's Board of Directors. Air District staff provides notice to the public of the draft Negative Declaration and an opportunity to comment on it, and then the Board of Directors considers the Negative Declaration at a public hearing. The Board of Directors considers the Negative Declaration along with any public comments received, and then adopts (or certifies) the Negative Declaration if it finds, using its independent judgment and analysis, that based on the whole record – including the project description, Initial Study, any mitigation measures, and any public comments – that there is no substantial evidence that the project will have a significant effect on the environment (CEQA Guidelines §15074(b)).

1.2 SCOPE OF THIS DOCUMENT

This document evaluates the potential impacts of the proposed amendments on the following resource areas:

- aesthetics,
- agriculture and forestry resources,
- air quality,
- biological resources,
- cultural resources,
- energy,
- geology / soils,
- greenhouse gas emissions,
- hazards & hazardous materials,
- hydrology and water quality,
- land use and planning,
- mineral resources,
- noise,
- population and housing,
- public services,
- recreation,
- transportation,
- tribal cultural resources,
- utilities / service systems, and
- wildfires.

1.3 IMPACT TERMINOLOGY

The following terminology is used in this Initial Study/Negative Declaration to describe the levels of significance of impacts that would result from the proposed rule amendments:

- An impact is considered *beneficial* when the analysis concludes that the project would have a positive effect on a particular resource.

- A conclusion of *no impact* is appropriate when the analysis concludes that there would be no impact on a particular resource from the proposed project.

- An impact is considered *less than significant* if the analysis concludes that an impact on a particular resource topic would not be significant (i.e., would not exceed certain criteria or guidelines established by the District). Impacts are frequently considered less than significant when the changes are minor relative to the size of the available resource base or would not change an existing resource.

- An impact is considered *less than significant with mitigation incorporated* if the analysis concludes that an impact on a particular resource topic would be significant (i.e., would exceed certain criteria or guidelines established by the District), but would be reduced to a less than significant level through the implementation of mitigation measures.

1.4 ORGANIZATION OF THIS DOCUMENT

The content and format of this document, described below, are designed to meet the requirements of CEQA.

- Chapter 1, "Introduction," identifies the purpose, scope, and terminology of the document.

- Chapter 2, "Description of the Proposed Rule Amendments," provides background information on Rules involving Particulate Matter and attainment status history in the Bay Area, describes the proposed rule modifications and new rules, and describes the area and facilities that would be affected by the rule.

- Chapter 3, "Environmental Checklist," presents the checklist responses for each resource topic. This chapter includes a brief setting description for each resource area and identifies the impact of the proposed rule amendments on the resources topics listed in the checklist.

- Chapter 4, "References Cited," identifies all printed references and personal communications cited in this report.

- Appendix A, Emission Calculations, includes the detailed emission calculations for construction activities that may be required by the proposed new rule and rule amendments.

M:\Dbs\3230 BAAQMD Reg 2-1 and 2-5\3230 Chapter 1

CHAPTER 2

Description of the Proposed Rule Amendments

2.1 INTRODUCTION

The Air District is proposing amendments to Regulation 2 to make the rules within it more health protective, with a particular emphasis on improving localized air quality in currently overburdened communities. The Air District is proposing to amend Rule 2-5: New Source Review of Toxic Air Contaminants to be more stringent in overburdened communities and to update health risk assumptions used to calculate toxic air contaminant (TAC) impacts. In addition, the Air District is proposing amendments to Rule 2-1: General Requirements that would require additional public notification and increase the public comment period prior to issuance of certain air permits.

2.2 OBJECTIVES

- Reduce air quality impacts in AB617 communities and other areas overburdened by air pollution, poverty, economic injustice, and social injustice.
- Make the Air District's air toxics permitting rules more stringent, both Bay Area wide and in overburdened communities;
- Increase transparency of Air District permitting by providing additional public notice;
- Reduce exposure to TACs from new and modified sources of air pollution in communities that are overburdened by pollution or face health vulnerabilities at the community level that could contribute to residents being more susceptible to the detrimental health effects for air pollution; and
- Update the health risk screening methodologies.

2.3 BACKGROUND

2.3.1 RULE 2-1: GENERAL REQUIREMENTS

The Air District publishes information regarding permit applications on its website and provides public notifications and opportunities for public comment on several permit application types, one of which involves permit applications that will result in an increase in toxic air contaminants near schools. Rule 2-1: General Requirements states that the Air District must notify parents and guardians of children enrolled in the school or schools near which the source or sources will be located, as well as to each address near the source. The Air Pollution Control Officer is required to review and consider all comments received during the application period. The expense of the public notice process is borne by the permit applicant, in the form of a fee that is paid to the Air District to cover costs.

2.3.2 RULE 2-5: AIR TOXICS NSR PROGRAM

The Air Toxics NSR Program was established in 1987 at the direction of the Air District's Board of Directors and was initially implemented based on policies and procedures established by the Air District's Air Pollution Control Officer (APCO). In 2005, the Air District updated the Air Toxics NSR Program and codified the Air Toxics NSR policies and procedures in Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants, in the Manual of Procedures, Volume II, Part 4: New and Modified Sources of Toxic Air Contaminants, and in the BAAQMD Health Risk Assessment (HRA) Guidelines. When evaluating heath impacts from new and modified sources, the Air District follows the BAAQMD Health Risk Assessment (HRA) Guidelines, which generally conform to State Air Toxics Hot Spots Health Risk Assessment (HRA) guidelines. The California Office of Environmental Health Hazard Assessment (OEHHA) periodically revises the State HRA guidelines and has made some changes since the BAAQMD HRA Guidelines were updated in 2015. The last time Rule 2-5 was amended, at the end of 2016, the Air District updated the rule to include the most current OEHHA risk procedures for determining health risk from new and modified sources of toxic air contaminants. The updates to Rule 2-5 resulted in a 40% increase in estimated cancer risk for the same emission levels of most toxic air contaminants. For a dozen toxic air contaminants, the estimated cancer risk increased by up to a factor of five, based on the revised health risk assessment calculation methodology.

The goal of the Air Toxics NSR Program is to evaluate and mitigate potential increases in public health risks resulting from new and modified sources of toxic air contaminants based on preconstruction permit review. The program is also intended to reduce existing health risks by requiring updated control requirements when older, more highly polluting, sources are modified or replaced. Rule 2-5 contains health risk-based thresholds at which a new or modified source must employ Best Available Control Technology for Toxics (TBACT) and health risk limits that each project cannot exceed. The rule also delineates the procedures to be used for calculating toxic air contaminant emission increases from sources and projects and for evaluating the health impacts that result from these emission increases.

The stringency of the program is affected by both the methodology and the action levels. Stringency can be increased either by changes in methodology that result in a higher calculated risk or by reductions in the risk action levels. The proposed changes to Rule 2-5 include increased stringency through a reduction in risk action level in communities overburdened by higher levels of pollution or population vulnerability, as well as a change in the methodology for assessing health risk from gas stations, which will result in a higher calculated risk for projects involving gas stations.

2.4 BACKGROUND AND SUMMARY OF PROPOSED RULE AMENDMENTS

Due to a variety of factors, air quality in the Bay Area often varies between different locations. Air District staff has focused on reducing disparities in access to clean air for decades and developed programs that are specifically targeted to achieve reductions in air pollution in the Bay Area's communities that are overburdened by poor air quality, which can be compounded by exposure to other forms of environmental pollution and health vulnerabilities. Efforts by the Air District in conjunction with actions undertaken by other regulatory agencies and industries contributed to an overall decline of the average background cancer risk in the Bay Area. Air District modeling and monitoring data show that cancer-risk weighted air toxics trends are declining regionally, and that the most significant driver of air toxics emissions in the Bay Area come from mobile source emissions. Since 1990, the estimated lifetime cancer risk for Bay Area residents over a 70-year lifespan from all toxic air contaminant emissions combined declined from 4,100 cases to around 600 cases per million people today. Diesel particulate matter still accounts for the majority of toxic air contaminant emissions in the Bay Area and the majority of toxic emissions still result from mobile source emissions.[1]

Despite the positive overall trend, information obtained through the Air District's implementation of Assembly Bill 617 (AB 617) demonstrates the persistence of differences in exposure and vulnerability to air pollution. Even though carcinogenic toxic air contaminant emissions are declining, they still contribute to cancer risk in the region, and in some communities, cancer risk remains higher than other areas due to the existence of nearby roadways or stationary sources of air pollution over which the Air District holds permitting authority.

The purpose of the proposed rule amendments is to reduce exposure to toxic air contaminants from new and modified sources of air pollution in communities that are overburdened by pollution or face health vulnerabilities at the community level that could contribute to residents being more susceptible to the detrimental health effects from air pollution. The Air District is proposing to use data from CalEnviroScreen 4.0, which quantifies indicators of pollution burden and population characteristics to score communities based on cumulative impacts, to identify parts of the Bay Area where more stringent cancer risk limits and enhanced notifications could be justified on the basis of a cumulative impacts analysis. Additionally, the Air District intends to update the toxic new source review rule to ensure it reflects the latest advances in the science of air pollution health assessments. Further, Amendments to Rule 2-1 are being proposed to require enhanced notification in high-scoring CalEnviroScreen 4.0 communities.

[1]Workshop Report: Draft Amendments to Regulation 2: Permits, Rule 1: General Requirements and Draft Amendments to Regulation 2: Permits, Rule 5: New Source Review of Toxic Air Contaminants, July 2021.

2.4.1 CALENVIROSCREEN

CalEnviroScreen is the commonly used name for the California Communities Environmental Health Screening Tool, which is a mapping tool developed and maintained by the California Office of Environmental Health Hazard Assessment (OEHHA). CalEnviroScreen version 4.0 multiplies pollution burden by population characteristics within a census tract to determine an overall score for the census tract. CalEnviroScreen bases scores upon indicators, which fall into four different components—two that consider pollution burden, and two that consider population characteristics.

- Pollution burden indicator categories are exposures (e.g., exposure to ozone, $PM_{2.5}$, diesel PM emissions, drinking water contaminants, children's lead risk, pesticide use, toxics from stationary sources, and traffic impacts) and environmental effects (cleanup sites, groundwater threats, hazardous waste, impaired water bodies, and solid waste sites/facilities).
- Population characteristics indicator categories are sensitive populations and socioeconomic factors. Sensitive populations include asthma associated with emergency department visits, cardiovascular disease (emergency department visits for heart attacks), and low birth-weight infants. Socioeconomic factors include educational attainment, housing-burdened low-income households, linguistic isolation, poverty, and unemployment.

Air District staff evaluated CalEnviroScreen 4.0 scores in the Bay Area to determine the census tracts and probable locations of areas in which permitting requirements could be made more stringent in response to cumulative impacts. Staff examined census tracts with scores at or above the 75th percentile as well as tracts within the range of 70th through the 75th percentile.

The rationale for selecting scores at or above the 75th percentile comes from CalEPA's designation that "disadvantaged communities" as defined in Senate Bill 535 (De León, Chapter 830, Statutes of 2012) consisted of the highest scoring 25 percent of census tracts in CalEnviroScreen. Staff additionally included tracts in the 70th through the 75th percentiles for two reasons: first, that including these census tracts could be more inclusive of communities that face burdensome socioeconomic vulnerability; and second, that including these census tracts could make up for the fact that several census tracts that were previously identified as disadvantaged under CalEnviroScreen 3.0 have dropped off the top 25 percent list but continue to face many of the same pollution burdens or health vulnerabilities as before.

Using the categorization described above, staff found that, out of 1,552 total census tracts within the Air District's jurisdiction, 159 census tracts, or about ten percent of the total, would be considered as disadvantaged or overburdened based on CalEnviroScreen 4.0 scoring (see Table 2-1).

TABLE 2-1

≥70th Percentile CalEnviroScreen 4.0 Census Tracts by County

County	Total
Alameda	47
Contra Costa	44
Marin	1
Napa	0
San Francisco	17
San Mateo	10
Santa Clara	20
Solano	17
Sonoma	3
TOTAL	159

2.4.2 HEALTH RISK ASSESSMENT PROCEDURES

Gas stations account for more than one in five Air District-permitted facilities. Bay Area-wide, gas stations and other gasoline dispensing facilities (collectively referred to in this document as gas stations) make up anywhere between five to 15 percent of permitting health risk screening analyses. Gas station emissions include toxic air contaminants such as benzene that can pose health risks to nearby residents and workers. Under Rule 2-5, new gas stations and existing gas stations proposing modifications are required to apply for a permit from the Air District. During the review and evaluation of the permit application, the Air District performs a health risk assessment, which models cancer and non-cancer health risks based on various factors including the proposed project location, the proximity of nearby residents and workers, weather patterns, terrain, and emissions data.

Proposed revisions to the Air District's Health Risk Assessment Guidelines incorporate updates to the health risk assessment procedures for gasoline dispensing facilities, to be consistent with other permitted sources/facilities. In 2015, OEHHA approved and adopted updated Health Risk Assessment Guidelines (2015 Guidelines) that are used in the Air District's Health Risk Assessment Guidelines. Under this concept, the Air District would update and incorporate the 2015 Guidelines to its evaluation of new and modified gas dispensing facility projects. The 2015 Guidelines adjusted multiple additional factors used to prepare health risk assessments, including breathing rate assumptions, exposure frequency and exposure duration, that in combination will result in higher calculated risks. Fully incorporating all the 2015 OEHHA health risk calculation procedures will result in cancer risk estimates for residents that are about 40 percent higher than the current procedures and will add a new limit on acute impacts. While these changes would not prevent gas stations from renewing permits, they could result in some existing gas stations being unable to increase throughput, or they could reduce the amount of gasoline throughput that might otherwise be allowed for a new station. The inclusion of acute

health impacts in gas station risk assessment procedures could limit the number of dispensers or the maximum hourly pumping rate for new stations.

2.4.3 PUBLIC NOTIFICATION PROCEDURES

The Air District publishes information regarding permit applications on its website and provides public notifications and opportunities for public comment on several permit application types, one of which involves permits applications that will result in an increase in toxic air contaminants near schools. Rule 2-1: General Requirements states that the Air District must notify parents and guardians of children enrolled in the school or schools near which the source or sources will be located, as well as to each address near the source. Since 2009, the Air District has carried out an annual average of 72 public notifications for projects triggering the schools notification requirement.

2.5 PROPOSED RULE AMENDMENTS TO RULE 2-1: GENERAL REQUIREMENTS

Proposed changes to Rule 2-1 - General Requirements work in tandem with proposed changes to Rule 2-5. Rule 2-1 provides the framework for the Air District's permitting regulation, while other rules within the regulation (such as Rule 2-5) focus on specific elements of the permitting process. In Rule 2-1, a new provision that defines an Overburdened Community for the purpose of the Permitting Regulation is the basis for more stringent limits in Rule 2-5.

Modifications to Rule 2-1 also include new notification requirements for projects that are planned to be located in communities that are overburdened by environmental or health burdens. Although these changes alone will not increase the stringency of emissions limitations, they are intended to serve the purpose of providing greater transparency to the public.

2.5.1 PURPOSE

The purpose of the proposed amendments to Rule 2-1 is to provide more information to the public on active permit applications in communities that face environmental and health burdens. By making information more accessible to the public through physical mailing of information to residents and posting notifications on the Air District website, the Air District would provide more awareness of permit applications and the proposed projects. In addition, this change would include a written public comment period, which could enable members of the public to provide additional information for the Air District to consider in evaluating permit applications.

2.5.2 APPLICABILITY

Proposed amendments to Rule 2-1 that pertain to the new notification requirement for projects that require health risk assessments and are located in areas that have high CalEnviroScreen scores would be limited to a relatively small number of applications per year compared to the overall volume of applications that the Air District receives. However, to account for the proposed changes to Rule 2-5, the changes to the notification procedures, and increasing constraints on staff due to implementation of multiple new programs over the recent past, staff proposes increasing the amount of time by which the APCO must notify the permit applicant of an approval, approval with conditions, or denial of the application. This change would apply to all permit applications.

2.5.3 DEFINITIONS

The proposed rule amendments would add a definition for Overburdened Community, using CalEnviroScreen version 4.0 scoring percentiles and includes a 1,000-foot buffer zone around any census tract identified by CalEnviroScreen criteria to ensure that projects that may have an influence on Overburdened Communities would also be included. The permit applications for projects that would be located within the high-scoring census tracts or in the 1,000-foot buffer from the census tract boundary would be required to comply with the more stringent cancer risk requirement in proposed Section 2-5-302.

2.5.4 ADMINISTRATIVE REQUIREMENTS

There are several proposed changes to the administrative requirements in Rule 2-1. The proposed changes expand the public notice requirement to require notification of nearby addresses if a project will require a health risk assessment because of toxic air contaminant (TAC) emissions and the project will be located within an Overburdened Community. The proposed changes would also extend the Air District's permit application action times. The completeness review period will be increased from 15 working days (21 calendar days) to 30 days. The final action period (from date of completeness to the date of the Air Pollution Control Officer's decision) currently 35 working days (49 calendar days) for all permit applications, except those subject to California Environmental Quality Act (CEQA) review, major facility review, or public notice requirements. Staff is proposing to replace this time period with two possible final action periods: 90 days, which will apply to most applications, and 180 days for more complex applications, unless the application is subject to CEQA review. Applications subject to CEQA review will continue to require approval of CEQA certification documents before the Air District may make a decision on the application. Staff is also proposing to increase the time period allowed for responding to public comments on applications from 30 days to 60 days.

2.5.5 OTHER RULE SECTIONS

The proposed rule amendments do not include any changes to the Standards, Administrative Requirements, or Manual of Procedures sections of Rule 2-1.

2.6 PROPOSED RULE AMENDMENTS TO RULE 2-5: TOXIC NEW SOURCE REVIEW

The purpose of Rule 2-5: Toxic New Source Review is to provide for the review of new and modified source of toxic air contaminant emissions to evaluate potential public exposure and health risk, to mitigate potentially significant health risks resulting from these exposures, and to provide net health risk benefits by improving the level of control when existing sources are modified or replaced. Rule 2-5 currently operates on a regional scale; its requirements are the same throughout the Bay Area, regardless of background air quality (carcinogenic or noncarcinogenic forms of air pollution).

The proposed amendments would transform Rule 2-5 into a rule that regulates on a more local scale. Instead of having one standard that applies throughout the Bay Area, Rule 2-5 would have two standards for cancer risk limits: one that applies in areas that do not score highly according to CalEnviroScreen, and another, more stringent standard, for areas that score highly on CalEnviroScreen and are, therefore, determined to be "Overburdened Communities" for health risk management.

2.6.1 PURPOSE

The amendments are intended to reduce exposure to carcinogenic toxic air contaminant emissions by increasing the level of stringency for new or modified equipment subject to air toxics new source review. The proposed amendments also include updates to the Air District's Health Risk Assessment Guidelines, which describe the procedures for assessing health risk from sources that emit air toxics. Finally, the proposed amendments include updates to the list of toxic air contaminants that the Air District utilizes to determine whether a health risk assessment is necessary.

2.6.2 APPLICABILITY

The proposed amendments to Rule 2-5 would apply to sources that are subject to the Air Toxics New Source Review requirements, although not every change will apply to every project. While some projects located in areas that receive higher scores in CalEnviroScreen will be subject to a more stringent cancer risk standard, some projects will not be subject to a more stringent cancer risk standard than the existing limit of ten in one million. Updates to the Air District's Health Risk Assessment Guidelines that specifically pertain to gasoline dispensing facilities will only apply to those facilities. Updates to the Toxic Air Contaminant Trigger Level table (Table 2-5-1) will apply to sources emitting those chemicals that have been added or updated.

2.6.3 EXEMPTIONS

Section 2-5-113 – Exemption, Small Internal Combustion Engines and Gas Turbines: This section exempts small engines (50 brake horsepower (bhp) capacity or less) from health risk assessment requirements. To clarify rule language, this exemption from a health risk assessment requirement to validate a permit exemption is being moved to Regulation 2-1-114 and Section 2-5-113 will be deleted.

2.6.4 DEFINITIONS

Section 2-5-216 – Project: The proposed amendments modify the definition of Project to include those new or modified sources of toxic air contaminants at a facility that have been permitted within the five-year period immediately preceding the date a complete application is received and any project at a facility where Authority to Construct has been issued and has not expired. This revision is intended to ensure that all potentially related projects are included in the health risk assessment to further prevent circumvention of this rule's requirements.

Section 2-5-227 – Priority Community: Section 2-5-227 is proposed to be deleted, because the definition is no longer necessary. The definition for Overburdened Community is located in Rule 2-1, Section 2-1-243.

Section 2-5-230 – Essential Public Service: The proposed rule amendments include a new definition for essential public service. Essential public services would not be subject to the more stringent cancer risk limit in areas that score highly on CalEnviroScreen; they are instead subject to the existing limit of 10 in one million. In reviewing recent permit applications since the last time Rule 2-5 was amended, it is likely that this limited exemption would not be used often.

2.6.5 STANDARDS

Section 2-5-302 – Project Risk Requirement: The proposed amendments to Rule 2-5 modify the text of the project risk requirement to clarify that there are two project risk requirement standards. These two standards apply in different scenarios: one applies in areas that score high on CalEnviroScreen, and one applies in areas outside of high-scoring CalEnviroScreen locations. Proposed amendments to Section 2-5-302 would clarify that in Overburdened Communities, as defined in proposed Section 2-1-243, the cancer risk limit is six in one million. In areas that are not located within Overburdened Communities, the cancer risk limit would remain unchanged from the current ten in one million limit in the current version of Section 2-5-302.

Section 2-5-303 – Net Project Risk Requirement: Section 2-5-303 was added to Rule 2-5 in 2016 to allow consideration of contemporaneous risk reductions for a small number of projects that involve pre-1987 modified sources. To be subject to Section 2-5-303, projects need to meet the applicability and procedural criteria in Section 2-5-406. To date, no permit applicants have requested to comply with Section 2-5-303.

As with Section 2-5-302 above, the proposed amendments to Rule 2-5 modify the text of the net project risk requirement to clarify that there are two net project risk requirement standards.

2.6.6 ADMINISTRATIVE REQUIREMENTS

Section 2-5-404 – Designation of Priority Community: Section 2-5-404 is proposed to be deleted. The procedures for identifying Overburdened Communities are proposed to be moved to Regulation 2-1-243 because Rule 2-1 will contain the public notification procedures for applications located in Overburdened Communities and is a more general requirement that applies to all permit activities.

Section 2-5-405 – Cumulative Impact Summary for Priority Communities: Section 2-5-405 is proposed to be deleted, because these procedures are no longer necessary. Cumulative impacts summaries in Overburdened Communities are being addressed through other programs such as the Community Health Protection Program.

2.6.7 MANUAL OF PROCEDURES

Section 2-5-602 – Baseline Emission Calculation Procedures: The proposed changes to Section 602.2.2 clarify the procedures for calculating baseline throughput when a source's throughput rate is limited by a bottleneck at a related source. These proposed changes are intended to ensure consistency with the Section 2-5-214.3 definition of a modified source of toxic air contaminants for a source that does not have conditions limiting daily or annual toxic emissions.

Section 2-5-603 – Health Risk Assessment Procedures: There are no proposed changes to the text of Section 2-5-603: Health Risk Assessment Procedures, however, staff is

recommending updates to the Air District's Health Risk Assessment Guidelines, which are included in Appendix C of the Guidelines. Updates to the Air District's Health Risk Assessment Guidelines would revise the health risk assessment procedure for gas stations so that it is consistent with the health risk assessment procedures for all other source types subject to air toxics New Source Review.

Section 2-5-604 – Calculation Procedures for Toxicity Weighted Emissions: There are no proposed changes to the text of Section 2-5-604: Calculation Procedures for Toxicity Weighted Emissions, however, updates to Table 2-5-1 are proposed.

Table 2-5-1 Toxic Air Contaminant Trigger Levels: This table will be updated by adding any new toxic air contaminants and any new health effects values that have been identified by OEHHA since this table was last revised. New toxic air contaminants include carbonyl sulfide, cobalt, 1,6-hexamethylene diisocyanate, and tertiary butyl acetate. Chronic inhalation reference exposure levels (RELs) or the associated chronic trigger level will be updated for: arsine, ethylene glycol butyl ether, mercuric chloride, methylene diphenyl isocyanate, selenium sulfide, toluene, and toluene diisocyanates.

In addition, staff is proposing to revise the procedures by which acute trigger levels are determined. Currently, the acute trigger level is determined based on an acute hazard index of 1.0. The proposed acute trigger levels will instead be based on an acute hazard index of 0.2, which is consistent with the significant source thresholds in Air District Rule 11-18. This change will impact all compounds in Table 2-5-1 that have an acute reference exposure level.

No changes are proposed to the monitoring and records section of Rule 2-5.

2.7 POTENTIAL ENVIRONMENTAL IMPACTS OF AIR TOXIC NSR PROGRAM CHANGES

The proposed changes to Rules 2-1 and 2-5 will increase the stringency of the Air District's Air Toxics New Source Review Program and will increase transparency regarding the permitting process. The following discusses how the proposed changes might impact applications in the future. The sections below discuss staff's analysis using permitting information from the recent past.

The Air District is proposing to reduce the cancer risk limit to six in one million in high-scoring CalEnviroScreen census tracts and surrounding buffer areas. Based on a review of projects that prepared health risk assessments between 2017 and 2021, the Air District determined that about one-third of the health risk assessments prepared over this time period exceed the cancer risk limit of six in one million. While this lookback analysis is not a prediction of the exact types of projects that will be affected in the future, the analysis provides information on how past projects might have been affected by the proposed amendments. The lookback analysis examined projects in Bay Area census tracts that scored at or above the 70th percentile in Draft CalEnviroScreen 4.0. Final CalEnviroScreen 4.0 was subsequently released by OEHHA in October 2021. Air District

staff reviewed the updates and changes included in the Final CalEnviroScreen 4.0 version, and determined that these updates do not result in substantial changes to the lookback analysis, nor do they result in additional affected projects or project types. There were about 40 total applications with a cancer risk between six in one million and ten in one million during this period which translates to about 10 projects per year that may need to modify operations, install additional abatement equipment, or consider other compliance options to comply with the more stringent risk limit in the high-scoring CalEnviroScreen 4.0 Communities (see Table 2-2).

TABLE 2-2

Health Risk Assessment for Projects with Cancer Risk of 6-10 in One Million in High-Scoring CalEnviroScreen 4.0 Communities[1]

Project Type	Number of Applications	Approximate Percent of Total (%)
Metal Casting Facility	1	<3
Conveyors/Stockpiles at Waste Facility	1	<3
Crematory Project	2	5
Prime Diesel Engines	2	5
Standby Diesel Engines	19	49
Gas Station	11	28
Soil Vapor Extraction	2	5
Concrete Manufacturing	1	<3
TOTAL:	39	

(1) February 2017- February 2021

There may also be other types of facilities that would be subject to the more stringent cancer risk limit in areas that have high scores in CalEnviroScreen; however, no other facilities have been permitted in the recent past in these areas. Therefore, the details on the other types of facilities that may be affected by the modifications to the rules are currently speculative.

More details on the types of control measures or changes that may be implemented as a result of revisions to Rules 2-1 and 2-5 are further discussed below.

2.7.1 DIESEL ENGINES

Diesel engines make up the largest share of applications that have cancer risk. Diesel engines are used for many purposes, including providing prime and backup power for facilities such as data centers, fire stations, hospitals, hotels, residential housing operations, and airport operations, to name just a few.

Historical information on health risk assessments prepared for emergency engine projects showed that of the 19 applications in Overburdened Communities with a cancer risk exceeding 6 in one million between February 2017 and February 2021, the average

cancer risk value was 7.9 in one million, with a median value of 7.6 in one million. 19 projects over four years means that about 5 projects per year would have needed to be revised to meet the more stringent cancer risk limit in Overburdened Communities had the proposed risk limit been in place at that time.

Cancer risk from diesel engine operations can be reduced by limiting throughput or operating hours or installing diesel particulate filters to catch particles before they enter the ambient air. Exposure can be lessened by increasing stack height as well.

Further, based on the Air District Best Available Control Technology (BACT) and TBACT Guidelines for emergency backup engines, diesel engines greater than or equal to one thousand brake horsepower (bhp) are required to meet U.S. Environmental Protection Agency (EPA) Tier 4 emissions standards, which is the EPA's most stringent emission standard. There are several ways to comply with the Tier 4 emission standard, including purchase of an EPA-certified Tier 4 engine, purchase of a Tier 4-compliant engine that is packaged by the engine manufacturer with abatement equipment, or retrofit of a Tier 2 engine with aftermarket abatement equipment from a third-party vendor.

2.7.2 GAS STATIONS

Incorporation of the 2015 OEHHA health risk calculation procedures for gas stations as recommended in the proposed rule changes would show that cancer risk increases by about 40 percent for projects where the maximally exposed individual is a residential receptor and will add a new limit on acute impacts. In addition, gas stations that are located in areas that score highly on CalEnviroScreen will also need to comply with more stringent cancer risk limits. Gas station permit applications made up about 30 percent of overall applications in high scoring areas, or about three projects per year in these areas. Outside of these areas, an additional 6 gas station projects per year would have exceeded the 10 in one million risk limit on a regional basis.

Controls available to address toxic air contaminant emissions from gas stations include limiting the throughput rate or operating time, or in the case of new proposed gas stations, possibly revising source locations so that emissions sources are located farther from where people are likely to be exposed.

2.7.3 DIESEL PARTICULATE FILTERS (DPF)

DPFs allow exhaust gases to pass through the filter medium, but trap diesel PM. Depending on engine baseline emissions, fuel sulfur content, and emission test method or duty cycle, DPF's can achieve a PM emission reduction of greater than 85 percent. In addition, DPFs can reduce hydrocarbon emissions by 95 percent and CO emissions by 90 percent. Limited test data indicate that DPFs can also reduce NOx emissions by six to ten percent. Most DPFs require periodic regeneration, most commonly achieved by burning off accumulated diesel PM. There are both active DPFs and passive DPFs. Active DPFs use heat generated by means other than exhaust gases (e.g., electricity, fuel burners, microwaves, and additional fuel injection to increase exhaust gas temperatures)

to assist in the regeneration process. Passive DPFs, which do not require an external heat source to regenerate, incorporate a catalytic material, typically a platinum group metal, to assist in oxidizing trapped diesel PM. Although there is a slight increase in directly emitted NO_2 during the regeneration of passive DPFs, overall there is ultimately a net reduction in NO_2 emissions.

2.7.4 REDUCED THROUGHPUT OR OPERATING TIME

Reducing the amount of materials used in a given process is a straightforward way to reduce emissions. Likewise, reducing the overall time the process operates over a given period will lead to similar emission reductions. The Air District believes that gas stations are likely to comply with the revised rules by limiting the throughput rate or operating time. In the case of proposed new gas stations, the applicant may also revise the source locations so that emission sources are located farther from where people are likely to be exposed. No new air pollution control equipment would be used to meet emission reductions via these methods, thus adverse environmental impacts would not be expected.

2.7.5 RELOCATING A SOURCE OR STACK

Relocating a source or stack farther away from the highest impacted receptor is a common way to reduce health risk. The Air District evaluates health risks at the new source/stack location to ensure that risks to all receptors meet acceptable levels. This type of risk reduction measure would not involve any new equipment or processes and would have no adverse environmental impacts.

2.7.6 STACK MODIFICATIONS

Stack modifications are another common and generally inexpensive risk reduction measure that are often used to reduce risk from back-up generators and soil remediation operations. Changing the direction of a stack (from horizontal to vertical, for example) and increasing the height of a stack to just above the height of nearby buildings will increase the dispersion of the emissions from that stack and will typically result in lower ground level air concentrations at nearby receptors and lower health risks. The Air District evaluates health risks from a project using the modified stack parameters to ensure that risks to all receptors meet acceptable levels. Stack modifications usually involve extensions of about 2-20 feet and are not expected to have any significant impact on the aesthetics of a facility. No other adverse environmental impacts are expected for stack modifications.

2.7.7 ALTERNATIVE TECHNOLOGIES

When health impacts of a proposed project are significant, some applicants may decide to use alternative technologies. One common example of an alternative technology is the use of electrically powered equipment instead of diesel-fired IC engines. These engines are usually installed to provide power during electrical outages. This type of alternative

technology would obviously increase electricity usage at the site, but this impact is not expected to be significant given the current power infrastructure in the Bay Area.

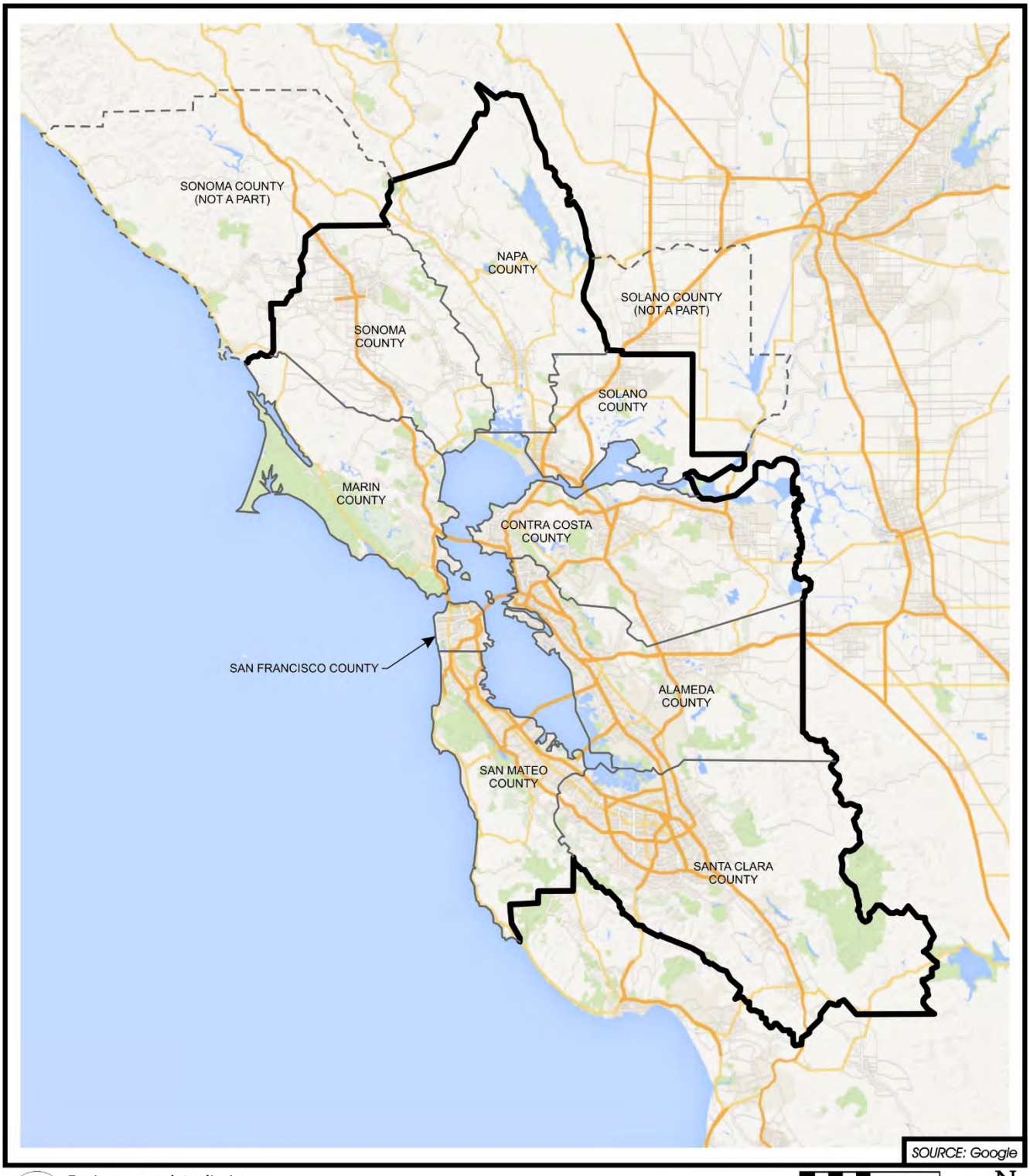
2.7.8 CONCLUSIONS

Based on the above, revisions to Rules 2-1 and 2-5 are expected to:

- Affect an additional five diesel engine applications per year that would require health risk assessments that may require emission reduction measures such as limiting the operating time; increasing the stack height; requiring the use of Tier 4 engines; or requiring the use of diesel particulate filters (DPFs).
- Affect an additional 9 gas station applications per year that would require health risk assessment and potential emission reduction measures such as limiting the throughput/operating hours of the station; requiring the relocation of sources at the site; or requiring stack modifications.

2.8 AFFECTED AREA

While the proposed amendments to Regulations 2-1 and 2-5 are being implemented to reduce toxic air contaminant emissions, they are also expected to reduce criteria pollutant emissions (e.g., particulate matter) within the Air District's jurisdiction. The equipment affected by the proposed project is located within the jurisdiction of the Bay Area Air Quality Management District (see Figure 2-1). The BAAQMD jurisdiction includes all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma counties (approximately 5,600 square miles). While the rule modifications would affect the entire jurisdiction of the Air District, the goal is to reduce emissions and exposures in overburdened communities, based on CalEnviroScreen 4.0 scoring. The San Francisco Bay Area is characterized by a large, shallow basin surrounded by coastal mountain ranges tapering into sheltered inland valleys. The combined climatic and topographic factors result in increased potential for the accumulation of air pollutants in the inland valleys and reduced potential for buildup of air pollutants along the coast. The Basin is bounded by the Pacific Ocean to the west and includes complex terrain consisting of coastal mountain ranges, inland valleys, and bays.



Project No. 3230 Figure 2-1

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CHAPTER 3

EVALUATION OF ENVIRONMENTAL IMPACTS

Introduction

General Information Form

Summary Checklist:
Environmental Factors Potentially Affected

Determination

Detailed Checklist and Discussion:
Evaluation of Environmental Impacts

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CHAPTER 3
Evaluation of Environmental Impacts

INTRODUCTION

The Initial Study is required to identify and evaluate the proposed project's environmental effects. The California Natural Resources Agency has published a standard checklist for lead agencies to use in doing so, in Appendix G of the CEQA Guidelines. The Appendix G environmental checklist provides a standard evaluation tool to identify a project's adverse environmental impacts. The Guidelines specifically authorize and encourage the use of Appendix G to satisfy the legal requirements for sufficiency of the Initial Study. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed project.

GENERAL INFORMATION

Project Title:	Negative Declaration for Proposed Amendments to Regulation 2, Rule 1: General Requirements and Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants
Lead Agency Name:	Bay Area Air Quality Management District 375 Beale Street, Suite 600 San Francisco, California 94105
Contact Person:	Mark Tang
Contact Phone Number:	415-749-4778
Project Location:	Rule 2-1 is being amended to require additional public notification and increase the public comment period prior to issuance of certain permits. Rule 2-5 is being amended to be more stringent in overburdened communities and to update health risk assumptions used to calculate toxic air contaminant impacts. The proposed project would apply to the area within the jurisdiction of the Bay Area Air Quality Management District, which encompasses all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano County and southern Sonoma County.
Project Sponsor's Name:	Bay Area Air Quality Management District
Project Sponsor's Address:	375 Beale Street, Suite 600 San Francisco, California 94105
General Plan Designation:	Amendments to Rules 2-1 and 2-5 would apply to the area within the jurisdiction of the Bay Area Air Quality Management and may encompass all general plan designations within the Bay Area.
Zoning:	Amendments to Rules 2-1 and 2.5 would apply to the area within the jurisdiction of the Bay Area Air Quality Management and may encompass all types of zoning within the Bay Area.

Description of Project:	See Chapter 2.
Surrounding Land Uses and Setting:	See "Affected Area" in Chapter 2.
Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?	No tribes have requested consultation.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The following environmental impact areas have been assessed to determine their potential to be affected by the proposed project. As indicated by the checklist on the following pages, environmental topics marked with an "✓" may be adversely affected by the proposed project. An explanation relative to the determination of impacts can be found following the checklist for each area.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology & Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☐ Hydrology & Water Quality	☐ Land Use & Planning	☐ Mineral Resources
☐ Noise	☐ Population & Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities & Services Systems	☐ Wildfire	☐ Mandatory Findings of Significance

DETERMINATION

On the basis of this initial evaluation:

☑ I find the proposed project COULD NOT have a significant effect on the environment, and that a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be significant effects in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature: Date:

Name:

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis.

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, Program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(D). In this case, a brief discussion should identify the following:

a) Earlier Analysis Used. Identify and state where they are available for review.

b) Impacts Adequately Addressed. Identify which effects from the checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and

   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

ENVIRONMENTAL CHECKLIST AND DISCUSSION

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less-than-Significant Impact	No Impact
I.	**AESTHETICS**. Except as provided in PRC §21099, would the project:				
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☑
b)	Substantially damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?	☐	☐	☐	☑
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality.	☐	☐	☑	☐
d)	Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	☐	☐	☐	☑

Environmental Setting

The Bay Area Air Quality Management District (BAAQMD or Air District) covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano County and southern Sonoma County. The area of coverage is vast (about 5,600 square miles), so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses. Important views of natural features include the San Francisco Bay and ocean, Mount Tamalpais, Mount Diablo, and other peaks and inland valleys of the Coast Range. Cityscape views offered by buildings and distinctive Bay Area bridges, especially the Golden Gate and Bay Bridges and the San Francisco skyline, are also important built visual resources to the region (ABAG, 2017). Views along travel corridors, including roads and rail lines, are in abundance in the Bay Area and include views of the San Francisco Bay, city scape, mountains and hills, redwood groves, and broader views of the ocean and lowlands, such as along

ridgelines. Because of the variety of visual resources, scenic highways or corridors are located throughout the Bay Area and include 15 routes that have been designated as scenic highways and 29 routes eligible for designation as scenic highways (ABAG, 2017).

The proposed amendments to Rules 2-1 and 2-5 are expected to mainly affect stationary emissions sources which tend to be located in commercial or industrial areas, which are not typically scenic areas.

Regulatory Background

Visual resources are generally protected by the city and/or county general plans through land use and zoning requirements.

Significance Criteria

The proposed project impacts on aesthetics will be considered significant if:

- The proposed project would have a substantial adverse effect on a scenic vista.
- The proposed project would substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historical buildings within a state scenic highway.
- The proposed project would substantially degrade the existing visual character or quality of the site and its surroundings.
- The proposed project would add a visual element of urban character to an existing rural or open space area or add a modern element to a historic area.
- The proposed project would create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area.

Discussion of Impacts

I a-c. The amendments to Rules 2-1 and 2-5 are designed to make technical and administrative changes to make these rules more health protective. The proposed amendments are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to overburdened communities. The modified rules would not require new facilities but may require new or modified sources to install air pollution control equipment (e.g., diesel particulate filters), uses cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. Although it is not expected to be as common, the proposed rule amendments could also affect new or modified heavy industrial sources (e.g., manufacturing facilities, metal casting facilities, waste transfer facilities, concrete manufacturing facilities, etc.) which could require other types of emission control including baghouses and water spray/mist systems. Any new equipment is expected to be compatible with the existing industrial/commercial character of the area.

Implementation of the proposed rule amendments may result in the installation of additional equipment such as diesel particulate filters or changes to operations (hours or operations or throughputs). These types of modifications are not expected to result in visual changes to any

facilities. Equipment such as diesel particulate filters are not visible outside of the facility boundaries. Other methods to reduce emissions would not result in visual changes, e.g., use of different type of engine, or reduction in operating times or throughputs. Any relocation of stationary sources or stacks would be expected to be located further away from sensitive sources and most likely less visible from public areas. The proposed rule amendments are not expected to result in changes to the aesthetic or visual qualities of the stationary sources. It is assumed that modifications at larger industrial facilities could occur (approximately once per year), but these facilities are typically located in heavy industrial areas that are not in scenic areas

The stationary sources affected by the proposed rule amendments are expected to be primarily located in industrial or commercial areas. Scenic highways or corridors are generally not located in industrial or commercial areas. Any new development potentially affecting visual resources would not be a result of the proposed rule amendments and approval of those projects, including their environmental impacts, would occur regardless of the proposed amendments to Rules 2-1 and 2-5. Therefore, the proposed rule amendments are not expected to impact scenic resources or vistas or degrade the existing visual character of any site or its surroundings.

I d. The proposed rule amendments are not expected to require additional lighting to most impacted sources. Implementation of the proposed rule amendments is mainly expected to result in the installation of additional equipment such as diesel particulate filters or changes to operations (hours or operations or throughputs). These types of modifications are not expected to require any additional outdoor lighting. Air pollution control equipment (e.g., baghouses) at larger industrial facilities could result in the need for additional lighting. These types of projects are expected to be limited to industrial areas which already have lighting for nighttime operations. Therefore, the proposed amendments to Rules 2-1 and 2-5 are not expected to generate any substantial light or glare impacts on day or nighttime views.

Conclusion

Based upon these considerations, no significant adverse aesthetic or light and glare impacts are expected due to implementation of the proposed amendments to Rule 2-1 and 2-5.

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
II.	**AGRICULTURE and FORESTRY RESOURCES.** In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.--Would the project:				
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☑
b)	Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?	☐	☐	☐	☑
c)	Conflict with existing zoning for, or cause rezoning of, forest land as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☑
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☑
e)	Involve other changes in the existing environment which, due to their location or nature, could result in	☐	☐	☐	☑

conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Environmental Setting

The Air District covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles), so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses. Some of these agricultural lands are under Williamson Act contracts. Agricultural land under Williamson Act contract includes both prime and nonprime lands. Prime agricultural land includes land with certain specific soil characteristics, land that has returned a predetermined annual gross value for three of the past five years, livestock-supporting land with specific carrying capacities, or land planted with fruit or nut trees, vines, bushes or crops that have a non-bearing period of less than five years (Government Code §51200-51207). Nonprime lands include pasture and grazing lands and other non-irrigated agricultural lands with lesser soil quality.

The Bay Area has a significant amount of land in agricultural uses. In 2010, over half of the region's approximately 4.5 million acres were classified as agricultural lands, as defined by the California Department of Conservation Farmland Mapping and Monitoring Program. Of these, 2.3 million acres of agricultural land, over 70 percent (about 1.7 million acres) are used for grazing. Products grown in the Bay Area include field crops, fruit and nut crops, seed crops, vegetable crops, and nursery products. Field crops, which include corn, wheat, and oats, as well as pasture lands, represent approximately 62 percent of the Bay Area's agricultural land (ABAG, 2017). In 2014, about 1.25 million acres of land were under Williamson Act contract in the Bay Area. Of this, about 203,200 acres were prime farmland and one million acres were nonprime. Lands under Williamson Act contract are primarily used for pasture and grazing and not for cultivation of crops. Approximately 70 percent of prime farmlands under contract are in Santa Clara, Solano, and Sonoma counties (ABAG, 2017).

The proposed amendments to Rules 2-1 and 2-5 are expected to mainly affect stationary sources of emissions which tend to be located in commercial or industrial areas.

Regulatory Background

Agricultural and forest resources are generally protected by the city and/or county general plans, community plans through land use and zoning requirements, as well as any applicable specific plans, ordinances, local coastal plans, and redevelopment plans.

Significance Criteria

Project-related impacts on agriculture and forest resources will be considered significant if any of the following conditions are met:

- The proposed project conflicts with existing zoning or agricultural use or Williamson Act contracts.
- The proposed project will convert prime farmland, unique farmland or farmland of statewide importance as shown on the maps prepared pursuant to the farmland mapping and monitoring program of the California Resources Agency, to non-agricultural use.
- The proposed project conflicts with existing zoning for, or causes rezoning of, forest land (as defined in Public Resources Code §12220(g)), timberland (as defined in Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code § 51104 (g)).
- The proposed project would involve changes in the existing environment, which due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.

Discussion of Impacts

II a-e. The amendments to Rules 2-1 and 2-5 are designed to make technical and administrative changes to make these rules more health protective. The proposed amendments are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to overburdened communities. The modified rules may require sources to install air pollution control equipment (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, relocate sources or stacks, or install baghouses on larger manufacturing facilities.

The proposed project would not conflict with existing agriculture related zoning designations or Williamson Act contracts. Any new development/new facilities potentially affecting agricultural or forestland resources would not be as a result of the proposed rule and approval of those projects, including their potential environmental impacts, would occur regardless of the proposed rule amendments.

Existing agriculture and forestland resources within the boundaries of the Air District are not expected to be affected by the installation of air pollution control equipment (e.g., diesel particulate filters), the use of cleaner equipment (e.g., Tier 4 engines), a reduction in operating times, or relocation or sources or stacks, that may be required under the proposed rule amendments. Any type of modifications would be expected to occur close to the emissions sources, which are generally located in industrial/commercial areas which lack agricultural and forest resources. Therefore, no significant impacts are expected from the conversion of farmland to non-agricultural use, conflicts with agricultural uses, conversion of land under a Williamson Act contract, or impacts to forestland resources.

Conclusion

Based upon these considerations, no significant adverse impacts to agricultural and forest resources are expected due to implementation of the proposed amendments to Rules 2-1 and 2-5.

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
III.	**AIR QUALITY.** When available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☑
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a non-attainment area for an applicable federal or state ambient air quality standard?	☐	☐	☑	☐
c)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☑	☐
d)	Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?)	☐	☐	☐	☑

Environmental Setting

The San Francisco Bay Area is characterized by a large, shallow basin surrounded by mountain ranges tapering into sheltered inland valleys. The basin is bounded by the Pacific Ocean to the west and includes complex terrain consisting of mountains, valleys and bays. Combined climatic and topographic factors result in increased potential for the accumulation of air pollutants in the inland valleys and reduced potential for buildup of air pollutants along the coast.

Air quality conditions in the San Francisco Bay Area have improved since the Air District was created in 1955. The long-term trend of ambient concentrations of air pollutants and the number of days on which the region exceeds ambient air quality standards (AAQS) have generally declined, although some year-to-year variability primarily due to meteorology, causes some short-term increases in the number of exceedance days. The increase of severity and frequency of wildfire smoke episodes since 2017 has led to an increase in levels of annual particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) and particulate matter less than 10 microns in diameter (PM_{10}) and indicates the need for continued reductions. The San Francisco Bay Area is in attainment of the State AAQS for carbon monoxide (CO), nitrogen dioxide (NO_2), and sulfur dioxide (SO_2). However, the Bay Area is not in attainment of the State 24-hour PM_{10} standard, annual PM_{10} standard, and annual $PM_{2.5}$ standard. The Air District is designated

unclassifiable/attainment for the Federal CO, NO_2, SO_2, lead, PM_{10} and 2013 annual $PM_{2.5}$ standards. A designation of unclassifiable/attainment means that the U.S. EPA has sufficient evidence to find the area either is attaining or likely attaining the NAAQS.

Based on the 2020 air quality data from the Air District monitoring stations, no monitoring stations measured an exceedance of any of State or Federal AAQS for CO or NO_2. There was one exceedance of the Federal 1-hour SO_2 standard in 2020 at the Crockett station, and one exceedance of the Federal PM_{10} standard in 2020 at the Concord station. The State 24-hour PM_{10} standard was exceeded at one or more Bay Area stations on eleven days in 2020.

The Bay Area is designated as a non-attainment area for the Federal and State eight-hour ozone standard and the Federal 2006 24-hour $PM_{2.5}$ standard. The State and Federal eight-hour ozone standards were exceeded at one site or more in the Air District on ten and nine days in 2020, respectively; most frequently in the Eastern District, the Santa Clara Valley, and the South Central Bay zones. The Federal 24-hour $PM_{2.5}$ standard was exceeded at one or more Bay Area stations on 25 days in 2020 throughout the Air District.

Criteria Pollutant Health Effects

Ozone: Ozone is not emitted directly from pollution sources. Instead, ozone is formed in the atmosphere through complex chemical reactions between hydrocarbons, or reactive organic gases (ROG), also commonly referred to as volatile organic compounds (VOC) , and nitrogen oxides (NOx), in the presence of sunlight. ROG and NOx are referred to as ozone precursors.

Ozone is harmful to public health at high concentrations near ground level. Ozone can damage the tissues of the lungs and respiratory tract. High concentrations of ozone irritate the nose, throat, and respiratory system and constrict the airways. Ozone also can aggravate other respiratory conditions such as asthma, bronchitis, and emphysema, causing increased hospital admissions. Repeated exposure to high ozone levels can make people more susceptible to respiratory infection and lung inflammation and permanently damage lung tissue. Ozone can also have negative cardiovascular impacts, including chronic hardening of the arteries and acute triggering of heart attacks. Children are most at risk as they tend to be active and outdoors in the summer when ozone levels are highest. Seniors and people with respiratory illnesses are also especially sensitive to ozone's effects. Even healthy adults can be affected by working or exercising outdoors during high ozone levels.

The propensity of ozone for reacting with organic materials causes it to be damaging to living cells, and ambient ozone concentrations in the Bay Area are occasionally sufficient to cause health effects. Ozone enters the human body primarily through the respiratory tract and causes respiratory irritation and discomfort, makes breathing more difficult during exercise, reducing the respiratory system's ability to remove inhaled particles and fight infection while long-term exposure damages lung tissue. People with respiratory diseases, children, the elderly, and people who exercise heavily are more susceptible to the effects of ozone.

Plants are sensitive to ozone at concentrations well below the health-based standards and ozone is responsible for significant crop damage. Ozone is also responsible for damage to forests and other ecosystems.

Reactive Organic Gases (ROGs): It should be noted that there are no state or national ambient air quality standards for ROGs because they are not classified as criteria pollutants. ROGs are regulated, however, because ROG emissions contribute to the formation of ozone. They are also transformed into organic aerosols in the atmosphere, contributing to higher PM_{10} and lower visibility levels.

Although health-based standards have not been established for ROGs, health effects can occur from exposures to high concentrations of ROGs because of interference with oxygen uptake. In general, ambient ROG concentrations in the atmosphere are suspected to cause coughing, sneezing, headaches, weakness, laryngitis, and bronchitis, even at low concentrations. Some hydrocarbon components classified as ROG emissions are thought or known to be hazardous. Benzene, for example, one hydrocarbon component of ROG emissions, is known to be a human carcinogen.

ROG emissions result primarily from incomplete fuel combustion and the evaporation of paints, solvents and fuels. Mobile sources are the largest contributors to ROG emissions. Stationary sources include processes that use solvents (such as manufacturing, degreasing, and coating operations) and petroleum refining, and marketing. Area-wide ROG sources include consumer products, pesticides, aerosol and architectural coatings, asphalt paving and roofing, and other evaporative emissions.

Carbon Monoxide (CO): CO is a colorless, odorless, relatively inert gas. It is a trace constituent in the unpolluted troposphere, and is produced by both natural processes and human activities. In remote areas far from human habitation, carbon monoxide occurs in the atmosphere at an average background concentration of 0.04 ppm, primarily as a result of natural processes such as forest fires and the oxidation of methane. Global atmospheric mixing of CO from urban and industrial sources creates higher background concentrations (up to 0.20 ppm) near urban areas. The major source of CO in urban areas is incomplete combustion of carbon-containing fuels, mainly gasoline used in mobile sources. Consequently, CO concentrations are generally highest in the vicinity of major concentrations of vehicular traffic.

CO is a primary pollutant, meaning that it is directly emitted into the air, not formed in the atmosphere by chemical reaction of precursors, as is the case with ozone and other secondary pollutants. Ambient concentrations of CO in the District exhibit large spatial and temporal variations, due to variations in the rate at which CO is emitted, and in the meteorological conditions that govern transport and dilution. Unlike ozone, CO tends to reach high concentrations in the fall and winter months. The highest concentrations frequently occur on weekdays at times consistent with rush hour traffic and late night during the coolest, most stable atmospheric portion of the day.

When CO is inhaled in sufficient concentrations, it can displace oxygen and bind with the hemoglobin in the blood, reducing the capacity of the blood to carry oxygen. Individuals most at risk from the effects of CO include heart patients, fetuses (unborn babies), smokers, and people

who exercise heavily. Normal healthy individuals are affected at higher concentrations, which may cause impairment of manual dexterity, vision, learning ability, and performance of work. The results of studies concerning the combined effects of CO and other pollutants in animals have shown a synergistic effect after exposure to CO and ozone.

Particulate Matter (PM_{10} & $PM_{2.5}$): Particulate matter, or PM, consists of microscopically small solid particles or liquid droplets suspended in the air. PM can be emitted directly into the air or it can be formed from secondary reactions involving gaseous pollutants that combine in the atmosphere. Particulate pollution is primarily a problem in winter, accumulating when cold, stagnant weather comes into the Bay Area. PM is usually broken down further into two size distributions, PM_{10} and $PM_{2.5}$. Of great concern to public health are the particles small enough to be inhaled into the deepest parts of the lungs. Respirable particles (particulate matter less than about 10 micrometers in diameter) can accumulate in the respiratory system and aggravate health problems such as asthma, bronchitis and other lung diseases. Children, the elderly, exercising adults, and those suffering from asthma are especially vulnerable to adverse health effects of PM_{10} and $PM_{2.5}$.

A consistent correlation between elevated ambient particulate matter (PM_{10} and $PM_{2.5}$) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. Studies have reported an association between long-term exposure to air pollution dominated by fine particles ($PM_{2.5}$) and increased mortality, reduction in lifespan, and an increased mortality from lung cancer.

Daily fluctuations in fine particulate matter concentration levels have also been related to hospital admissions for acute respiratory conditions, to school and kindergarten absences, to a decrease in respiratory function in normal children and to increased medication use in children and adults with asthma. Studies have also shown lung function growth in children is reduced with long-term exposure to particulate matter. The elderly, people with pre-existing respiratory and/or cardiovascular disease and children appear to be more susceptible to the effects of PM_{10} and $PM_{2.5}$.

Nitrogen Dioxide (NO_2): NO_2 is a reddish-brown gas with a bleach-like odor. Nitric oxide (NO) is a colorless gas, formed from the nitrogen (N_2) and oxygen (O_2) in air under conditions of high temperature and pressure which are generally present during combustion of fuels; NO reacts rapidly with the oxygen in air to form NO_2. NO_2 is responsible for the brownish tinge of polluted air. The two gases, NO and NO_2, are referred to collectively as nitrogen oxides or NOx. In the presence of sunlight, NO_2 reacts to form nitric oxide and an oxygen atom. The oxygen atom can react further to form ozone, via a complex series of chemical reactions involving hydrocarbons. Nitrogen dioxide may also react to form nitric acid (HNO_3) which reacts further to form nitrates, which are a component of PM_{10}.

NO_2 is a respiratory irritant and reduces resistance to respiratory infection. Children and people with respiratory disease are most susceptible to its effects.

Sulfur Dioxide (SO_2): SO_2 is a colorless gas with a sharp odor. It reacts in the air to form sulfuric acid (H_2SO_4), which contributes to acid precipitation, and sulfates, which are a component of PM_{10}

and $PM_{2.5}$. Most of the SO_2 emitted into the atmosphere is produced by the burning of sulfur-containing fuels.

At sufficiently high concentrations, SO_2 affects breathing and the lungs' defenses, and can aggravate respiratory and cardiovascular diseases. Asthmatics and people with chronic lung disease or cardiovascular disease are most sensitive to its effects. SO_2 also causes plant damage, damage to materials, and acidification of lakes and streams.

Non-Criteria Pollutants Health Effects

Although the primary mandate of the Air District is attaining and maintaining the national and state Ambient Air Quality Standards for criteria pollutants within the Air District jurisdiction, the Air District also has a general responsibility to control, and where possible, reduce public exposure to airborne toxic compounds. TACs are a defined set of airborne pollutants that may pose a present or potential hazard to human health. TACs can be emitted directly and can also be formed in the atmosphere through reactions among different pollutants. The health effects associated with TACs are quite diverse and generally are assessed locally, rather than regionally. TACs can cause long-term health effects such as cancer, birth defects, neurological damage, asthma, bronchitis or genetic damage; or short-term acute affects such as eye watering, respiratory irritation, running nose, throat pain, and headaches. TACs are separated into carcinogens and non-carcinogens based on the nature of the pollutant. Carcinogens are assumed to have no safe threshold below which health impacts would not occur. Non-carcinogenic substances differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is expected to occur. These levels are determined on a pollutant-by-pollutant basis. The air toxics program was established as a separate and complementary program designed to evaluate and reduce adverse health effects resulting from exposure to TACs.

The major elements of the District's air toxics program are outlined below.

- Preconstruction review of new and modified sources for potential health impacts, and the requirement for new/modified sources with TAC emissions that exceed a specified threshold to use BACT.

- The Air Toxics Hot Spots Program, designed to identify industrial and commercial facilities that may result in locally elevated ambient concentrations of TACs, to report significant emissions to the affected public, and to reduce unacceptable health risks.

- Findings from the District's Community Health Protection Program have been implemented to identify areas where air pollution contributes most to health impacts and where populations are most vulnerable to air pollution; to reduce the health impacts in these areas; and to engage the community and other agencies to develop additional actions to reduce local health impacts.

- Control measures designed to reduce emissions from source categories of TACs, including rules originating from the state Toxic Air Contaminant Act and the federal Clean Air Act.

- The TAC emissions inventory, a database that contains information concerning routine and predictable emissions of TACs from permitted stationary sources.

- Ambient monitoring of TAC concentrations at a number of sites throughout the Bay Area.

- The District's Regulation 11, Rule 18: Reduction from Air Toxic Emissions at Existing Facilities, which was adopted November 15, 2017. This rule requires the District to conduct screening analyses for facilities that report TAC emissions within the District and calculate health prioritization scores based on the amount of TAC emissions, the toxicity of the TAC pollutants, and the proximity of the facilities to local communities. The District will conduct health risk assessments for facilities that have priority scores above a certain level. Based on the health risk assessment, facilities found to have a potential health risk above the risk action level would be required to reduce their risk below the action level, or install Best Available Retrofit Control Technology for Toxics on all significant sources of toxic emissions.

TAC Health Effects

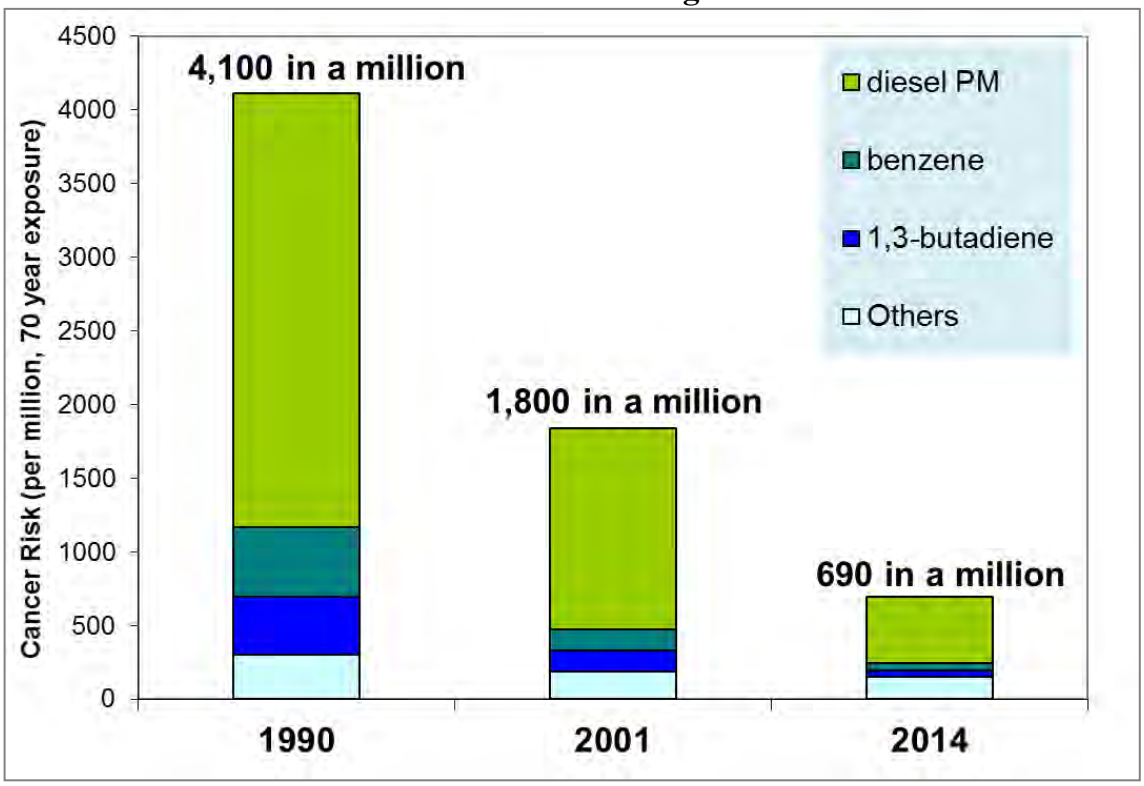
TACs can cause or contribute to a wide range of health effects. Acute (short-term) health effects may include eye and throat irritation. Chronic (long-term) exposure to TACs may cause more severe effects such as neurological damage, hormone disruption, developmental defects, and cancer. CARB has identified roughly 200 TACs, including diesel particulate matter (diesel PM) and environmental tobacco smoke.

Unlike criteria pollutants which are subject to ambient air quality standards, TACs are primarily regulated at the individual emissions source level based on risk assessment. Human outdoor exposure risk associated with an individual air toxic species is calculated as its ground-level concentration multiplied by an established unit risk factor for that air toxic species. Total risk due to TACs is the sum of the individual risks associated with each air toxic species.

Occupational health studies have shown diesel PM to be a lung carcinogen as well as a respiratory irritant. Benzene, present in gasoline vapors and also a byproduct of combustion, has been classified as a human carcinogen and is associated with leukemia. 1,3-butadiene, produced from motor vehicle exhaust and other combustion sources, has also been associated with leukemia. Reducing 1,3-butadiene also has a co-benefit in reducing the TAC acrolein.

Acetaldehyde and formaldehyde are emitted from fuel combustion and other sources. They are also formed photo-chemically in the atmosphere from other compounds. Both compounds have been found to cause nasal cancers in animal studies and are also associated with skin and respiratory irritation. Human studies for carcinogenic effects of acetaldehyde are sparse but, in combination with animal studies, sufficient to support classification as a probable human carcinogen. Formaldehyde has been associated with nasal sinus cancer and nasopharyngeal cancer, and possibly with leukemia.

FIGURE 3-1: Cancer-Risk Weighted Toxics Trends



Source: BAAQMD, 2020a.

The primary health risk of concern due to exposure to TACs is the risk of contracting cancer. The carcinogenic potential of TACs is a particular public health concern because many scientists currently believe that there are not "safe" levels of exposure to carcinogens without some risk to causing cancer. The proportion of cancer deaths attributable to air pollution has not been estimated using epidemiological methods. Based on ambient air quality monitoring, and using OEHHA cancer risk factors,[1] the estimated lifetime cancer risk for Bay Area residents, over a 70-year lifespan from all TACs combined, declined from 4,100 cases per million in 1990 to 690 cases per million people in 2014, as shown in Figure 3-1. This represents an 80 percent decrease between 1990 and 2014 (BAAQMD, 2020a).

The cancer risk related to diesel PM, which accounts for most of the cancer risk from TACs, has declined substantially over the past 15-20 years as a result of ARB regulations and Air District

[1] See CARB's Risk Management Guidance for Stationary Sources of Air Toxics, Discussion Draft, May 27, 2015, https://www.arb.ca.gov/toxics/rma/rma_guidancedraft052715.pdf and the Office Environmental Health Hazard Assessment's toxicity values at http://oehha.ca.gov/media/CPFs042909.pdf. The cancer risk estimates shown in Figure 3-1 are higher than the estimates provided in documents such as the Bay Area 2010 Clean Air Plan and the April 2014 CARE report entitled *Improving Air Quality and Health in Bay Area Communities*. It should be emphasized that the higher risk estimates shown in Figure 3-1 are due solely to changes in the methodology used to estimate cancer risk, and not to any actual increase in TAC emissions or population exposure to TACs.

programs to reduce emissions from diesel engines. However, diesel PM still accounts for roughly 60 percent of the total cancer risk related to TACs.

Air Toxics Emission Inventory

The Air District maintains a database that contains information concerning emissions of TACs from permitted stationary sources in the Bay Area. This inventory, and a similar inventory for mobile and area sources compiled by CARB, is used to plan strategies to reduce public exposure to TACs. The detailed emissions inventory is reported in the Air District Toxic Air Contaminant Control Program, 2017 Annual Report (BAAQMD, 2020b). The 2017 emissions inventory continues to show decreasing emissions of many TACs in the Bay Area.

Table 3-1 contains a summary of average ambient concentrations of TACs measured at monitoring stations in the Bay Area by the District in 2017.

Regulatory Background

Criteria Pollutants

The U.S. EPA is responsible for setting and enforcing the National Ambient Air Quality Standards for ozone, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead. The U.S. EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters (Outer Continental Shelf). The U.S. EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of the CARB.

TABLE 3-1

Summary of 2017 Air District Ambient Air Toxics Monitoring Data

Compound	Max. Conc. (ppb) (1)	Min. Conc. (ppb) (2)	Mean Conc. (ppb) (3)
1,3-Butadiene	0.541	0.000	0.012
Acetaldehyde	5.680	0.480	1.982
Acetone	29.901	0.345	4.072
Acetonitrile	3.799	0.000	0.088
Acyrlonitrile	0.323	0.000	0.001
Benzene	3.123	0.000	0.221
Carbon Tetrachloride	0.130	0.024	0.098
Chloroform	0.115	0.000	0.023
Dichloromethane	1.791	0.000	0.159
Ethyl Alcohol	91.740	0.236	5.455
Ethylbenzene	1.136	0.000	0.138
Ethylene Dibromide	0.000	0.000	0.000
Ethylene Dichloride	0.000	0.000	0.000
Formaldehyde	7.290	0.480	2.707
Freon-113	0.205	0.051	0.070
Methyl Chloroform	1.226	0.000	0.006
Methyl Ethyl Ketone	5.743	0.000	0.259
Tetrachloroethylene	0.337	0.000	0.003
Toluene	3.925	0.000	0.503
Trichloroethylene	0.328	0.000	0.001
Trichlorofluoromethane	0.593	0.194	0.248
Vinyl Chloride	0.000	0.000	0.000
m/p-Xylene	2.929	0.000	0.236
o-Xylene	1.446	0.000	0.108

Source: BAAQMD, 2018a

NOTES: Table 3-1 summarizes the results of the Air District gaseous toxic air contaminant monitoring network for the year 2017. These data represent monitoring results at 21 separate sites at which samples were collected.

(1) "Maximum Conc." is the highest daily concentration measured at any of the 21 monitoring sites.

(2) "Minimum Conc." is the lowest daily concentration measured at any of the 21 monitoring sites.

(3) "Mean Conc." is the arithmetic average of the air samples collected in 2017 at the 21 monitoring sites.

(4) Acetaldehyde and formaldehyde concentrations reflect measurements from one monitoring site (San Jose-Jackson).

At the federal level, the Clean Air Act Amendments of 1990 give the U.S. Environmental Protection Agency additional authority to require states to reduce emissions of ozone precursors and particulate matter in non-attainment areas. The amendments set attainment deadlines based on the severity of problems. At the state level, CARB has traditionally established state ambient air quality standards, maintained oversight authority in air quality planning, developed programs for reducing emissions from motor vehicles, developed air emission inventories, collected air quality and meteorological data, and approved state implementation plans. At a local level, California's air districts, including the Bay Area Air Quality Management District, are responsible for overseeing stationary source emissions, approving permits, maintaining emission inventories, developing air quality compliance plans, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality-related sections of environmental documents required by CEQA.

Other federal regulations applicable to the Bay Area include Title III of the Clean Air Act, which regulates hazardous air pollutants (HAPs). Title V of the Act establishes a federal permit program for large stationary emission sources. The U.S. EPA also has authority over the Prevention of Significant Deterioration (PSD) program, as well as the New Source Performance Standards (NSPS), both of which regulate stationary sources under specified conditions.

The Air District is responsible for regulating stationary sources of air pollution in the nine counties that surround San Francisco Bay: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, southwestern Solano, and southern Sonoma counties. The District is responsible for implementing emissions standards and other requirements of federal and state laws. Numerous regulations have been developed by the District to control emissions sources within its jurisdiction. It is also responsible for developing air quality planning documents required by both federal and state laws.

Toxic Air Contaminants

TACs are regulated in the District through federal, state, and local programs. At the federal level, HAPs are regulated primarily under the authority of the Clean Air Act. Prior to the amendment of the Clean Air Act in 1990, source-specific National Emission Standards for Hazardous Air Pollutants (NESHAPs) were promulgated under Section 112 of the Clean Air Act for certain sources of radionuclides and Hazardous Air Pollutants.

Title III of the 1990 Clean Air Act amendments required U.S. EPA to promulgate NESHAPs for certain categories of sources identified by U.S. EPA as emitting one or more of the 189 listed HAPs. Emission standards for major sources must require the maximum achievable control technology (MACT). MACT is defined as the maximum degree of emission reduction achievable considering cost and non-air quality health and environmental impacts and energy requirements.

Many of the sources of HAPs that have been identified under the Clean Air Act are also subject to the California TAC regulatory programs. CARB developed regulatory programs for the control of TACs, including: (1) California's TAC identification and control program, adopted in 1983 as Assembly Bill 1807 (AB 1807) (California Health and Safety Code §39662), a two-step program in which substances are identified as TACs, and airborne toxic control measures are adopted to

control emissions from specific sources; and (2) the Air Toxics Hot Spot Information and Assessment Act of 1987 (AB 2588) (California Health and Safety Code §39656), which established a state-wide program to inventory and assess the risks from facilities that emit TACs and to notify the public about significant health risks associated with those emissions.

The Air District uses three approaches to reduce TAC emissions and to reduce the health impacts resulting from TAC emissions: 1) Specific rules and regulations; 2) Pre-construction review; and, 3) the Air Toxics Hot Spots Program. In addition, the Air District implements U.S. EPA, CARB, and Air District rules that specifically target toxic air contaminant emissions from sources at petroleum refineries.

In 2004, the Air District initiated the Community Air Risk Evaluation (CARE) program to identify areas with relatively high concentrations of air pollution – including TACs and fine particulate matter – and populations most vulnerable to air pollution's health impacts. Maps of communities most impacted by air pollution, generated through the CARE program, have been integrated into many Air District programs. For example, the Air District uses information derived from the CARE program to develop and implement targeted risk reduction programs, including grant and incentive programs, community outreach efforts, collaboration with other governmental agencies, model ordinances, new regulations for stationary sources and indirect sources, and advocacy for additional legislation. Information from the CARE program has been used to determine the communities most impacted by air quality for the purposes of the Air District's Community Health Protection Program, which implements AB617 in the Bay Area.

Significance Criteria

The Air District's CEQA Guidelines have been developed to assist local jurisdictions and lead agencies in complying with the requirements of CEQA regarding potentially adverse impacts to air quality. The most recent significance thresholds are the District's CEQA Air Quality Guidelines (BAAQMD, 2017a) dated May 2017. These guidelines provide suggested significance thresholds for evaluation of impacts of a proposed project during both construction and operation phases.

Construction Emissions

The Air District's 2017 Thresholds of Significance will be used in the current air quality analysis for construction emissions (see Table 3-2).

TABLE 3-2

Thresholds of Significance for Construction-Related Criteria Air Pollutants and Precursors

Pollutant/Precursor	Daily Average Emissions (lbs/day)
ROG	54
NOx	54
PM_{10}	82*
$PM_{2.5}$	54*
PM_{10}/ $PM_{2.5}$ Fugitive Dust	Best Management Practices

*Applies to construction exhaust emissions only.
Source: BAAQMD, 2017a

Operational Emissions

The 2017 project-level stationary source CEQA thresholds are identified in Table 3-3. These represent the levels at which a project's individual emissions would result in a cumulatively considerable contribution to the Air District's existing air quality conditions for individual projects. These thresholds are based on the federal offset requirements for ozone precursors for which the Bay Area is designated as a non-attainment area, which is an appropriate approach to prevent further deterioration of ambient air quality and thus has nexus and proportionality to prevent regionally cumulative significant impacts (e.g., worsened status of non -attainment). Despite being a non-attainment area for state PM_{10} and non-attainment for federal $PM_{2.5}$, the Federal NSR significant emission rate annual limits of 15 and 10 tons per year, respectively, are the thresholds established by the Air District, as the Air District has not established an offset requirement limit for $PM_{2.5}$ and the existing limit of 100 tons per year is much less stringent and would not be appropriate for the Federal 24-hour $PM_{2.5}$ standards. These operational thresholds represent the emission levels above which a project's individual emissions would result in a cumulatively considerable contribution to the Bay Area's existing air quality conditions (BAAQMD, 2017a). To provide a conservative air quality analysis, the air quality impacts analysis will use the project-specific thresholds (see Table 3-3) recommended in the revised 2017 CEQA Guidelines (BAAQMD, 2017a)

TABLE 3-3

Thresholds of Significance for Operation-Related Criteria Air Pollutants and Precursors

Pollutant/Precursor	Daily Average Emissions (lbs/day)	Maximum Annual Emissions (tons/year)
ROG	54	10
NOx	54	10
PM_{10}	82	15
$PM_{2.5}$	54	10

*Source: BAAQMD, 2017a

For air toxics concerns, the threshold for a significant air quality impact is a lifetime cancer risk of 10 additional cancers per million people exposed or a non-cancer (i.e., chronic or acute) risk greater than 1.0 hazard index (BAAQMD, 2017a).

Discussion of Impacts

III a. Proposed amendments to Rules 2-1 and 2-5 are not expected to conflict with or obstruct implementation of the applicable air quality plan. The applicable air quality plan is the Air District's 2017 Clean Air Plan, *Spare the Air, Cool the Climate* ("Plan"). The Plan outlines a strategy for achieving the Bay Area's clean air goals by reducing emissions of ozone precursors, particulate matter, TACs and other pollutants in the region. One of the objectives of the 2017 Plan was to "eliminate disparities among Bay Area communities in cancer health risk and toxic air contaminants" and to "reduce ambient concentrations of toxic air contaminants." The 2017 Plan included Control Measure SS21 (New Source Review for Toxics) which proposed revisions to Air District Rule 2-5 due to changes in OEHHA's 2015 HRA Guidelines and revisions to the HRA trigger levels. The proposed amendments to Rules 2-1 and 2-5 would implement portions of Control Measure SS21 in the 2017 Plan, complementing the 2016 amendments to Rule 2-5. Therefore, the proposed rule amendments will not conflict with or obstruct implementation of the 2017 Clean Air Plan, rather they will help achieve the Plan's goals by helping to minimize toxic air contaminant emissions.

III b and c. The amendments to Rules 2-1 and 2-5 are designed to make technical and administrative changes to make these rules more health protective. The proposed amendments are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to overburdened communities. The modified rules would not require new facilities but may require sources to install air pollution control equipment (e.g., diesel particulate filters, baghouses, water mist systems), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks, which may generate air quality impacts, as discussed below.

Construction Air Quality Impacts

Construction activities may be required for the construction of air pollution control equipment, relocating equipment, or modifying existing equipment. Construction emissions are summarized in Table 3-4 and detailed emission calculations are provided in Appendix A.

Construction would likely require truck trips to deliver equipment, a construction crew of five to twenty workers, and a few pieces of construction equipment (e.g., cranes, forklift, aerial lifts, welders, and hand tools). The construction associated with the modified the rules are divided into two types of construction, small projects and large projects. Modifications to or the relocation of diesel engines and changes to stacks would be considered small projects. Construction of new air pollution control equipment or resizing existing air pollution control equipment for facilities (e.g., new baghouses) are considered large projects. Small projects are expected to take only a single day. Large projects are expected to take one month (20 working days). Construction emissions are based on 14 small projects and 1 large project. All construction is expected to occur in paved

areas, therefore, no emissions from earthmoving activities or fugitive dust from unpaved roads is expected to be generated.

In order to conservatively estimate peak day emissions, it is estimated that one small project and one large project will occur at a time with all construction equipment operating concurrently (see Appendix A for detailed emissions calculations). As shown in Table 3-4, construction emissions are expected to be less than the CEQA significance thresholds and would not be expected to result in a significant air quality impact. Further, the amendments to Rules 2-1 and 2-5 may reduce or minimize criteria pollutant emissions, however, the emissions benefits are unknown and, thus, are not quantified in this analysis. Even with the omission of emissions reductions, the increases in criteria emissions associated with the construction activities related to the amendments to Rules 2-1 and 2-5 are expected to be less than the significance thresholds and, thus, not expected to make a cumulatively considerable air quality impact.

TABLE 3-4

Estimated Construction Emissions Impacts
(lb/day)

Pollutant	**ROG**	**CO**	**NOx**	**SOx**	**PM_{10}**	**$PM_{2.5}$**
Small Project Construction Peak Day Emissions [1]	0.5	3.4	4.8	<0.1	0.6	0.3
Large Project Construction Peak Day Emissions [1]	0.9	6.9	9.0	<0.1	0.9	0.5
Total Peak Day Emissions [1]	1.4	10.3	13.8	<0.1	1.5	1.0
BAAQMD CEQA Thresholds	**54**	**NE[2]**	**54**	**NE[2]**	**82**	**54**
Significant?	**NO**	**--**	**NO**	**--**	**NO**	**NO**

1. Based on CARB Off-Road 2017 emission factors.
2. NE – CEQA Thresholds are not established.
3. See Appendix A for detailed emission calculations.

Operational Air Quality Impacts

The amendments to Rules 2-1 and 2-5 are designed to make technical and administrative changes to make these rules more health protective. The proposed amendments are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to overburdened communities. The modified rules would not require new facilities but may require sources to install air pollution control equipment (e.g., diesel particulate filters, baghouses, water mist systems), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. None of the known technology is expected to increase criteria pollutant emissions. Further, all of the potential compliance strategies would either have no change or reduce criteria pollutant emissions. However, the actual emissions benefits are unknown and, thus, are not quantified in this analysis.

Diesel Engines

Diesel engines make up the largest share of applications that have cancer risk. Diesel engines are used for many purposes, including providing prime and backup power for facilities such as data centers, fire stations, hospitals, hotels, residential housing operations, and airport operations, to name just a few. Cancer risk from diesel engine operations can be reduced by limiting throughput or operating hours, retrofitting existing diesel engines with air pollution control technology, or replacing old diesel engines with Tier 4 equipment.

Gasoline Service Stations

Incorporation of the 2015 OEHHA health risk calculation procedures for gas stations as recommended in the proposed rule changes would show that cancer risk increases by about 40 percent for projects where the maximally exposed individual is a residential receptor and will add a new limit on acute impacts. In addition, gas stations that are located in areas that score highly on CalEnviroScreen will also need to comply with more stringent cancer risk limits.

Controls available to address toxic air contaminant emissions from gas stations include limiting the throughput rate or operating time, or in the case of new proposed gas stations, possibly revising source locations so that emissions sources are located farther from where people are likely to be exposed.

Other Facilities and Technologies

When health impacts of a proposed project are significant, some applicants may decide to use alternative technologies. Some common examples are to upgrade or install baghouses to control particulate matter; upgrade or install water spray system to abate fugitive dust; or alternative technology such as the use of electrically powered equipment instead of diesel-fired engines. Baghouses and electric motors could increase electricity usage at the site, but this impact is not expected to be significant given the current power infrastructure in the Bay Area.

Health Risk Impacts

The amendments to Rules 2-1 and 2-5 are expected to minimize and potentially reduce TAC emissions from the operation of the air pollution control equipment and implementation of other strategies. However, the emissions benefits are unknown and, thus, are not quantified in this analysis. Therefore, amendments to Rules 2-1 and 2-5 are not expected to expose sensitive receptors to any new or substantial TAC pollutant concentrations, but would be expected to result in a reduction in TAC emissions and related health risks.

III d. The amendments to Rules 2-1 and 2-5 are expected to minimize and potentially reduce TAC emissions from the operation of the air pollution control equipment and implementation of other strategies. Further, no emissions are expected during the construction or operational phases that are expected to generate odors. Therefore, no significant odor impacts are expected due to implementation of proposed rule amendments.

Conclusion

Based upon these considerations, no significant adverse impacts to air quality resources are expected due to implementation of the proposed amendments to Rules 2-1 and 2-5. Rather, the proposed rule amendments are expected to result in a decrease in TAC emissions associated with the operation of the air pollution control equipment and implementation of other emissions control strategies.

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV.	**BIOLOGICAL RESOURCES.** Would the project:				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☑
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☑
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☑
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☑
e)	Conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☑
f)	Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☑

Environmental Setting

The Air District covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles), so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses. A wide variety of biological resources are located within the Bay Area.

The Bay Area supports numerous distinct natural communities composed of a diversity of vegetative types that provide habitat for a wide variety of plan and wildlife species. Broad habitat categories in the region include grasslands, coastal scrubs and chaparral, woodlands and forests, riparian systems and freshwater aquatic habitat, and wetlands. Extensive aquatic resources are provided by the San Francisco Bay Delta estuary, as well as numerous other rivers and streams. Urban and otherwise highly disturbed habitats, such as agricultural fields, also provide natural functions and values as wildlife habitat (ABAG, 2017).

The proposed amendments to Rules 2-1 and 2-5 are expected to mainly affect back up diesel engines and gasoline stations which tend to be located in commercial/industrial areas or where native vegetation has been removed, although emergency diesel engines can be located in all types of areas. Biological resources are not usually located in industrial or commercial areas.

Regulatory Background

Biological resources are generally protected by the City and/or County General Plans through land use and zoning requirements which minimize or prohibit development in biologically sensitive areas. Biological resources are also protected by the California Department of Fish and Wildlife, and the U.S. Fish and Wildlife Service. The U.S Fish and Wildlife Service and National Marine Fisheries Service oversee the Federal Endangered Species Act. Development permits may be required from one or both of these agencies if development would impact rare or endangered species. The California Department of Fish and Wildlife administers the California Endangered Species Act, which prohibits impacting endangered and threatened species. The U.S. Army Corps of Engineers and the U.S. EPA regulate the discharge of dredge or fill material into waters of the United States, including wetlands.

Significance Criteria

The proposed project impacts on biological resources will be considered significant if:

- The project has a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- The project has a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service.

- The project has a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- The project interferes substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.
- The project conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Discussion of Impacts

IV a, b, c and d). The amendments to Rules 2-1 and 2-5 are designed to make technical and administrative changes to make these rules more health protective. The proposed amendments are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to overburdened communities. The modified rules would not require new facilities but may require sources to install air pollution control equipment (e.g., diesel particulate filters or particulate control), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. Any new equipment is expected to be compatible with the existing industrial/commercial character of the area where the existing sources are located.

Implementation of the proposed rule amendments may result in the installation of additional equipment such as diesel particulate filters or changes to operations (hours or operations or throughputs). These types of modifications are not expected to result in any construction activities outside of the existing facilities, which are largely industrial or commercial facilities. Air pollution control equipment such as baghouses would not require any construction outside of the facility boundaries. Other methods to reduce emissions would not result in any construction activities, e.g., use of different type of engine, or reduction in operating times or throughputs. Any relocation of stationary sources or stacks would be expected to be located within the boundaries of the existing facility, as well. The proposed rule amendments are not expected to result in construction activities outside of the existing facility or result in impacts to biological resources. The stationary sources affected by the proposed rule amendments are expected to be primarily located in industrial or commercial areas, where native vegetation has largely been removed or is non-existent. Any new development potentially affecting biological resources would not be as a result of the proposed rule amendments and approval of those projects, including their environmental impacts, would occur regardless of the proposed amendments to Rules 2-1 and 2-5. Therefore, the proposed rule amendments are not expected to impact biological resources and would not be expected to impact riparian, wetlands, or other sensitive communities.

IV e and f). The proposed amendments to Rules 2-1 and 2-5 are not expected to affect land use plans, local policies or ordinances, or regulations protecting biological resources such as a tree preservation policy or ordinances for the reasons described above. Land use and other planning considerations are determined by local governments and land use or planning requirements would not be altered by the proposed rule amendments. Similarly, the proposed rule amendments are not expected to affect any habitat conservation or natural community conservation plans, biological

resources or operations, and would not create divisions in any existing communities, as construction activities are expected to be limited to existing facilities in industrial/commercial areas that have already been developed and graded.

Conclusion

Based upon these considerations, no significant adverse impacts to biological resources are expected due to implementation of the proposed amendments to Rules 2-1 and 2-5.

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
V.	**CULTURAL RESOURCES.** Would the project:				
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	☐	☐	☑	☐
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☐	☑	☐
c)	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☑	☐

Environmental Setting

The Air District covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles), so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses. Cultural resources are defined as buildings, sites, structures, or objects which might have historical architectural, archaeological, cultural, or scientific importance. Cultural resources also include paleontological sites, which can consist of mineralized, partially mineralized, or unmineralized bones and teeth, soft tissues, shells, wood, leaf impressions, footprints, burrows, and microscopic remains that are more than 5,000 years old and occur mainly in Pleistocene or older sedimentary rock units.

The Carquinez Strait represents the entry point for the Sacramento and San Joaquin Rivers into the San Francisco Bay. This locality lies within the San Francisco Bay and the west end of the Central Valley archaeological regions, both of which contain a rich array of prehistoric and historical cultural resources. The areas surrounding the Carquinez Strait and Suisun Bay have been occupied for millennia given their abundant combination of littoral and oak woodland resources.

Historic resources are standing structures of historic or aesthetic significance. Architectural sites dating from the Spanish Period (1529-1822) through the late 1960s are generally considered for protection if they are determined to be historically or architecturally significant. These may include missions, historic ranch lands, and structures from the Gold Rush and the region's early industrial era. More recent architectural sites may also be considered for protection if they could gain historic significance in the future (ABAG, 2017).

Of the 8,199 sites recorded in the Bay Area, there are 1,006 cultural resources listed on the California Register of Historic Resources (CRHR), meaning that they are significant at the local, State or federal level; of those, 744 are also listed on the National Register of Historic Places (NRHP). From this list, 249 resources are listed as California Historic Landmarks. The greatest concentration of historic resources listed on both the NRHP and the CRHR in the Bay Area occurs in San Francisco, with 181 resources. Alameda County has the second highest number with 147 resources (ABAG, 2017).

The proposed amendments to Rules 2-1 and 2-5 are expected to mainly affect stationary emission sources which tend to be located in commercial/industrial areas or already developed areas. Grading to install control equipment is not expected to be required, so cultural resources are not expected to be impacted.

Regulatory Background

The State CEQA Guidelines define a significant cultural resource as a "resource listed or eligible for listing on the California Register of Historical Resources" (Public Resources Code Section 5024.1). A project would have a significant impact if it would cause a substantial adverse change in the significance of a historical resource (State CEQA Guidelines Section 15064.5(b)). A substantial adverse change in the significance of a historical resource would result from an action that would demolish or adversely alter the physical characteristics of the historical resource that convey its historical significance and that qualify the resource for inclusion in the California Register of Historical Resources or a local register or survey that meets the requirements of Public Resources Code §§50020.1(k) and 5024.1(g).

Significance Criteria

The proposed project impacts to cultural resources will be considered significant if:

- The project results in a substantial adverse change in the significance of historical resources as defined in CEQA Guidelines §15064.5. A substantial adverse change includes physical demolition, destruction, relocation, or alteration of a resource or its immediate surroundings such that the significance of the historical resources would be materially impaired.
- Cause a substantial adverse change in the significance of an archaeological resources pursuant to CEQA Guidelines §15064.5.
- Disturb any human remains, including those interred outside of formal cemeteries.

Discussion of Impacts

V a, b, and c). CEQA Guidelines state that generally, a resource shall be considered "historically significant" if the resource meets the criteria for listing in the California Register of Historical Resources including the following:

A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

B. Is associated with the lives of persons important in our past;

C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values;

D. Has yielded or may be likely to yield information important in prehistory or history (CEQA Guidelines §15064.5).

Generally, resources (buildings, structures, equipment) that are less than 50 years old are excluded from listing in the National Register of Historic Places unless they can be shown to be exceptionally important. The proposed amendments are expected to result in additional control measures at stationary sources of emissions, within or adjacent to overburdened communities. The modified rules would not require new facilities but may require sources to install air pollution control equipment (e.g., diesel particulate filters or other particulate control equipment), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. Any new equipment is expected to be compatible with the existing industrial/commercial character of the area where the existing sources are located.

No extensive construction or demolition activities or grading is expected to occur to install air pollution control equipment or implement emission reduction measures associated with the proposed rule amendments. Some affected facilities may have equipment or structures older than 50 years and may modify existing structures, (e.g., gasoline stations). However, this type of equipment usually does not meet the criteria identified in CEQA Guidelines §15064.5(a)(3) as historic resources.

No extensive construction or demolition activities or grading is expected to occur to install air pollution control equipment or implement emission reduction measures associated with the proposed rule amendments. These areas have already been graded and developed, and no substantial grading is expected to be required to implement the proposed rule amendments which could include the use of diesel particulate filters or other particulate control equipment, cleaner engines, or a reduction in operating times or throughput. Relocating emission sources would require minor construction activities, but those activities would still occur within the existing commercial or industrial area which has already been graded. Thus, the proposed rule amendments would not be expected to adversely affect historical or archaeological resources as defined in CEQA Guidelines §15064.5, or disturb human remains interred outside formal cemeteries. Therefore, no significant impacts to cultural resources are anticipated to occur as a result of the proposed project as no major construction activities are expected to be required.

Conclusion

Based upon these considerations, no significant adverse impacts to cultural resources are expected due to implementation of proposed amendments to Rules 2-1 and 2-5.

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI.	**ENERGY.** Would the project:				
a)	Result in potentially significant environmental impact due to wasteful, inefficient or unnecessary consumption of energy resources, during project construction or operations?	☐	☐	☑	☐
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☑	☐

Environmental Setting

Pacific Gas and Electric Company (PG&E) supplies electricity to over five million customers in central and northern California. The counties within the Air District (Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma) used over 55,400 gigawatt/hours (millions of kilowatt/hours) in 2019[2]. Residential electricity use accounts for approximately 30 percent of the electrical use and non-residential use accounts for approximately 70 percent. PG&E's electricity is supplied by natural gas power plants, nuclear generation, large hydroelectric facilities, and renewable sources (e.g., wind, geothermal, biomass, and small hydroelectric power).

In 2019, in California, approximately 43 percent of electricity was generated by natural gas, 32 percent was generated by renewables, 17 percent was generated by hydroelectric facilities, 8 percent was generated by nuclear, and 0.1 percent was generated by coal.[3]

In 2019, the counties within the Air District used approximately 2,950 million therms of natural gas.[4] Residential use accounts for approximately 37 percent of natural gas consumption, and non-residential use accounts for approximately 63 percent of natural gas use in Alameda County.

Regulatory Background

Energy efficiency requirements are primarily regulated at the state level. Title 24, California's Energy Efficiency Standards for Residential and Non-residential Buildings, details requirements to achieve minimum energy efficiency standards. The standards apply to new construction of both

[2] California Energy Commission, Electricity Consumption by County. Available at https://ecdms.energy.ca.gov/elecbycounty.aspx

[3] California Energy Commission, Total System Electric Generation. Available at: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2020-total-system-electric-generation/2019l

[4] California Energy Commission, Gas Consumption by County. Available at: http://www.ecdms.energy.ca.gov/gasbycounty.aspx

residential and non-residential buildings, and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. Compliance with these standards is verified and enforced through the local building permit process.

Some local cities within the Bay Area have developed and implemented green building ordinances, energy and climate action plans, and sustainability plans that address energy efficiency, such as the cities of Belmont, Benicia, Martinez, Oakland, Palo Alto, Richmond, San Francisco, South San Francisco, and Walnut Creek, as well the counties of Marin and Contra Costa, among others.

Significance Criteria

The impacts to energy will be considered significant if any of the following criteria are met:

- The project conflicts with adopted energy conservation plans or standards.
- The project results in substantial depletion of existing energy resource supplies.
- An increase in demand for utilities impacts the current capacities of the electric and natural gas utilities.
- The project uses non-renewable resources in a wasteful and/or inefficient manner.

Discussion of Impacts

6. a and b) The amendments to Rules 2-1 and 2-5 are designed to make technical and administrative changes to make these rules more health protective. The proposed amendments are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to overburdened communities. The modified rules would not require new facilities but may require sources to install air pollution control equipment (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks.

The amendments to Rules 2-1 and 2-5 are not expected to require new equipment but may require air pollution control measures. Most of the measures that may be required are not expected to require an increase in electricity or natural gas. For example, Tier 4 diesel engines may be required instead of Tier 3 diesel engines. A Tier 4 engine would not use additional energy (diesel fuel) than a Tier 3 engine. Relocation of equipment would not require additional energy. A reduction in operating hours for a gas station, for example, would likely use less energy than full operating hours. The types of equipment that are expected to be predominately required under the proposed rule amendments are not expected to require any substantial increase in electricity or natural gas. The amendments to Rules 2-1 and 2-5 are expected to predominately apply to emergency diesel engines used during electrical outages so switching to electricity is not expected to be an option for emergency engines.

Should larger facilities fall into Rules 2-1 and 2-5, other types of air pollution control measures could be required, e.g., baghouses and spray mist systems for particulate control. Baghouses require the use of electricity and could require an estimated 55,000 to 60,000 kilowatt-hours per year or 0.055 to 0.060 gigawatt-hours per year or less and 0.0001 percent of the electricity use in the Bay Area. None of the control measures are expected to require additional natural gas. Therefore, the proposed rule amendments are not expected to conflict with an energy conservation or renewable energy plan and the state will continue to move toward the increased use of renewable energy sources, reducing GHG emissions statewide. For example, California has adopted the "Renewable Portfolio Standard" for electric power which requires that at least 33 percent of the state's electric power come from renewable sources by 2020, and at least 50 percent must come from renewables by 2030. The proposed amendments to Rules 2-1 and 2-5 2 would not be expected to interfere or impact compliance with these state requirements.

Conclusion

Based upon these considerations, no significant adverse impacts to energy resources are expected due to implementation of the proposed amendments to Rules 2-1 and 2-5.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY / SOILS. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☑	☐
ii) Strong seismic ground shaking?	☐	☐	☑	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☑	☐
iv) Landslides?	☐	☐	☑	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☑	☐
c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☑	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the California Building Code, creating substantial direct or indirect risks to life or property?	☐	☐	☑	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	☐	☐	☑	☐
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	☐	☐	☑	☐

Environmental Setting

California has 11 natural geologic regions, known as geomorphic provinces, which are defined by the presence of similar physical characteristics, such as relief, landforms, and geology. Most of the Bay Area is located within the natural region of California known as the Coast Ranges geomorphic province, with the eastern portions of Contra Costa and Alameda Counties extending into the neighboring Great Valley geomorphic province, located east of the Coast Ranges. The Coast Range extends about 400 miles from Oregon south into Southern California and is characterized by a series of northwest trending ridges and valleys that roughly parallel the San Andreas fault zone. The San Francisco Bay is a broad, shallow regional structural depression created from an east-west expansion between the San Andreas and the Hayward fault systems.

Much of the Coast Range province is composed of marine sedimentary and volcanic rocks located east of the San Andreas Fault. The region west of the San Andreas Fault is underlain by a mass of basement rock that is composed of mainly marine sandstone and various metamorphic rocks. Marginal lands surrounding San Francisco Bay consist generally of alluvial plains of low relief that slope gently towards the bay from bordering uplands and foothills (ABAG, 2017). Unconsolidated alluvial deposits, artificial fill, and estuarine deposits, (including Bay Mud) underlie the low-lying region along the margins of the Carquinez Straight and Suisun Bay. The organic, soft, clay-rich sediments along the San Francisco and San Pablo Bays are referred to locally as Bay Mud and can present a variety of engineering challenges due to inherent low strength, compressibility and saturated conditions. Landslides in the region occur in weak, easily weathered bedrock on relatively steep slopes.

The San Francisco Bay Area is a seismically active region, which is situated on a tectonic plate boundary marked by the San Andreas Fault System. Several northwest trending active and potentially active faults are included with this fault system. Under the Alquist-Priolo Earthquake Fault Zoning Act, Earthquake Fault Zones were established by the California Division of Mines and Geology along “active” faults, or faults along which surface rupture occurred in Holocene time (the last 11,000 years). The San Andreas and the Hayward faults are the two faults considered to have the highest probabilities of causing a significant seismic event in the Bay Area. These two faults are classified as strike-slip faults that have experienced movement within the last 150 years. Other faults include the Rodgers Creek-Healdsburg, Concord-Green Valley, Marsh Creek-Greenville, San Gregorio-Hosgri, West Napa and Calaveras faults (ABAG, 2017). A major seismic event on any of these active faults could cause significant ground shaking and potential surface fault rupture. Other smaller faults in the region classified as potentially active include the Southampton and Franklin faults.

Ground movement intensity during an earthquake can vary depending on the overall magnitude, distance to the fault, focus of earthquake energy, and type of geological material. Areas that are underlain by bedrock tend to experience less ground shaking than those underlain by unconsolidated sediments such as artificial fill. Earthquake ground shaking may have secondary effects on certain foundation materials, including liquefaction, seismically induced settlement, and lateral spreading.

Important vertebrate and invertebrate fossils and unique geologic units have been documented throughout California. The fossil yielding potential of a particular area is highly dependent on the

geologic age and origin of the underlying rocks. Pleistocene or older (older than 11,000 years) continental sedimentary deposits are considered to have a high paleontological potential while Holocene-age deposits (less than 10,000 year old) are generally considered to have a low paleontological potential because they are geologically immature and are unlikely to contain fossilized remains of organisms. Metamorphic and igneous rocks have a low paleontological potential, either because they formed beneath the surface of the earth (such as granite), or because they have been altered under heat and high pressures (ABAG, 2017).

Regulatory Background

Construction is regulated by the local City or County building codes that provide requirements for construction, grading, excavations, use of fill, and foundation work including type of materials, design, procedures, etc., which are intended to limit the probability of occurrence and the severity of consequences from geological hazards. Necessary permits, plan checks, and inspections are generally required.

The City or County General Plan includes the Seismic Safety Element. The Element serves primarily to identify seismic hazards and their location in order that they may be taken into account in the planning of future development. The California Building Code is the principal mechanism for protection against and relief from the danger of earthquakes and related events.

In addition, the Seismic Hazard Zone Mapping Act (Public Resources Code §§2690 – 2699.6) was passed by the California legislature in 1990 following the Loma Prieta earthquake. The Act required that the California Division of Mines and Geology (DMG) develop maps that identify the areas of the state that require site specific investigation for earthquake-triggered landslides and/or potential liquefaction prior to permitting most urban developments. The act directs cities, counties, and state agencies to use the maps in their land use planning and permitting processes.

Local governments are responsible for implementing the requirements of the Seismic Hazards Mapping Act. The maps and guidelines are tools for local governments to use in establishing their land use management policies and in developing ordinances and reviewing procedures that will reduce losses from ground failure during future earthquakes.

Significance Criteria

The proposed project impacts on the geological environment will be considered significant if:

- Topographic alterations would result in significant changes, disruptions, displacement, excavation, compaction or over covering of large amounts of soil.
- Unique geological resources (paleontological resources or unique outcrops) are present that could be disturbed by the construction of the proposed project.
- Exposure of people or structures to major geologic hazards such as earthquake surface rupture, ground shaking, liquefaction or landslides.
- Secondary seismic effects could occur which could damage facility structures, e.g., liquefaction.

- Other geological hazards exist which could adversely affect the facility, e.g., landslides, mudslides.

Discussion of Impacts

VI a, c, and d). The amendments to Rules 2-1 and 2-5 are designed to make technical and administrative changes to make these rules more health protective. The proposed amendments are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to communities overburdened with cumulative air quality impacts. The modified rules would not require new facilities but may require sources to install air pollution control equipment (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks.

Geologic hazards are expected to be minimal as no major construction activities are expected to be required. Any new construction (including modifications to existing structures) requires compliance with the California Building Code. The California Building Code is considered to be a standard safeguard against major structural failures and loss of life. The goal of the code is to provide structures that will: (1) resist minor earthquakes without damage; (2) resist moderate earthquakes without structural damage, but with some non-structural damage; and (3) resist major earthquakes without collapse, but with some structural and non-structural damage. The California Building Code basis seismic design on minimum lateral seismic forces ("ground shaking"). The California Building Code requirements operate on the principle that providing appropriate foundations, among other aspects, helps to protect buildings from failure during earthquakes. The basic formulas used for the California Building Code seismic design require determination of the seismic zone and site coefficient, which represent the foundation conditions at the site. Compliance with the California Building Code would minimize the impacts associated with existing geological hazards.

VI b). The proposed rule amendments are expected to result in additional control measures at existing facilities. Any construction activities are expected to take place at already existing facilities that have been previously graded. Thus, the proposed rule amendments are not expected to result in substantial soil erosion or the loss of topsoil as construction activities are expected to be limited to existing industrial or commercial areas that have been previously graded and developed.

VI e). Septic tanks or other similar alternative wastewater disposal systems are typically associated with small residential projects in remote areas. The proposed rule amendments would affect existing and new facilities that have existing wastewater treatment systems or connected to appropriate wastewater facilities. Additionally, facilities affected by the proposed rule amendments are expected to be connected to appropriate wastewater treatment facilities and are not expected to rely on septic tanks or similar alternative wastewater disposal systems. Based on these considerations, septic tanks or other alternative wastewater disposal systems are not expected to be impacted by the proposed project.

VI f). Construction activities associated with the proposed rule amendments are expected to occur at primarily existing facilities in industrial/commercial areas. These areas have already been

graded and developed, and no substantial grading is expected to be required to implement amendments to Rules 2-1 and 2-5. Thus, the proposed rule amendments would not be expected to adversely affect paleontological resources. Therefore, no significant impacts to paleontological resources are anticipated to occur as a result of the proposed rule amendments as no major construction activities are expected to be required.

Conclusion

Based upon these considerations, no significant adverse impacts to geology and soils are expected due to implementation of the proposed amendments to Rules 2-1 and 2-5.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☑	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☑	☐

Environmental Setting

Global climate change refers to changes in average climatic conditions on the earth as a whole, including temperature, wind patterns, precipitation and storms. Global climate change is caused primarily by an increase in levels of greenhouse gases (GHGs) in the atmosphere. The major greenhouse gases are the so-called "Kyoto Six" gases – carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs) – as well as black carbon.[5] These greenhouse gases absorb longwave radiant energy (heat) reflected by the earth, which warms the atmosphere in a phenomenon known as the "greenhouse effect." The potential effects of global climate change include rising surface temperatures, loss in snow pack, sea level rise, ocean acidification, more extreme heat days per year, and more drought years.

Increases in the combustion of fossil fuels (e.g., gasoline, diesel, coal, etc.) since the beginning of the industrial revolution have resulted in a significant increase in atmospheric levels of GHGs. CO_2 levels have increased from long-term historical levels of around 280 ppm before the mid-18th century to over 400 ppm today. This increase in GHGs has already caused noticeable changes in the climate. The average global temperature has risen by approximately 1.4°F (0.8°C) over the past one hundred years, and 16 of the 17 hottest years in recorded history have occurred since 2001, according to the National Oceanic and Atmospheric Administration.

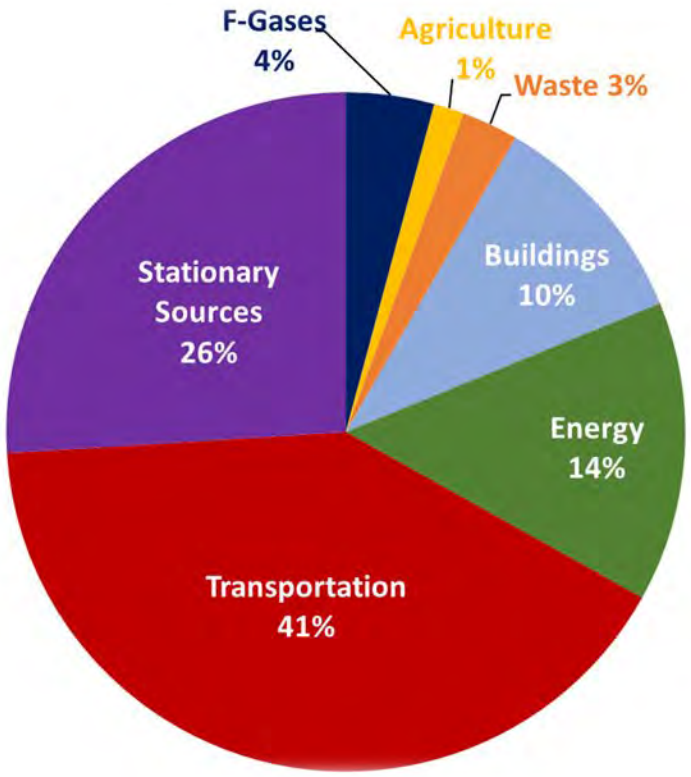
Total global GHG emissions contributing to climate change are in the tens of billions of metric tons of carbon dioxide equivalent (CO_2e) emissions per year. The Bay Area's contribution to the global total is approximately 85 million tons per year. Figure 3-2 presents a breakdown of the

[5] Technically, black carbon is not a gas but is made up of solid particulates or aerosols. It is included in the discussion of greenhouse gas emissions because, like true greenhouse gases, it is an important contributor to global climate change.

region's GHG emissions by major source categories. Transportation sources generate approximately 40 percent of the total, with the remaining 60 percent coming from stationary and area sources (see Figure 3-2).

FIGURE 3-2

2015 Bay Area GHG Emissions by Source Category (Total = 85 MMT CO_2e)

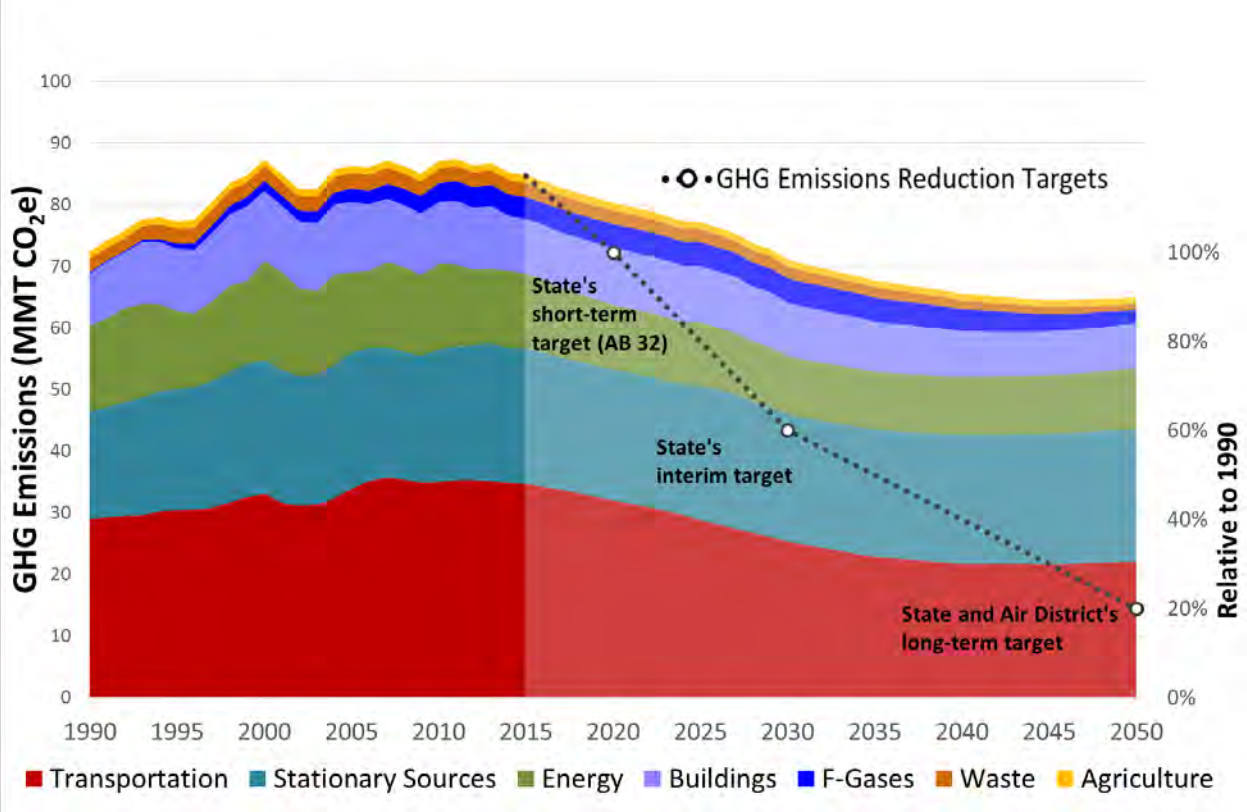


Source: BAAQMD, 2017b

Historically, regional GHG emissions rose substantially as the Bay Area industrialized. But emissions have peaked recently, and they are expected to decline in the coming years. Figure 3-3 shows the Bay Area's total GHG emissions since 1990, with projections for future emissions through 2050. As the figure shows, emissions are expected to decline in the future as the region continues to shift away from burning fossil fuels and towards renewable energy resources such as wind and solar power. Emissions will need to decline even more than currently projected, however, in order to reach the aggressive targets adopted by California and by the Air District. These GHG reduction goals are represented by the dashed line on the graph in Figure 3-3.

FIGURE 3-3

Projected Bay Area GHG Emissions by Sector Based on State Policies



Source: BAAQMD, 2017b

Regulatory Background

There is a general consensus that global temperature increases must be limited to well under 2°C in order to reduce the risks and impacts of climate change to an acceptable level. Limiting global climate change to no more than this amount drives GHG regulation at every level.

For purposes of the Bay Area, the most important regulatory actions on climate change have been undertaken by the State of California. To fulfill its share of the burden of keeping climate change within acceptable limits, California has committed to reducing its GHG emissions to 1990 levels by 2020, to 40 percent below 1990 levels by 2030, and to 80 percent below 1990 levels by 2050. This commitment is enshrined in AB 32, the Global Warming Solutions Act of 2006, which adopted the 2020 target; in 2016's SB 32 (Pavley), which adopted the 2030 target; and in Executive Order S-3-05, which adopted the 2050 target. The Air District has adopted the same 80 percent reduction target for 2050 for the Bay Area's GHG emissions, in Board of Directors Resolution 2013-11.

To achieve these emission reduction goals, the California legislature has directed the California Air Resources Board (CARB) to develop a Scoping Plan setting forth regulatory measures that CARB will implement, along with other measures, to reduce the state's GHG emissions. One of

the principal regulatory measures is CARB's Cap and Trade program, which requires industrial GHG sources to obtain "allowances" equal to their GHG emissions. The amount of available allowances is subject to a "cap" on total emissions statewide, which CARB will reduce each year. Regulated facilities will either have to reduce their emissions or purchase allowances on the open market, which will give them a financial incentive to reduce emissions and will ensure that total annual emissions from the industrial sector will not exceed the declining statewide cap.

California has also adopted the so-called "Renewable Portfolio Standard" for electric power generation, which requires that at least 33 percent of the state's electric power must come from renewable sources by 2020, and at least 50 percent must come from renewables by 2030. To complement these efforts on electricity generation, the state has also committed to increasing the energy efficiency of existing buildings by 50 percent by 2050 in order to reduce energy demand.

California has also adopted regulatory measures aimed at reducing GHG emissions from mobile sources. These measures include the so-called "Pavley" standards for motor vehicle emissions and the state's Low Carbon Fuel Standard, which set limits on the carbon intensity of transportation fuels. California has also adopted SB 375, the Sustainable Communities and Climate Protection Act of 2008, which requires regional transportation and land use planning agencies to develop coordinated plans, called "Sustainable Communities Strategies," to reduce GHG emissions from the transportation sector by promoting denser development and alternatives to driving. The current Sustainable Communities Strategy for the Bay Area is *Plan Bay Area 2040*, was adopted by the Metropolitan Transportation Commission and the Association of Bay Area Governments in July of 2017 (ABAG, 2017).

The Air District supports these statewide goals through action at the regional level. The Air District has committed to reducing the Bay Area's regional GHG emissions to 80 percent below 1990 levels by 2050, as noted above. The Air District has also committed to a broad suite of specific measures to address GHGs in the 2017 Clean Air Plan, *Spare the Air, Cool the Climate*. That document lays out the Air District's vision for what the Bay Area may look like in a post-carbon year 2050 and describes policies and actions that the region needs to take in the near- to mid-term to achieves these goals.

Significance Criteria

The Air District's May 2017 CEQA Air Quality Guidelines (BAAQMD, 2017a) established GHG thresholds for specific projects, general plans, and regional plans. An air quality rule does not fall neatly into any of these categories. Air quality rules are typically regional in nature, as opposed to general plans and community plans. In addition, air quality rules are usually specific to particular source types and particular pollutants.

The Air District's May 2017 CEQA Air Quality Guidelines (BAAQMD, 2017a) established a GHG threshold for air quality plans of "no net increase in emissions," which is appropriate for air quality plans because they include a mix of control measures with individual trade-offs. For example, one control measure may result in combustion of methane to reduce GHG emissions, while increasing criteria pollutant combustion emissions by a small amount. Those increases from the methane measure would be offset by decreases from other measures focused on reducing

criteria pollutants. In a particular rule development effort, there may not be opportunities to make these trade-offs.

The project level GHG threshold for stationary source projects is 10,000 metric tons of carbon dioxide equivalent (CO_2eq) emissions under the Air District CEQA Guidelines. This threshold is expected to capture approximately 95 percent of all GHG emissions from new permit applications from stationary sources within the jurisdiction of the Air District. The threshold level was calculated as an average of the combined CO_2 emissions from all stationary source permit applications submitted to the Air District during the three-year analysis period (BAAQMD, 2017a). The project-level GHG significance thresholds of 10,000 MT CO_2eq will be used to evaluate the cumulative GHG impacts associated with proposed amendments to Rule 2-1 and Rule 2-5.

Discussion of Impacts

VII a. The analysis of GHG emissions is a different analysis than for criteria pollutants for the following reasons. For criteria pollutant, significance thresholds are based on daily emissions because attainment or non-attainment is typically based on daily exceedances of applicable ambient air quality standards. Further, several ambient air quality standards are based on relatively short-term exposure effects to human health, e.g., one-hour and eight-hour. Using the half-life of CO_2, 100 years for example, the effects of GHGs are longer-term, affecting the global climate over a relatively long timeframe. GHGs do not have human health effects like criteria pollutants. Rather, it is the increased accumulation of GHGs in the atmosphere that may result in global climate change. Due to the complexity of conditions and interactions affecting global climate change, it is not possible to predict the specific impact, if any, attributable to GHG emissions associated with a single project. Furthermore, the GHG emissions associated with the proposed rule amendments would be small relative to total global or even state-wide GHG emissions. Thus, the significance of potential impacts from GHG emissions related to the proposed project has been analyzed for long-term operations on a cumulative basis, as discussed below.

The overall objective of the proposed amendments to Rules 2-1 and 2-5 is to reduce TAC and PM emissions from stationary sources, primarily in or adjacent to overburdened communities. The proposed rule amendments will reduce emissions by requiring applicable sources to implement air pollution control measures (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks.

Construction would likely require truck trips to deliver equipment, a construction crew of five to twenty workers, and a few pieces of construction equipment (e.g., cranes, forklift, aerial lifts, welders, and hand tools). The construction associated with the modified the rules are divided into two types of construction, small projects and large projects. Modifications to or the relocation of diesel engines and changes to stacks would be considered small projects. Construction of new air pollution control equipment or resizing existing air pollutions control equipment for facilities are considered large projects. Small projects are expected to take only a single day. Large projects are expected to take one month (20 working days). Annual construction emissions are based on 14 small projects and 1 large project.

The operation of the air pollution control equipment is not expected to generate any new GHG emissions since no new fired sources are expected. The GHG emission calculations assume one large project per year would be required and would use electricity for operations. Table 3-5 summarizes only the increases in operational GHG emission associated with amendments to Rules 2-1 and 2-5. See Appendix A for detailed emissions calculations.

TABLE 3-5

Greenhouse Gas Emissions Increases
(metric tons/yr)

Activity	**CO_2e**
Construction (Annual)	110.0
Operations	28.0
Total	138.0
BAAQMD Significance Threshold	10,000
Significant?	**No**

See Appendix A for detailed emission calculations.

The increases in GHG emissions associated with the construction and operation of the amendments to Rules 2-1 and 2-5 are expected to be less than the GHG CEQA threshold and, therefore, not expected to make a cumulatively considerable contribution to a significant cumulative impact caused by GHG emissions.

VII b. The amendments to Rules 2-1 and 2-5 will not conflict with any plans, policies, or regulations addressing climate change. As discussed above, applicable plans, policies and regulations are aimed at limiting global climate change to well under 2°C, and at reducing regional and state-wide emissions to 80 percent below 1990 levels by 2050 in order to achieve that goal. The amendments to Rules 2-1 and 2-5 will not conflict with the Bay Area's progress towards achieving that emission reduction target. In fact, it would implement portions of the 2017 Clean Air Plan and is intended to create a consistent regulatory framework for these operations. Further, the amendments to Rules 2-1 and 2-5 will not require affected facilities to make any substantial changes that would increase their GHG emissions, and they will not conflict with any regulatory efforts to achieve the state and regional GHG emission reduction goals under CARB's Scoping Plan, the District's 2017 Clean Air Plan, *Plan Bay Area 2040*, or any other local climate action plan.

Conclusion

Based upon these considerations, no significant adverse GHG impacts are expected due to implementation of the amendments to Rules 2-1 and 2-5.

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX.	**HAZARDS & HAZARDOUS MATERIALS.** Would the project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☑	☐
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☑	☐
c)	Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☑	☐
d)	Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☑	☐
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☑
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☑	☐
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☑

Environmental Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara Counties, and potions of western Solano and southern Sonoma Counties. Because the area of coverage is vast (approximately 5,600 square miles), land uses vary greatly and include commercial, industrial, residential, and agricultural uses.

Facilities and operations within the District handle and process substantial quantities of flammable materials and acutely toxic substances. Accidents involving these substances can result in worker or public exposure to fire, heat, blast from an explosion, or airborne exposure to hazardous substances.

Fires can expose the public or workers to heat. The heat decreases rapidly with distance from the flame and, therefore, poses a greater risk to workers at specific facilities where flammable materials and toxic substances are handled than to the public. Explosions can generate a shock wave, but the risks from explosion also decrease with distance. Airborne releases of hazardous materials may affect workers or the public, and the risks depend upon the location of the release, the hazards associated with the material, the winds at the time of the release, and the proximity of sensitive populations, e.g., residences, hospitals, and schools.

For all facilities and operations handling flammable materials and toxic substances, risks to the public are reduced if there is a buffer zone between process or storage units and sensitive populations or if prevailing winds blow away from them. Thus, the risks posed by operations at a given facility or operation are unique and determined by a variety of factors.

Hazards are related to the risks of fire, explosions, or releases of hazardous substances in the event of accident or upset conditions. Hazards are related to the production, use, storage, and transport of hazardous materials. Industrial production and processing facilities are potential sites for hazardous materials. Some facilities produce hazardous materials as their end product, while others use such materials as an input to their production processes. Examples of hazardous materials used by consumers include fuels, paints, paint thinner, nail polish, and solvents. Hazardous materials may be stored at facilities producing such materials and at facilities where hazardous materials are part of the production processes. Currently, hazardous materials are transported throughout the Bay Area in great quantities via all modes of transportation including rail, highway, water, air, and pipeline.

Regulatory Background

There are many federal and state rules and regulations that facilities handling hazardous materials must comply with which serve to minimize the potential impacts associated with hazards at these facilities.

Under the Occupational Safety and Health Administration (OSHA) regulations [29 Code of Federal Regulations (CFR) Part 1910], facilities which use, store, manufacture, handle, process, or move highly hazardous materials must prepare a fire prevention plan. In addition, 29 CFR Part 1910.119, Process Safety Management (PSM) of Highly Hazardous Chemicals, and Title 8 of the

California Code of Regulations, General Industry Safety Order §5189, specify required prevention program elements to protect workers at facilities that handle toxic, flammable, reactive, or explosive materials.

Section 112 (r) of the Clean Air Act Amendments of 1990 [42 U.S.C. 7401 et. Seq.] and Article 2, Chapter 6.95 of the California Health and Safety Code require facilities that handle listed regulated substances to develop Risk Management Programs (RMPs) to prevent accidental releases of these substances, U.S. EPA regulations are set forth in 40 CFR Part 68. In California, the California Accidental Release Prevention (CalARP) Program regulation (CCR Title 19, Division 2, Chapter 4.5) was issued by the Governor's Office of Emergency Services (OES). RMPs are documents prepared by the affected owner or operator of a stationary source containing detailed information including: (1) regulated substances held onsite at the stationary source; (2) offsite consequences of an accidental release of a regulated substance; (3) the accident history at the stationary source; (4) the emergency response program for the stationary source; (5) coordination with local emergency responders; (6) hazard review or process hazard analysis; (7) operating procedures at the stationary source; (8) training of the stationary source's personnel; (9) maintenance and mechanical integrity of the stationary source's physical plant; and (10) incident investigation. California updated the CalARP Program in October 2017, along with the state's PSM program, in response to an accident at the Chevron Richmond Refinery.

Affected facilities that store materials are required to have a Spill Prevention Control and Countermeasures (SPCC) Plan per the requirements of 40 Code of Federal Regulations, Section 112. The SPCC is designed to prevent spills from on-site facilities and includes requirements for secondary containment so spilled materials would not migrate off-site, provides emergency response procedures, establishes training requirements, and so forth.

The Hazardous Materials Transportation (HMT) Act is the federal legislation that regulates transportation of hazardous materials. The primary regulatory authorities are the U.S. Department of Transportation, the Federal Highway Administration, and the Federal Railroad Administration. The HMT Act requires that carriers report accidental releases of hazardous materials to the Department of Transportation at the earliest practical moment (49 CFR Subchapter C). The California Department of Transportation (Caltrans) sets standards for trucks in California. The regulations are enforced by the California Highway Patrol, among others.

California Health and Safety Code Section 25500 et seq., codifying Assembly Bill 2185 (Maxine Waters 1985), requires local agencies to regulate the storage and handling of hazardous materials and requires development of a business plan to mitigate the release of hazardous materials. Businesses that handle any of the specified hazardous materials must submit to government agencies (i.e., fire departments), an inventory of the hazardous materials, an emergency response plan, and an employee training program. The information in the business plan can then be used in the event of an emergency to determine the appropriate response action, the need for public notification, and the need for evacuation.

Contra Costa County has adopted an industrial safety ordinance that addresses the human factors that lead to accidents. The ordinance requires stationary sources to develop a written human

factors program that considers human factors as part of process hazards analyses, incident investigations, training, and operating procedures, among others.

Significance Criteria

The proposed project impacts associated with hazards will be considered significant if any of the following occur:

- Non-compliance with any applicable design code or regulation.
- Non-conformance with National Fire Protection Association standards.
- Non-conformance with regulations or generally accepted industry practices related to operating policy and procedures concerning the design, construction, security, leak detection, spill containment or fire protection.
- Exposure to hazardous chemicals in concentrations equal to or greater than the Emergency Response Planning Guideline (ERPG) 2 levels.
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Discussion of Impacts

VIII a - b. The amendments to Rules 2-1 and 2-5 are designed to make technical and administrative changes to make these rules more health protective. The proposed amendments are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to overburdened communities. The modified rules would not require new facilities but may require sources to install air pollution control equipment (e.g., diesel particulate filters), uses cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. These types of control measures would not introduce any new hazards or require the use of hazardous materials during either construction or operational activities. Further, any new equipment is expected to be compatible with the existing industrial/commercial character of the area.

Health and Safety Code §25506 specifically requires all businesses handling hazardous materials to submit a business emergency response plan to assist local administering agencies in the emergency release or threatened release of a hazardous material. Business emergency response plans generally require the following:

- Types of hazardous materials used and their locations;
- Training programs for employees including safe handling of hazardous materials and emergency response procedures and resources.
- Procedures for emergency response notification;

- Proper use of emergency equipment;
- Procedures to mitigate a release or threatened release of hazardous materials and measures to minimize potential harm or damage to individuals, property, or the environment; and
- Evacuation plans and procedures.

Hazardous materials at existing facilities would continue to be used in compliance with established OSHA or Cal/OSHA regulations and procedures, including providing adequate ventilation, using recommended personal protective equipment and clothing, posting appropriate signs and warnings, and providing adequate worker health and safety training. The exposure of employees is regulated by Cal-OSHA in Title 8 of the CCR. Specifically, 8 CCR 5155 establishes permissible exposure levels (PELs) and short-term exposure levels (STELs) for various chemicals. These requirements apply to all employees. The PELs and STELs establish levels below which no adverse health effects are expected. These requirements protect the health and safety of the workers, as well as the nearby population including sensitive receptors.

In general, all local jurisdictions and all facilities using a minimum amount of hazardous materials are required to formulate detailed contingency plans to eliminate, or at least minimize, the possibility and effect of fires, explosion, or spills. In conjunction with the California Office of Emergency Services, local jurisdictions have enacted ordinances that set standards for area and business emergency response plans. These requirements include immediate notification, mitigation of an actual or threatened release of a hazardous material, and evacuation of the emergency area.

The above regulations provide comprehensive measures to reduce hazards of explosive or otherwise hazardous materials. Compliance with these and other federal, state and local regulations and proper operation and maintenance of equipment should ensure the potential for accidental releases of hazardous materials is not significant. Further, the proposed amendments to Rules 2-1 and 2-5 are not expected to require handling additional types of hazardous materials. Therefore, the proposed amendments to Rules 2-1 and 2-5 are not expected to create a significant hazard to the public or environment.

VIII c. Schools may be located within a quarter mile of facilities affected by the proposed rules amendments. The proposed amendments to Rules 2-1 and 2-5 are not expected to result in the construction or operation of equipment or result in modifications to existing equipment, that would generate hazardous emissions, or result in the handling of hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school. The proposed rule amendments are expected to result in a reduction in TAC emissions and a reduction in the related health risk associated with exposure to TAC emissions in overburdened communities, providing emission and health benefits. Therefore, no increase in hazardous emissions is expected due to implementation of the proposed amendments to Rule 2-1 and 2-5.

VIII d. Government Code §65962.5 requires creation of lists of facilities that may be subject to Resource Conservation and Recovery Act (RCRA) permits or site cleanup activities. It is not

known if the affected stationary sources are located on the hazardous materials sites list pursuant to Government Code §65962.5. However, the proposed rule amendments would not interfere with site cleanup activities or create additional site contamination, and would not be expected to create a significant hazard to the public or environment.

VIII e. The proposed rule amendments would not result in a safety hazard for people residing or working within two miles of a public airport. No impacts on airports or airport land use plans are anticipated from implementation of the amendments to Rules 2-1 and 2-5. Modifications are expected to be confined to the existing industrial/commercial land uses. Therefore, no significant adverse impacts on an airport or airport land use plan are expected.

VIII f. Modifications may be required to implement air pollution control measures at facilities affected by the amendments to Rules 2-1 and 2-5. The construction of air pollution control equipment would be expected to occur in existing industrial or commercial areas. Implementation of these types of control measures would not be expected to interfere with an adopted emergency response plan or emergency evacuation plan or require street closures that could impact emergency response activities. Therefore, implementation of the proposed rule amendments would not be expected to impair implementation of interfere with an adopted emergency response plan or emergency evacuation plan.

VIII g. Facilities affected by the proposed amendments to Rules 2-1 and 2-5 may be adjacent to wildlands. The proposed rule amendments are not expected to generate additional development that would place structures closer to wildland areas as it would require air pollution control equipment and measures at existing facilities. It is expected that facilities adjacent to wildland areas take appropriate and required actions to protect their property from wildland fires. The proposed rule amendments would not increase the existing risk of fire hazards in areas with flammable brush, grass, or trees, nor would it increase fire risk by increasing the use of flammable materials. The proposed amendments to Rules 2-1 and 2-5 are not expected to expose people or structures to wild fires. Therefore, no significant increase in fire hazards is expected due to the proposed new rule.

Conclusion

Based upon these considerations, no significant adverse impacts to hazards and hazardous materials are expected due to implementation of the proposed amendments to Rules 2-1 and 2-5.

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
X.	**HYDROLOGY / WATER QUALITY.** Would the project:				
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☑	☐
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☑	☐
c)	Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:				
i)	result in substantial erosion or siltation onsite or offsite;	☐	☐	☑	☐
ii)	substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☑	☐
iii)	create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;	☐	☐	☑	☐
iv)	impede or redirect flood flows?	☐	☐	☑	☐
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☑	☐
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☑	☐

Environmental Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles). Reservoirs and drainage streams are

located throughout the area within the BAAQMD's jurisdiction, and discharge into the Bays. Marshlands incised with numerous winding tidal channels containing brackish water are located throughout the Bay Area.

The San Francisco Bay estuary system is one of the largest in the country and drains approximately 40 percent of California. Water from the Sacramento and San Joaquin Rivers of the Central Valley flow into what is known as the Delta region, then into the sub-bays, Suisun Bay and San Pablo Bay, and finally into the Central Bay and out the Golden Gate strait. The Delta is a large triangle of interconnected sloughs and agricultural "islands" that forms a key link in California's water delivery system. Some of the fresh water flows through the Delta and into Bay, but much is diverted from the Bay for agricultural, residential, and industrial purposes, as well as delivery to distant cities of southern California as part of state and federal water projects (ABAG, 2017).

The two major drainages, the Sacramento and San Joaquin Rivers receive more than 90 percent of runoff during the winter and spring months from rainstorms and snow melt. San Francisco Bay encompasses approximately 1,600 square miles and is surrounded by the nine Bay Area counties of which seven border the Bay. Other surface waters flow either directly to the Bay or Pacific Ocean. The drainage basin that contributes surface water flows directly to the Bay covers a total area of 3,464 square miles. The largest watersheds include Alameda Creek (695 square miles), the Napa River (417 square miles), and Coyote Creek (353 square miles) watersheds. The San Francisco Bay estuary includes deep-water channels, tidelands, and marshlands that provide a variety of habitats for plants and animals. The salinity of the water varies widely as the landward flows of saline water and the seaward flows of fresh water converge near the Benicia Bridge. The salinity levels in the Central Bay can vary from near oceanic levels to one quarter as much, depending on the volume of freshwater runoff (ABAG 2017).

Surface waters in the Bay Area include freshwater rivers and streams, coastal waters, and estuarine waters. Estuarine waters include the San Francisco Bay Delta from the Golden Gate Bridge to the Sacramento and San Joaquin Rivers, and the lower reaches of various streams that flow directly into the Bay, such as the Napa and Petaluma Rivers in the North Bay and the Coyote and San Francisquito Creeks in the South Bay (ABAG, 2017).

The Bay Area region is divided into a total of 28 groundwater basins. The ten primary groundwater basins in the Bay Area are the Petaluma Valley, Napa-Sonoma Valley, Suisun-Fairfield Valley, San Joaquin Valley, Clayton Valley, Diablo Valley, San Ramon Valley, Livermore Valley, Sunol Valley, and Santa Clara Valley basins. Groundwater in the region is used for numerous purposes, including municipal and industrial water supply. However, groundwater use accounts for only about five percent of the total water usage (ABAG, 2017).

Together, surface water and ground water supply approximately 31 percent of Bay Area water. Surface water from local rivers and streams (including the Delta) is an important source for all Bay Area Water agencies, but particularly in the North Bay counties, where access to imported water is more limited because of infrastructure limitations. The greatest proportion of Bay Area water is imported from Sierra Nevada and Delta sources, comprising approximately 66 percent of supply. The primary Sierra Nevada sources are the Mokelumne River and Tuolumne River watersheds. Several Bay Area water agencies receive Delta water through the State and Central

Valley Water Projects, which comprise a vast network of canals and aqueducts for the delivery of water throughout the Bay Area and the Central Valley (ABAG, 2017).

The use of recycled water in the Bay Area has come to be widely used for a number of applications, including landscape irrigation, agricultural uses, commercial and industrial purposes and as a supply to the area's wetlands. The Alameda County Water District operates the Newark Desalination Facility which supplies approximately 12.5 million gallons per day to the distribution system (ABAG, 2017).

Wastewater treatment in the Bay Area is provided by various agencies as well as individual city and towns wastewater treatment systems. Some treatment plants serve individual cities while others serve multiple jurisdictions. More than 50 agencies provide wastewater treatment throughout the Bay Area. Most industrial facilities, including refineries, have wastewater and storm water treatment facilities and discharge treated wastewater under the requirements of National Pollutant Discharge Elimination System (NPDES) permits.

Regulatory Background

The Federal Clean Water Act of 1972 primarily establishes regulations for pollutant discharges into surface waters in order to protect and maintain the quality and integrity of the nation's waters. This Act requires industries that discharge wastewater to municipal sewer systems to meet pretreatment standards. The regulations authorize the U.S. EPA to set the pretreatment standards. The regulations also allow the local treatment plants to set more stringent wastewater discharge requirements, if necessary, to meet local conditions.

The 1987 amendments to the Clean Water Act enabled the U.S. EPA to regulate, under the NPDES program, discharges from industries and large municipal sewer systems. The U.S. EPA set initial permit application requirements in 1990. The State of California, through the State Water Resources Control Board, has authority to issue NPDES permits, which meet U.S. EPA requirements, to specified industries.

The Porter-Cologne Water Quality Act is California's primary water quality control law. It implements the state's responsibilities under the Federal Clean Water Act but also establishes state wastewater discharge requirements. The Regional Water Quality Control Board administers the state requirements as specified under the Porter-Cologne Water Quality Act, which include storm water discharge permits. The water quality in the Bay Area is under the jurisdiction of the San Francisco Bay Regional Water Quality Control Board.

In response to the Federal Act, the State Water Resources Control Board prepared two state-wide plans in 1991 and 1995 that address storm water runoff: the California Inland Surface Waters Plan and the California Enclosed Bays and Estuaries Plan, which have been updated in 2005 as the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California. Enclosed bays are indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. San Francisco Bay, and its constituent parts, including Carquinez Strait and Suisun Bay, fall under this category.

The San Francisco Bay Basin Plan identifies the: (1) beneficial water uses that need to be protected; (2) the water quality objectives needed to protect the designated beneficial water uses; and (3) strategies and time schedules for achieving the water quality objectives. The beneficial uses of the Carquinez Strait that must be protected include water contact and non-contact recreation, navigation, ocean commercial and sport fishing, wildlife habitat, estuarine habitat, fish spawning and migration, industrial process and service supply, and preservation of rare and endangered species. The Carquinez Strait and Suisun Bay are included on the California list as impaired water bodies due to the presence of chlordane, copper, DDT, diazinon, dieldrin, dioxin and furan compounds, mercury, nickel, PCBs, and selenium.

Significance Criteria

Water Demand:

- The existing water supply does not have the capacity to meet the increased demands of the project, or the project would use more than 263,000 gallons per day of potable water.

Water Quality:

- The project will cause degradation or depletion of ground water resources substantially affecting current or future uses.
- The project will cause the degradation of surface water substantially affecting current or future uses.
- The project will result in a violation of National Pollutant Discharge Elimination System (NPDES) permit requirements.
- The capacities of existing or proposed wastewater treatment facilities and the sanitary sewer system are not sufficient to meet the needs of the project.
- The project results in substantial increases in the area of impervious surfaces, such that interference with groundwater recharge efforts occurs.
- The project results in alterations to the course or flow of floodwaters.

Discussion of Impacts

IX a. The amendments to Rules 2-1 and 2-5 are designed to make technical and administrative changes to make these rules more health protective. The proposed amendments are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to overburdened communities. The modified rules would not require new facilities but may require sources to install air pollution control equipment (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks.

The proposed rule amendments are expected to result in additional control measures at existing facilities. Any construction activities are expected to take place at already existing facilities that have been previously graded and would not require any major grading. Water may be misted to keep soil moist, thus minimizing fugitive dust. However, water would not be sprayed in sufficient quantities to generate water runoff that could potentially result in waste discharge or water quality impacts.

The amendments to Rules 2-1 and 2-5 would not require new facilities but may require sources to install air pollution control equipment (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. Water spray/mist systems for particulate control may be required for larger industrial sources, although it is not expected to be common. Most of the control measures would not require the use of any additional water. While water spray/mist systems use water, create small water droplets that are more effective at contacting small dust particles than water spray systems. Estimates of water mist systems indicate that they are 10-20 times more effective at reducing fugitive dust per gallon of water. Water mist systems produce very small water droplets that come into contact with dust particles. Because the water use is in a very fine mist, the amount of water use is reduced, as compared to a water spray, such that the application of water is minimal and no water runoff is expected. Therefore, the proposed rule amendments are not expected to result in an increase in water runoff, wastewater discharge, would not be expected to result in water quality impacts, and would not result in the degradation of surface water. The proposed rule amendments are not expected to result in any modifications to NPDES permits or result in violation of NPDES permits. Further, the proposed rule amendments would not result in an increase in wastewater that requires treatment and would not impact any wastewater treatment facility.

IX b and e. The amendments to Rules 2-1 and 2-5 would not require new facilities but may require sources to install air pollution control equipment (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. These types of measures would not require the use of any additional water. Water spray/mist systems for particulate control may be required for larger industrial sources, although the use of water spray/mist systems are not expected to be common.

No grading or extensive site preparation is expected to be required to construct foundations, for example, thus requiring little or no water for fugitive dust control. Therefore, little or no water for dust suppression purposes is expected to be needed for construction activities under the proposed rule amendments.

The amendments to Rules 2-1 and 2-5 would not require new facilities but may require sources to install air pollution control measures (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. These types of measures would not require the use of any additional water. The installation of water spray/mist systems could be used at larger facilities (e.g., manufacturing facilities, waste transfer facilities, concrete manufacturing facilities, etc.) to minimize particulate emissions. A mist system is estimated to use an average of 6,300 gallons per day (SCAQMD, 2011), for a total increase of 63,000 gallons per day. The water use would be considered significant if it exceeded the CEQA threshold of 263,000 gallons or more of potable water per day. Since the proposed rule

amendments would only be expected to require 2-3 water systems at most (126,000 to 189,000 gallons per day), the water use associated with the proposed amendments to Rules 2-1 and 2-5 will not significantly impact water demand or interfere with groundwater recharge or cause any notable change in the groundwater table level.

IX c. The amendments to Rules 2-1 and 2-5 would not require new facilities but may require sources to install air pollution control equipment (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. The proposed rule amendments do not have the potential to substantially increase the area subject to runoff since construction will be minor in scope and limited to minor construction activities at existing facilities. The type of emission control measures that would be installed are not expected to result in a substantial increase in impervious surfaces that would result in an increase in water runoff. Additionally, facilities and major construction sites are typically required to develop a SWPPP to address storm water impacts. The proposed rule amendments are also not expected to alter the existing drainage or drainage patterns, result in erosion or siltation, alter the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite as there will be no significant water use. Therefore, no significant adverse impacts to storm water runoff or existing drainage patterns are expected as a result of the proposed rule amendments.

IX d. Proposed amendments to Rules 2-1 and 2-5 would not include the construction of new or relocation of existing housing or other types of facilities and, as such, would not require the placement of housing or other structures within a 100-year flood hazard area. (See also XIII "Population and Housing"). Any construction activities associated with implementation of the proposed rule amendments would occur within the confines of existing facilities and as a result, the proposed project would not be expected to create or substantially increase risks from flooding; expose people or structures to significant risk of loss, injury or death involving flooding; or increase existing risks, if any, of inundation by seiche, tsunami, or mudflow.

Conclusion

Based upon these considerations, no significant adverse impacts to hydrology and water quality are expected due to implementation of the proposed amendments to Rules 2-1 and 2-5.

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI.	**LAND USE / PLANNING.** Would the project:				
a)	Physically divide an established community?	☐	☐	☐	☑
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☑

Environmental Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles), so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses. The land uses surrounding the Bay margins tend to be more intensely developed, particularly from San Francisco south along the Peninsula to Santa Clara County, and Contra Costa County south through Alameda County to Santa Clara County. These areas also include extensive networks of open space. The counties north of the Bay (Marin, Sonoma, and Napa) are more sparsely developed with a combination of suburban development, smaller cities and towns, and agriculture defining the landscape. Other areas of the Bay Area, such as the East Bay and Solano County, tend to be more suburban in character, with heavy industry related to oil refineries dotting the landscape as well as agriculture (ABAG, 2017).

Approximately 18 percent of the region's 4.8 million acres are considered to be urban or built-up land according to the California Farmland Mapping and Monitoring Program. The remaining undeveloped area includes open space and agricultural lands as well as water bodies and parks. Approximately 29 percent of the region is identified as protected open space. The Bay Area includes 101 cities with San Jose, San Francisco, and Oakland representing the largest urbanized centers (ABAG, 2017).

The proposed amendments to Rules 2-1 and 2-5 will affect stationary sources of emissions within an adjacent to overburdened communities. These sources are located in industrial or commercial areas throughout the Bay Area.

Regulatory Background

Land uses are generally protected and regulated by the City and/or County General Plans through land use and zoning requirements.

Significance Criteria

The proposed project impacts will be considered significant on land use and planning if the project conflicts with the land use and zoning designations established by local jurisdictions, or any applicable habitat conservation or natural community conservation plan.

Discussion of Impacts

X a and b. The amendments to Rules 2-1 and 2-5 are designed to make technical and administrative changes to make these rules more health protective. The proposed amendments are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to overburdened communities. The modified rules would not require new facilities but may require existing sources to install air pollution control equipment or implement control measures. The affected sources are expected to be located in commercial or industrial areas and, thus, are not expected to affect land use and planning. All construction would take place at already existing facilities that have been previously graded. Thus, the proposed project would not result in impacts that would physically divide an established community.

The proposed project is expected to primarily affect industrial or commercial areas. Land uses surrounding industrial/commercial areas can vary considerably and include industrial areas, commercial areas, open space, and residential areas. The General Plans and land use plans for areas with industrial land uses, such as Contra Costa County, allow for and encourage the continued use of industrial land uses within their respective communities. Some of the General Plans encourage the modernization of existing industrial areas. The proposed rule amendments would help to minimize TAC emissions which are a potential source of health impacts that may generate land use conflicts, thus providing beneficial health impacts.

Conclusion

Based upon these considerations, no significant adverse land use impacts are expected due to the implementation of the proposed amendments to Rules 2-1 and 2-5.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☑
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☑

Environmental Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles), so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses.

According to the California Department of Conservation Division of Mines and Geology's Aggregate Resources Map, two Aggregate Resource areas are located in the Bay Area. North San Francisco has 492 million tons of permitted aggregate reserves sector nad South San Francisco has 1, 320 million tons of permitted reserves. Other smaller aggregate production areas in the Bay Area include Fremont, Pleasanton, Santa Clara, Santa Cruz, among others (California Geological Survey, 2018).

Regulatory Background

Mineral resources are generally protected and regulated by the City and/or County General Plans through land use and zoning requirements.

Significance Criteria

The proposed project impacts on mineral resources will be considered significant if:

- The project would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- The proposed project results in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Discussion of Impacts

XI a-b. The proposed amendments to Rules 2-1 and 2-5 are not associated with any action that would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state, or of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Modifications may be required to implement air pollution control equipment or measures at existing industrial/commercial facilities. Any new equipment or facility modifications associated with the proposed rule amendments are not expected to result in impacts to mineral resources that are of value to the region or result in the loss of a locally important mineral resource site as affected facilities are not expected to be located in areas with mineral resources. Thus, no significant adverse impacts to mineral resources are expected.

Conclusion

Based upon these considerations, no significant adverse impacts to mineral resources are expected due to implementation of proposed amendments to Rules 2-1 and 2-5.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE. Would the project:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☑	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☑	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☑

Environmental Setting

The ambient noise environment in the urban areas of the Bay Area is defined by a wide variety of noise sources, with the predominant noise source being traffic. Traffic noise exposure is primarily a function of the volume of vehicles per day, the speed of those vehicles, the type of ground surface, the number of those vehicles represented by medium and heavy trucks, the distribution of those vehicles during daytime and nighttime hours, and the proximity of noise-sensitive receptors to the roadway. Existing average traffic noise exposure ranges from 52.1 decibels (dBA) (next to collector and small roads) to as high as 75.9 dBA (next to freeways). Bus transit also contributes to roadway noise levels. In San Francisco, a large portion of the transit bus fleet is electrified and, consequently, the contribution of bus transit to localized roadway noise levels is decreased (ABAG, 2013).

The Bay Area is also presently affected by noise from freight and passenger rail operations. While these operations generate significant noise levels in the immediate vicinity of the railways, train operations are intermittent and area railways are widely dispersed. Commuter rail such as San Francisco Muni Metro and Santa Clara Valley Transportation Authority (VTA) operate with more frequency than standard gauge rail operations but lower speeds resulting in lower noise levels. Bay Area Rapid Transit (BART) operations, on the other hand, can attain higher speeds and have the potential for greater noise levels along extended stretches. Noise levels from rail operations in

the Bay Area can range from 70 dBA to 82 dBA, Community Noise Equivalent Level (CNEL). Train operations may be a source of ground vibration near the tracks (ABAG, 2017).

The Bay Area is home to many airports—including public use, private use, and military facilities. Major airports include San Francisco International, Oakland International and Norman Y. Mineta San José International. In addition to the numerous daily aircraft operations originating and terminating at these facilities, aircraft not utilizing these airports frequently fly over the Bay Area. All of these operations contribute to the overall ambient noise environment. In general, like rail noise, the proximity of the receiver to the airport and aircraft flight path determines the noise exposure. Other contributing factors include the type of aircraft operated, altitude of the aircraft, and atmospheric conditions. Atmospheric conditions may contribute to the direction of aircraft operations (flow) and affect aircraft noise propagation (ABAG, 2017).

Based on the adopted Airport Land Use Compatibility Plan (ALUCP) for San Francisco International Airport, the 65 dBA CNEL contour extends approximately 6 miles northwest of the airport. Based on the ALUCP for Oakland International Airport, the 65 dBA CNEL contour extends approximately 5 miles south of the airport. Based on the ALUCP for Mineta San Jose International Airport, the 65 dBA CNEL contour extends approximately 2.5 miles northwest from the airport. Many other smaller airports and airstrips exist within the Bay Area with widely varying noise levels that contribute to the existing noise environment (ABAG, 2017)

A wide variety of industrial and other non-transportation noise sources are located within the Bay Area. These include manufacturing plants, landfills, treatment plants (e.g., water), power generation facilities, refineries, food packaging plants, lumber mills, and aggregate mining facilities, just to name a few. Noise generated by these sources varies widely, but in many cases may be a significant if not dominant contributor to the noise environment in a specific community (ABAG, 2017).

Regulatory Background

Noise levels related to construction and operation activities are addressed in local General Plan policies and local noise ordinance standards. The General Plans and noise ordinances generally establish allowable noise limits within different land uses including residential areas, other sensitive use areas (e.g., schools, churches, hospitals, and libraries), commercial areas, and industrial areas.

Significance Criteria

The proposed project impacts on noise will be considered significant if:

- Construction noise levels exceed the local noise ordinances or, if the noise ordinance is currently exceeded, project noise sources increase ambient noise levels by more than three decibels (dBA) at the closest off-site receptor.
- The proposed project operational noise levels exceed any of the local noise ordinances at the site boundary or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three dBA at the site boundary.

Discussion of Impacts

XII a and b. The proposed amendments to Rules 2-1 and 2-5 would not require new facilities but may require existing sources to implement air pollution control measures (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. These types of measures are not expected to require extensive construction or demolition activities or grading to install the control equipment or implement the emission reduction measures. Diesel particulate filters could be installed on existing equipment with no construction activities. Relocating emission sources or stacks is also expected to require minimal activities as they would be relocated within the existing site. A reduction in operating hours or throughput would require no construction activities. The equipment would be installed at existing facilities that have been previously graded.

The locations of specific projects and the type of equipment that would be used is currently unknown. Noise from construction activities can vary greatly from 65 to 80 dBA or more, depending on the type of construction equipment (U.S. FTA, 2018). Noise from construction activities would diminish rapidly with distance from a constructive site, generally at a rate of six decibels per doubling of distance. For example, a noise level of 86 decibels measured at 50 feet from the noise source would decrease to 80 decibels at 100 feet, 74 decibels at 200 feet, 68 decibels at 400 feet, and 62 decibels at 800 feet. Most local cities and counties limit construction activities to daytime houses (e.g., between 7:00 am and 7:00 pm Monday through Friday). Compliance with local noise requirements would limit noise activities to daytime hours during weekdays and avoid construction during the more sensitive nighttime hours. Further construction activities are expected to be limited to industrial/commercial areas and would be temporary. Therefore, noise impacts associated with construction activities are expected to be less than significant.

The existing noise environment at the affected facilities is typically dominated by noise from existing equipment onsite, vehicular traffic around the facilities, and trucks entering and exiting facility premises. No new major industrial equipment is expected to be required to be installed due to the proposed rule amendments. Control measures such as, diesel particulate filters, cleaner equipment (e.g., Tier 4 engines), reduced operating times/througput, or relocated emission sources or stacks are not major sources of noise and would result in little to no noise impacts. Any noise producing equipment must comply with local noise ordnances and applicable OSHA and Cal/OSHA noise requirements. Compliance with these noise requirements would apply to affected facilities and would be expected to limit noise activities to acceptable levels. Therefore, noise impacts associated with operational activities are expected to be less than significant.

The proposed rule amendments are not expected to generate or expose people to excessive ground borne vibration or ground borne noise. No large construction equipment that would generate substantial noise or vibration (e.g., backhoes, graders, jackhammers, etc.), no new industrial equipment that would generate vibration, and no increase in traffic is expected to be generated.

XII c. It is not known if the existing commercial or industrial sites affected by the proposed rule amendments are located within existing airport land use plans. The addition of new or modification of existing facilities would not expose people residing or working in the project area

to excessive noise levels associated with airports, as this type of equipment is not typically noise generating equipment. The proposed amendments to Rules 2-1 and 2-5 would not locate residents or commercial buildings or other sensitive noise sources closer to airport operations.

Conclusion

Based upon these considerations, no significant adverse noise impacts are expected due to implementation of the proposed amendments to Rules 2-1 and 2-5.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION / HOUSING. Would the project:				
a) Induce substantial unplanned population growth in an area either directly (e.g., by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)?	☐	☐	☐	☑
b) Displace a substantial number of existing people or housing units, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑

Environmental Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles), so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses. The amendments to Rules 2-1 and 2-5 would apply to facilities which are typically located within industrial or commercial areas.

Population in the Bay Area in 2015 was about 7.6 million people which is about 20 percent of California's population. The population of the Bay Area is expected to grow to about 9.6 million people by 2040. Approximately 4 million people in the Bay Area were employed in 2015, and that number is expected to grow to 4.7 million jobs by 2040. There were approximately 2.8 million households in the Bay Area in 2015, and the number of households is expected to increase to 3.4 million by 2040 (ABAG, 2017).

Regulatory Background

Population and housing growth and resources are generally protected and regulated by the City and/or County General Plans through land use and zoning requirements.

Significance Criteria

The proposed project impacts on population and housing will be considered significant if:

- The demand for temporary or permanent housing exceeds the existing supply.

- The proposed project produces additional population, housing or employment inconsistent with adopted plans either in terms of overall amount or location.
- The project displaces substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere in excess of that contained in a City or County Housing Element.

Discussion of Impacts

XIII a). The amendments to Rules 2-1 and 2-5 are designed to make technical and administrative changes to make these rules more health protective. The proposed amendments are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to overburdened communities. The modified rules would not require new facilities but may require sources to implement air pollution control measures.

It is expected that the existing labor pool would accommodate the labor requirements for the any construction activities (should they be required), as the existing labor pool in the Bay Area is approximately 7.6 million people. In addition, it is not expected that the affected facilities would need to hire additional permanent personnel to implement the proposed rule amendments. As such, implementing the proposed amendments to Rules 2-1 and 2-5 are not expected to induce substantial population growth.

XIII b). As discussed previously, the proposed amendments to Rules 2-1 and 2-5 are expected to occur at existing industrial/commercial facilities. The implementation of the proposed rule amendments are not expected to result in the creation of any industry/business that would affect population growth, directly or indirectly induce the construction of single- or multiple-family units, or require the displacement of people or housing elsewhere in the Bay Area. Based upon these considerations, significant population and housing impacts are not expected from the implementation of the proposed rule amendments.

Conclusion

Based upon these considerations, no significant adverse impacts to population and housing are expected due to the implementation of the proposed amendments to Rules 2-1 and 2-5.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. PUBLIC SERVICES.				
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:	☐	☐	☐	☑
Fire protection?				
Police protection?	☐	☐	☐	☑
Schools?	☐	☐	☐	☑
Parks?	☐	☐	☐	☑
Other public facilities?	☐	☐	☐	☑

Environmental Setting

The jurisdiction of the Air District covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties.

Public services are provided by a wide variety of local agencies. Fire protection services are managed at the local level, typically by municipalities, counties, fire protection districts, or volunteer fire companies. California Government Code §38611 states that any city organized under general law must establish a fire department unless it is included within the boundaries of an established fire protection district. State and federal lands are generally served by State and federal fire agencies, e.g., CALFIRE and National Park Service. In some cases, businesses and native tribes manage their own fire departments. Each fire protection agency is responsible for serving its own prescribed area, but mutual aid agreements are in wide use across the region such that agencies can rely on assistance from neighboring agencies in the case of overwhelming demand (ABAG, 2017).

Police services are provided on the State, county, and local levels. Police services provide law enforcement in crime prevention, traffic and congestion control, safety management, emergency response, and homeland security. The California Highway Patrol (CHP) is responsible for police protection along the interstate highway systems and provides services for traffic management,

emergency response, and protection of the highway system. Each county in the Bay Area has its own sheriff's department responsible for police protection in unincorporated areas of each county. Each incorporated city and town has a police department responsible for police protection within its own jurisdiction. Unincorporated areas and individual cities and towns also may contract with county sheriff departments for police services instead of providing their own (ABAG, 2017).

Although the California public school system is under the policy direction of the Legislature, the California Department of Education relies on local control for the management of school districts. School district governing boards and district administrators allocate resources among the schools of the district and set education priorities for their schools. Each jurisdiction in the Bay Area provides residents with local public education facilities and services, including elementary, middle, secondary, and post-secondary schools, as well as special and adult education. As of 2015-2016 school year, there were 2,018 public and charter schools in the Bay Area with 1,019,853 enrolled students and 51,702 teachers (ABAG, 2017).

Public facilities within the Air District are managed by different county, city, and special-use districts.

Regulatory Background

City and/or County General Plans usually contain goals and policies to assure adequate public services are maintained within the local jurisdiction.

Significance Criteria

The proposed project impacts on public services will be considered significant if the project results in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time or other performance objectives.

Discussion of Impacts

XIV a. The amendments to Rules 2-1 and 2-5 are designed to make technical and administrative changes to make these rules more health protective. The proposed amendments are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to overburdened communities. The modified rules would not require new facilities but may require sources to implement air pollution control measures. No additional fire or police protection services are expected to be required due to the proposed rule amendments as they would apply to existing emission sources.

As noted in the "Population and Housing" discussion above, the proposed rule amendments are not expected to induce population growth because the existing local labor pool (e.g., workforce) is expected to be sufficient to accommodate the very minor construction activities that could be required due to the proposed rule amendments. No increase in permanent workers is expected to be required to operate the equipment or control measures associated with implementation of

proposed amendments to Rules 2-1 and 2-5. Therefore, there will be no increase in local population and thus no impacts are expected to local schools or parks.

Implementation of the proposed amendments to Rules 2-1 and 2-5 would not result in the need for new or physically altered government facilities in order to maintain acceptable service ratios, response times, or other performance objectives. The facilities affected by the proposed rule amendments are existing facilities for which public services are already required and no increase in the need for such services is expected. There will be no increase in population as a result of the adoption of the proposed rule amendments, therefore, no need for physically altered government facilities.

Conclusion

Based upon these considerations, no significant adverse impacts to public services are expected due to the implementation of the proposed amendments to Rules 2-1 and 2-5.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION. Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☑
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☑

Environmental Setting

The jurisdiction of the Air District covers all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara Counties, and potions of western Solano and southern Sonoma Counties. Because the area of coverage is vast (approximately 5,600 square miles), land uses vary greatly and include commercial, industrial, residential, and agricultural uses.

The Bay Area contains over one million acres of parks and open space areas. Approximately 265,000 acres of new parkland were added to the region's open space inventory between 2002 and 2013, representing a 26 percent increase. Additionally, approximately 200,000 acres of privately owned land are held in permanent reserve as of 2013. While access by the general public to these reserve areas is restricted, they are important for the preservation of wildlife habitats and the protection of the environment (ABAG, 2017).

Regulatory Background

Recreational areas are generally protected and regulated by the City and/or County General Plans at the local level through land use and zoning requirements. Some parks and recreation areas are designated and protected by state and federal regulations.

Significance Criteria

The proposed project impacts on recreation will be considered significant if:

- The project results in an increased demand for neighborhood or regional parks or other recreational facilities.

- The project adversely affects existing recreational opportunities.

Discussion of Impacts

XVI a-b. As discussed under "Land Use" (Section XI), there are no provisions in the proposed amendments to Rules 2-1 and 2-5 that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments; no land use or planning requirements will be altered by the proposed rule amendments. Construction activities are expected to be minimal and no increase in permanent workers is expected. All construction activities are expected to take place within existing industrial/commercial areas that have been previously graded and developed. Thus, there would be no impacts on recreation facilities associated with implementation of the proposed rule amendments.

Further, the proposed amendments to Rules 2-1 and 2-5 would not increase or redistribute population and, therefore, would not increase the demand for or use of existing neighborhood and regional parks or other recreational facilities or require the construction of new or the expansion of existing recreational facilities. Therefore, adoption of the proposed amendments to Rules 2-1 and 2-5 are expected to have any significant adverse impacts on recreation.

Conclusion

Based upon these considerations, no significant adverse recreation impacts are expected due to implementation of the proposed amendments to Rules 2-1 and 2-5.

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII.	**TRANSPORTATION** Would the project:				
a)	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☑	☐
b)	Would the project conflict or be inconsistent with CEQA Guidelines § 15064.3 subdivision(b)?	☐	☐	☑	☐
c)	Substantially increase hazards due to a geometric design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	☐	☐	☐	☑
d)	Result in inadequate emergency access?	☐	☐	☐	☑

Environmental Setting

The jurisdiction of the Air District covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles). Transportation systems located within the Bay Area include railroads, airports, waterways, and highways. The Port of Oakland and three international airports in the area serve as hubs for commerce and transportation. The transportation infrastructure for vehicles and trucks in the Bay Area ranges from single lane roadways to multilane interstate highways. The Bay Area currently contains over 1,300 directional miles of limited-access highways, which include both interstates and state highways. In addition, the Bay Area has over 33,000 directional miles of arterials and local streets, providing more localized access to individual communities. Together, these roadway facilities accommodate nearly 21 million vehicle trips a day. There are over 11,500 transit route miles of service including heavy rail (BART), light rail (Muni Metro and VTA Light Rail), commuter rail (Caltrain and Alameda Commuter Express or ACE), diesel and electric buses, cable cars, and ferries. The Bay Area also has an extensive local system of bicycle routes and pedestrian paths and sidewalks. At a regional level, the share of workers driving alone was about 68 percent in 2010. The portion of commuters that carpool was about 10 percent in 2015, while an additional 12 percent utilize public transit. About 2 percent of commuters walked to work in 2015. In addition, other modes of travel (bicycle, motorcycle, etc.), account for 5 percent of commuters in 2015 (ABAG, 2017). Cars, buses, and commercial vehicles travel about 158 million miles a day (2015) on the Bay Area freeways and local roads. Transit serves about 2.3 million riders on the average weekday (ABAG, 2017).

The region is served by numerous interstate and U.S. freeways. On the west side of San Francisco Bay, Interstate 280 and U.S. 101 run north-south. U.S. 101 continues north of San Francisco into Marin County. Interstates 880 and 660 run north-south on the east side of the Bay. Interstate 80 starts in San Francisco, crosses the Bay Bridge, and runs northeast toward Sacramento. Interstate 80 is a six-lane north-south freeway which connects Contra Costa County to Solano County via the Carquinez Bridge. State Routes 29 and 84, both highways that allow at-grade crossings in certain parts of the region, become freeways that run east-west, and cross the Bay. Interstate 580 starts in San Rafael, crosses the Richmond-San Rafael Bridge, joins with Interstate 80, runs through Oakland, and then runs eastward toward Livermore. From the Benicia-Martinez Bridge, Interstate 680 extends north to Interstate 80 in Cordelia. Interstate 780 is a four lane, east-west freeway extending from the Benicia-Martinez Bridge west to I-80 in Vallejo.

Regulatory Background

Transportation planning is usually conducted at the state and county level. California Department of Transportation (Caltrans) has jurisdiction over and constructs and maintains state highways. Caltrans District 4 serves Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, San Francisco, Santa Clara, Solano, and Sonoma counties.

The Metropolitan Transportation Commission (MTC) is the state designated metropolitan planning organization for the nine-county San Francisco Bay Area; it has authority for regional planning, distributing and administering federal and state funds for all modes of transportation, and assuring that projects are consistent with the Regional Transportation Plan.

MTC updated its Regional Transportation Plan in 2017, referred to as the Plan Bay Area 2040, which forecasts transportation needs through 2040, while providing more housing and transportation choices and reducing pollution caused by transportation.

Most local counties maintain a transportation agency that has the duties of transportation planning and administration of improvement projects within the county and implements the Transportation Improvement and Growth Management Program, and the congestion management plans (CMPs). The CMP identifies a system of state highways and regionally significant principal arterials and specifies level of service standards for those roadways.

Significance Criteria

The proposed project impacts on transportation will be considered significant if:

- The project would conflict with a program, plan, ordinance, or policy addressing the circulation system.
- The project conflicts with or is inconsistent with CEQA Guidelines § 15064.3 subdivision(b).
- There is an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system.
- The demand for parking facilities is substantially increased.

- Water borne, rail car or air traffic is substantially altered.
- Traffic hazards to motor vehicles, bicyclists or pedestrians are substantially increased due to geometric design features or incompatible uses.
- The project would result in inadequate emergency access.

Discussion of Impacts

XVII. a and b) The proposed amendments to Rules 2-1 and 2-5 are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to overburdened communities. The modified rules would not require new facilities but may require sources to implement air pollution control measures. Additional trucks may be required to deliver new air pollution control equipment as part of the construction phase. This would be a one-time delivery of equipment with no increase in peak hour truck traffic. Up to 20 temporary construction workers may be required to install new air pollution control equipment, however, construction activities are not expected to be extensive or require a substantial increase in workers or related traffic. Further, construction workers would be temporary and the traffic would cease once construction activities are complete.

Following construction activities, the control strategies would not be expected to generate a substantial increase in traffic, either workers or trucks. As discussed in XIV - Population and Housing, it is not expected that the affected facilities would need to hire additional personnel to operate new equipment at existing facilities, so no increase in permanent worker or truck traffic would be expected. The proposed amendments to Rules 2-1 and 2-5 would not result in a conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. Therefore, the proposed rule amendments are not expected to conflict or be inconsistent with CEQA Guidelines § 15064.3 subdivision(b), as no increase in traffic is expected to occur, following the completion of construction activities.

XVII. c and d) The proposed rule amendments would not increase traffic hazards or create incompatible uses. The proposed project does not involve construction of any roadways or other transportation design features, so no changes to current roadway designs that would increase traffic hazards are expected. Since changes to the roadway system are not expected, no impacts to emergency access would be expected. Emergency access at facilities affected by the proposed rule amendments is not expected to be impacted, as no modifications that effect traffic or access are expected to be required. Based on the above, the proposed amendments to Rules 2-1 and 2-5 are not expected to increase vehicle trips or to alter the existing long-term circulation patterns, thus creating traffic hazards or impacting emergency access.

Conclusion

Based upon these considerations, no significant adverse impacts to transportation are expected due to implementation of proposed amendments to Rules 2-1 and 2-5.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES.				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	☐	☐	☑	☐
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resourced Code section 5020.1(k), or	☐	☐	☑	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☐	☑	☐

Environmental Setting

The jurisdiction of the Air District covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles), so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses.

The Carquinez Strait represents the entry point for the Sacramento and San Joaquin Rivers into the San Francisco Bay. This locality lies within the San Francisco Bay and the west end of the Central Valley archaeological regions, both of which contain a rich array of prehistoric and historical cultural resources. The areas surrounding the Carquinez Strait and Suisun Bay have been occupied for centuries given their abundant natural resources and moderate climate. The

arrival of Native Americans into the Bay Area is associated with documented cultural resources from about 5,500 years ago (ABAG, 2013).

Six different groups of Native American population, identified by their language, lived within the Bay Area, including Costanoan, Eastern Miwok, Patwin, Coast Miwok, Pomo, and Wappo. Native villages and campsites were inhabited on a temporary basis and are found in several ecological niches due to the seasonal nature of their subsistence base. Remains of these early populations indicate that main villages, seldom more than 1,000 residents, were usually established along water courses and drainages. By the late 1760s, about 300,000 Native Americans lived in California (ABAG, 2013).

Regulatory Background

The State CEQA Guidelines were amended in July 2015 to include evaluation of impacts on tribal cultural resources. Tribal cultural resources include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe (Public Resources Code 21074).

Significance Criteria

The proposed project impacts to tribal resources will be considered significant if:

- The project results in the disturbance of a significant prehistoric or historic archaeological site or a property of tribal cultural significance to a community or ethnic or social group or a California Native American tribe.
- Unique objects with cultural value to a California Native American tribe are present that could be disturbed by construction of the proposed project.

Discussion of Impacts

The State CEQA Guidelines were amended in July 2015 to include evaluation of impacts on tribal cultural resources, which include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe. Assembly Bill (AB) 52 specifies that a project that may cause a substantial adverse change to a tribal cultural resource may result in a significant effect on the environment. AB52 requires tribes interested in development projects within a traditionally and culturally affiliated geographic area to notify a lead agency of such interest and to request notification of future projects subject to CEQA prior to determining if a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. The lead agency is then required to notify the tribe within 14 days of deeming a development application subject to CEQA complete to notify the requesting tribe as an invitation to consult on the project. AB52 identifies examples of mitigation measures that will avoid or minimize impacts to a tribal cultural resources and applies to projects that have a notice of preparation or a notice of intent to adopt a negative declaration/mitigated negative declaration circulated on or after July 1, 2015.

XVIII a). As discussed under Cultural Resources (Section V), the Bay Area has locations that were historically used by Native Americans. Thus there is the potential for the presence of unrecorded tribal cultural resources to be buried throughout the District.

The proposed amendments to Rules 2-1 and 2-5 are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to overburdened communities. The modified rules would not require new facilities but may require sources to implement air pollution control measures at existing facilities. Any construction activities would take place at existing facilities that have been previously graded and developed and no major construction activities are expected. Because construction will be limited to existing industrial/commercial facilities that have been graded and developed, the proposed rule amendments are not expected to require physical changes to a site, feature, place, cultural landscape, sacred place or object with cultural value to a California Native American Tribe. Furthermore, the proposed rule amendments are not expected to result in a physical change to a resource determined to be eligible for inclusion or listed in the California Register of Historical Resources or included in a local register of historical resources. In areas where there are sensitive resources, pre-construction surveys and qualified archaeological and tribal monitors will be present during grading operations (if needed) to identify historic resources. These standard requirements, along with the fact that the proposed rule amendments are not expected to require extensive construction or grading activities, are expected to limit impacts on historical and tribal resources as defined in Public Resources Section 5020.1(k), or 5024.1. Therefore, no significant impacts to tribal resources are anticipated to occur as a result of the proposed amendments to Rules 2-1 and 2-5.

Conclusion

Based upon these considerations, no significant adverse impacts to tribal cultural resources are expected due to implementation of the proposed amendments to Rules 2-1 and 2-5.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less-than-Significant Impact	No Impact
XIX. UTILITIES / SERVICE SYSTEMS. Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☑
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☑	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☑
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☑
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☑

Environmental Setting

Given the large area covered by the Air District, public utilities are provided by a wide variety of local agencies. Most public wastewater treatment plants and industrial facilities have wastewater and storm water treatment facilities and discharge treated wastewater under the requirements of National Pollutant Discharge Elimination System (NPDES) permits. Water is supplied to affected facilities by several water purveyors in the Bay Area. Solid waste is handled through a variety of municipalities, through recycling activities, and at disposal sites.

There are no hazardous waste disposal sites within the jurisdiction of the Air District. Hazardous waste generated at facilities, which is not recycled off-site, is required to be disposed of at a licensed hazardous waste disposal facility. Two such facilities are the Chemical Waste Management Inc. (CWMI) Kettleman Hills facility in King's County, and the Safety-Kleen facility in Buttonwillow (Kern County). Hazardous waste can also be transported to permitted facilities outside of California.

Regulatory Background

City and/or County General Plans usually contain goals and policies to assure adequate utilities and service systems are maintained within the local jurisdiction.

Significance Criteria

The proposed project impacts on utilities/service systems will be considered significant if:

- The capacities of existing or proposed wastewater treatment facilities and the sanitary sewer system are not sufficient to meet the needs of the project.
- An increase in demand for utilities impacts the current capacities of the electric utilities.
- The existing water supply does not have the capacity to meet the increased demands of the project, or the project would use a substantial amount of potable water.
- The project increases demand for water by more than 263,000 gallons per day.
- The generation and disposal of hazardous and non-hazardous waste exceeds the capacity of designated landfills.

Discussion of Impacts

XIX a and c). The potential water use and wastewater impacts associated with implementation of the proposed rule amendments were discussed under Hydrology and Water Quality (see Section X). The amendments to Rules 2-1 and 2-5 would not require new facilities but may require sources to install air pollution control equipment (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. These types of measures would not require the use of any additional water or generate wastewater. The installation of water spray/mist systems could be used at larger facilities (e.g., manufacturing facilities, waste transfer facilities, concrete manufacturing facilities, etc.) to minimize particulate emissions. The water mist systems only use small amounts of water to minimize particulate emissions and do not generate wastewater. Therefore, the proposed rule amendments would not be expected to result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage facilities.

The potential increase in energy consumption associated with the proposed rule amendments was discussed under Energy (see Section VI). The amendments to Rules 2-1 and 2-5 are not expected to require new equipment but may require air pollution control measures. The types of measures that may be required are not expected to require an increase in electricity or natural gas. For example, Tier 4 diesel engines may be required instead of Tier 3 diesel engines. A Tier 4 engine

would not use additional energy (diesel fuel) than a Tier 3 engine. Relocation of equipment would not require additional energy. A reduction in operating hours for a gas station, for example, would likely use less energy than full operating hours. The types of equipment that are expected to be predominately required under the proposed rule amendments are not expected to require any substantial increase in electricity, natural gas, or telecommunication equipment or require the construction of new facilities.

Should larger facilities be impacted by amendments to Rules 2-1 and 2-5, other types of air pollution control measures could be required, e.g., baghouses and spray mist systems for particulate control. Baghouses require the use of electricity and could require an estimated 0.055 to 0.060 gigawatt-hours per year or less and 0.0001 percent of the electricity use in the Bay Area. None of the control measures are expected to require additional natural gas. The facilities potentially affected by the proposed rule amendments are expected to be commercial and industrial facilities that already have electricity services, which are expected to be sufficient to handle the potential small increase in electricity

XIX b). The amendments to Rules 2-1 and 2-5 would not require new facilities but may require sources to implement air pollution control measures (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. These types of measures would not require the use of any additional water.

A mist system is estimated to use an average of 6,300 gallons per day (SCAQMD, 2011), for a total increase of 63,000 gallons per day. The water use would be considered significant if it exceeded the CEQA threshold of 263,000 gallons or more of potable water per day. The proposed rule amendments would only be expected to require 2-3 water systems at most (126,000 to 189,000 gallons per day), so that the water use associated with the proposed amendments to Rules 2-1 and 2-5 will not significantly impact water demand. Further, modifications would be expected to occur at existing commercial/industrial facilities which are already supplied with water. Therefore, the proposed rule amendments are not expected to result in an increase in water demand, or have a negative impact on water supplies.

XIX d and e). Implementation of air emission control measures as a result of proposed amendments to Rules 2-1 and 2-5 will not significantly increase solid or hazardous wastes generated by the affected facilities. The types of measures that may be required are not expected to generate additional wastes. For example, Tier 4 diesel engines may be required instead of Tier 3 diesel engines. A Tier 4 engine would not generate additional waste than a Tier 3 engine. Relocation of equipment, an increase in stack height, or a reduction in operating hours for a gas station, for example, would not generate more waste. Therefore, no significant impacts to hazardous or solid waste disposal facilities are expected due to the proposed rule amendments rule. Facilities are expected to continue to comply with all applicable federal, state, and local statutes and regulations related to solid and hazardous wastes.

Conclusion

Based upon these considerations, no significant adverse impacts to utilities and service systems are expected due to implementation of the proposed amendments to Rules 2-1 and 2-5.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evaluation plan?	☐	☐	☐	☑
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread or a wildfire?	☐	☐	☐	☑
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☑
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☑

Environmental Setting

Wildfires are a natural part of the California landscape, and wildfire threats have worsened over recent years. Climate change is considered a key driver of this trend, as climate change is expected to exacerbate wildfire risk through hotter temperatures, greater moisture deficits even in wetter years, and greater likelihood of prolonged drought and possibly associated beetle-caused tree mortality over the coming decades. Further, decades of fire suppression have disrupted natural fire cycles and added to the problem.

The California Department of Forestry and Fire Protection (CalFire) maps areas identify significant fire hazard based on fuels, terrain, weather, and other relevant factors. These zones, referred to as a Fire Hazard Severity Zones, then determine the requirements for special building codes designed to reduce the ignition potential of buildings.

Regulatory Background

The State of California has passed numerous laws to address wildlife and structural fires. Wildfire-prevention laws regulate activities in areas deemed by the state to be hazardous fire areas; the maintenance of buildings and other structures in areas covered by forest, brush, or other flammable materials; and the setting and burning of fires on open land.

Title 24 of the California Building Code sets forth the fire, life-safety and other building-related regulations applicable to any structure fit for occupancy statewide for which a building permit is sought. Title 24 Part 9 is the California Fire Codes that addresses automatic sprinkler systems, fire-alarm systems, access by fire-fighting equipment, fire hydrants, explosion-hazards safety, hazardous materials storage and use, protection for first responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings.

Executive Order N-05-19 was issued in 2019 to address the increasing threat of wildfires due to climate change. The executive order was issued to earmark funding from the Greenhouse Gas Reduction Fund to active forestland management to reduce wildfires in the state. Governor Newsom included in the order a directive to CalFIRE to provide a written report with recommendations for the most impactful changes necessary to prevent and mitigate wildfires.

Local cities and counties generally include safety elements in their General Plans that establishes goals and policies to assure adequate fire services are maintained within the local jurisdiction. Cities and counties also may establish building and fire prevention codes which place regulations on the separation of buildings, ventilation criteria, roof materials, landscaping, building access, and the installation of automatic fire-extinguishing systems in public buildings.

Significance Criteria

The impacts to wildfires will be considered significant if:

- The project results in new structures located within or adjacent to lands classified as very high fire hazard severity zones
- The project adversely effects emergency response or emergency evacuation plans.

Discussion of Impacts

XX. a), b), c), and d) No Impact. The amendments to Rules 2-1 and 2-5 would not require new facilities but may require sources to implement air pollution control measures (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. The implementation of additional air pollution control measures would occur in existing industrial/commercial areas and adjacent to existing facilities. This equipment would be compatible with the existing industrial/commercial character of the area and is not expected to occur in CalFIRE wildfire hazard zones. New structures would need to be compliant with the local building and fire codes that take wildfire hazard zones and fire protection into

consideration. The proposed amendments to Rules 2-1 and 2-5are not expected to expose people or structures to wild fires, would not impair and adopted emergency response plan or emergency evacuation plan for wild fires, would not exposure project occupants to pollutants from a wildfire or the uncontrolled spread of a wildfire and would not exposure people or structures to flooding or landslides as a result of post-fire slope or drainage changes. Therefore, no potential significant adverse impacts resulting from wildfires are expected from the proposed rule amendments.

Conclusion

Based upon the above considerations, no significant impacts due to wildfires are expected to occur due to implementation of the proposed amendments to Rules 2-1 and 2-5.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE.				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☑
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	☐	☐	☑	☐
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☑	☐

Discussion of Impacts

XXI a. The amendments to Rules 2-1 and 2-5 would not require new facilities but may require sources to install air pollution control equipment (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. The implementation of additional air pollution control measures would be expected to occur in existing developed industrial and commercial areas where native biological resources have been removed or are non-existent. In additional, cultural or tribal resources would also not be expected to occur. In areas where there are sensitive resources, pre-construction surveys and qualified archaeological and tribal monitors will be present during grading operations (if needed) to identify historic resources.

Therefore, the proposed rule amendments do not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory, as discussed in the previous sections of the CEQA checklist. As discussed in Section IV - Biological Resources, Section V - Cultural Resources, and Section XVIII – Tribal Cultural Resources, no significant adverse impacts are expected to biological, cultural or tribal cultural resources.

XXI b-c. The amendments to Rules 2-1 and 2-5 are not expected to result in any significant environmental impacts. Air quality impacts to implement control measures are expected to be largely beneficial and any minor construction activities are expected to be below applicable significance thresholds. Therefore, the implementation of proposed rule amendments will not result in a cumulatively considerable contribution to the net increase of any criteria pollutant for which the project region is a non-attainment area for an applicable federal or state ambient air quality standard. Further, the proposed rule amendments are expected to minimize emissions of toxic air contaminants from new and modified emissions sources in communities that are overburdened by pollution, resulting in a reduction in exposures to TACs and beneficial health impacts. Additional emission reductions are unknown and, thus, are not quantified in this analysis. Further, the proposed amendments to Rules 2-1 and 2-5 would implement portions of control measure SS21 in the 2017 Clean Air Plan to help achieve the Plan's goals of reducing TAC emissions.

As discussed in the previous checklist discussions, the proposed amendments to Rules 2-1 and 2-5 are not expected to exceed any of the applicable significance thresholds, which also serve as the cumulative significance thresholds. Therefore, the proposed project impacts are not considered to be cumulatively considerable (CEQA Guidelines §15064 (h)(1)) and are not expected to generate significant adverse cumulative impacts. The proposed project does not have adverse environmental impacts that are limited individually, but cumulatively considerable when considered in conjunction with other regulatory control projects. The proposed amendments to Rules 2-1 and 2-5 are not expected to have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly. No significant adverse environmental impacts are expected.

CHAPTER 4

REFERENCES

References

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CHAPTER 4

References

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APPENDIX A

Emissions Calculations

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Appendix A
Bay Area Air Quality Management District
Regulation 2, Rules 1 and 5
Air Quality Analysis
Small Project Construction Emission Summary

Emissions from Equipment (lb)	Daily Emissions (1)	Annual Emissions (2)
ROG	0.43	5.99
CO	3.00	41.94
NOx	4.12	57.74
SOx	0.01	0.08
PM10	0.21	2.92
PM2.5	0.21	2.89
CO_2	558.91	7824.68

Emission from Trips - Onsite/Offsite	Daily Emissions (1)	Annual Emissions (2)
ROG	0.02	0.27
CO	0.36	5.07
NOx	0.71	9.99
SOx	0.00	0.06
PM10	0.35	4.91
Exhuast PM	0.01	0.13
Fugitive PM	0.34	4.78
PM2.5	0.09	1.33
Exhuast PM	0.01	0.12
Fugitive PM	0.09	1.20
CO_2	499.12	6987.71

Total Emissions	Thresholds	Daily Emissions (1)	Annual Emissions (2)
ROG	54	0.45	6.26
CO	NA	3.36	47.00
NOx	54	4.84	67.73
SOx	NA	0.01	0.14
PM10	82	0.56	7.83
PM2.5	54	0.30	4.22
CO_2 (MT)	NA	0.48	6.72

(1) Based on 1 project per day.

(2) Based on 14 projects per year.

Appendix A
Bay Area Air Quality Management District
Regulation 2, Rules 1 and 5
Air Quality Analysis
Large Project Construction Emission Summary

Emissions from Equipment (lb)	Daily Emissions [1]	Annual Emissions [2]
ROG	0.90	18.09
CO	6.02	120.33
NOx	8.24	164.76
SOx	0.01	0.23
PM10	0.40	7.93
PM2.5	0.39	7.85
CO_2	1100.15	22003.01

Emission from Trips - Onsite/Offsite	Daily Emissions [1]	Annual Emissions [2]
ROG	0.03	0.54
CO	0.84	16.72
NOx	0.75	15.09
SOx	0.01	0.12
PM10	0.48	9.61
Exhuast PM	0.01	0.20
Fugitive PM	0.47	9.41
PM2.5	0.13	2.55
Exhuast PM	0.01	0.19
Fugitive PM	0.12	2.36
CO_2	660.80	13215.99

Total Emissions	Thresholds	Daily Emissions [1]	Annual Emissions [2]
ROG	54	0.93	18.63
CO	NA	6.85	137.05
NOx	54	8.99	179.85
SOx	NA	0.02	0.35
PM10	82	0.88	17.54
PM2.5	54	0.52	10.40
CO_2 (MT)	NA	0.80	15.98

(1) Based on 1 project per day.

(2) Based on 20 days per year.

Appendix A
Bay Area Air Quality Management District
Regulation 2, Rules 1 and 5
Air Quality Analysis
Construction Equipment Emission Rates

Equipment Type	OFFROAD2017 Category	Hp	2021 Emission Factors lb/hr						
			ROG	CO	NOx	SOx	PM10	PM2.5	CO2
Aerial Lift	OFF - Industrial - Aerial Lifts	25	0.01010	0.0483	0.07653	0.00014	0.00304	0.00280	10.0781
Crane	ConstMin - Cranes	Aggregated	0.05434	0.3695	0.59726	0.00072	0.02736	0.02517	77.5083
Fork Lift	Industrial - Forklifts	Aggregated	0.01624	0.1414	0.14039	0.00019	0.00935	0.00860	21.031
Welder	OFF - Light Commercial - Welders	Aggregated	0.02225	0.1446	0.13907	0.00025	0.00675	0.00621	18.8234

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Construction Equipment Emissions

Equipment	Hours (hr/day)	Small Projects Equipment Count	Large Projects Equipment Count
Aerial Lift	8	1	2
Crane	4	1	2
Fork Lift	8	1	1
Welder	8		1

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	Emission Rate (lb/hr)	Small Project	Large Project
ROG	**2021**	**(lb/day)**	**(lb/day)**
Aerial Lift	0.010	0.08	0.16
Crane	0.054	0.22	0.43
Fork Lift	0.016	0.13	0.13
Welder	0.022	0.00	0.18
Total		0.43	0.90

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	Emission Rate (lb/hr)	Small Project	Large Project
CO	**2021**	**(lb/day)**	**(lb/day)**
Aerial Lift	0.048	0.39	0.77
Crane	0.370	1.48	2.96
Fork Lift	0.141	1.13	1.13
Welder	0.145	0.00	1.16
Total		3.00	6.02

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	Emission Rate (lb/hr)	Small Project	Large Project
NOX	**2021**	**(lb/day)**	**(lb/day)**
Aerial Lift	0.077	0.61	1.22
Crane	0.597	2.39	4.78
Fork Lift	0.140	1.12	1.12
Welder	0.139	0.00	1.11
Total		4.12	8.24

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Bay Area Air Quality Management District
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Construction Equipment Emissions

	Emission Rate (lb/hr)	Small Project	Large Project
SOx	**2021**	**(lb/day)**	**(lb/day)**
Aerial Lift	0.000	0.00	0.00
Crane	0.001	0.00	0.01
Fork Lift	0.000	0.00	0.00
Welder	0.000	0.00	0.00
Total		0.01	0.01

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Bay Area Air Quality Management District
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Construction Equipment Emissions

	Emission Rate (lb/hr)	Small Project	Large Project
PM10	**2021**	**(lb/day)**	**(lb/day)**
Aerial Lift	0.003	0.02	0.05
Crane	0.027	0.11	0.22
Fork Lift	0.009	0.07	0.07
Welder	0.007	0.00	0.05
Total		0.21	0.40

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Bay Area Air Quality Management District
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Air Quality Analysis
Construction Equipment Emissions

	Emission Rate (lb/hr)	Small Project	Large Project
PM2.5	**2021**	**(lb/day)**	**(lb/day)**
Aerial Lift	0.003	0.02	0.04
Crane	0.025	0.10	0.20
Fork Lift	0.009	0.07	0.07
Welder	0.006	0.00	0.05
Total		0.19	0.36

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Bay Area Air Quality Management District
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Air Quality Analysis
Construction Equipment Emissions

	Emission Rate (lb/hr)	Small Project	Large Project
CO2	**2021**	**(lb/day)**	**(lb/day)**
Aerial Lift	10.078	80.62	161.25
Crane	77.508	310.03	620.07
Fork Lift	21.031	168.25	168.25
Welder	18.823	0.00	150.59
Total		558.91	1100.15

Appendix A
Bay Area Air Quality Management District
Regulation 2, Rules 1 and 5
Air Quality Analysis
Onsite Construction Vehicle Trip Emissions

		Month (Vehicles per
Vehicle	**Miles per Day**	**1**	**2**
Cars	0.1	5	20
Pickup Trucks	0.1	0	0
Total Light Vehicle Miles		0.5	2
Water Truck	0.1	0	0
Delivery Truck	0.1	1	2
1 Ton Truck	0.1		
Misc. MD Truck	0.1	1	1
Total Medium Truck Miles		0.2	0.3
Dump Truck	0.1		
Concrete Truck	0.1		
Boom Truck	0.1	1	1
Misc. HD Truck	0.1	1	1
Total Heavy Truck Miles		0.2	0.2

	Emission Rate (lb/mi)(1)	**Month (Vehicles per day)**	
ROG	**Month**	**1**	**2**
Light Duty	0.0000139	0.00	0.00
Medium Duty	0.0000324	0.00	0.00
Heavy Duty	0.0001081	0.00	0.00
Heavy Duty Idling	0.0007736	0.00	0.00
Total		0.00	0.00

CO	**Month**	**1**	**2**
Light Duty	0.0009095	0.00	0.00
Medium Duty	0.0014309	0.00	0.00
Heavy Duty	0.0004314	0.00	0.00
Heavy Duty Idling	0.0102637	0.02	0.02
Total		0.02	0.02

NOx	**Month**	**1**	**2**
Light Duty	0.0000680	0.00	0.00
Medium Duty	0.0002139	0.00	0.00
Heavy Duty	0.0063879	0.00	0.00
Heavy Duty Idling	0.0104926	0.02	0.02
Total		0.02	0.02

SOx	**Month**	**1**	**2**
Light Duty	0.0000030	0.00	0.00
Medium Duty	0.0000052	0.00	0.00
Heavy Duty	0.0000354	0.00	0.00
Heavy Duty Idling	0.0000183	0.00	0.00
Total		0.00	0.00

PM10	**Month**	**1**	**2**
Light Duty Exhaust	0.0000015	0.00	0.00
Medium Duty Exhaust	0.0000024	0.00	0.00
Heavy Duty Idle Exhaust	0.0000099	0.00	0.00
Heavy Duty Exhaust	0.0000863	0.00	0.00
Total Exhaust PM		0.00	0.00
Light Duty Tire and Brake Wear	0.0000155	0.00	0.00
Medium Duty Tire and Brake Wear	0.0000218	0.00	0.00
Heavy Duty Tire and Brake Wear	0.0002575	0.00	0.00
Light Duty Fugitive Road Dust(2)	0.000221	0.00	0.00
Medium Duty Fugitive Road Dust(2)	0.000467	0.00	0.00
Heavy Duty Fugitive Road Dust(2)	0.002314	0.00	0.00
Total Fugitive PM		0.00	0.00
Total		0.00	0.00

PM2.5	**Month**	**1**	**2**
Light Duty Exhaust	0.0000013	0.00	0.00
Medium Duty Exhaust	0.0000023	0.00	0.00
Heavy Duty Idle Exhaust	0.0000095	0.00	0.00
Heavy Duty Exhaust	0.0000825	0.00	0.00
Total Exhaust PM		0.00	0.00
Light Duty Tire and Brake Wear	0.0000046	0.00	0.00
Medium Duty Tire and Brake Wear	0.0000067	0.00	0.00
Heavy Duty Tire and Brake Wear	0.0000824	0.00	0.00
Light Duty Fugitive Road Dust(2)	0.000054	0.00	0.00
Medium Duty Fugitive Road Dust(2)	0.000115	0.00	0.00
Heavy Duty Fugitive Road Dust(2)	0.000568	0.00	0.00
Total Fugitive PM		0.00	0.00
Total		0.00	0.00

CO2e	**Month**	**1**	**2**
Light Duty	0.305	0.15	0.61
Medium Duty	0.529	0.11	0.16
Heavy Duty	3.922	0.78	0.78
Heavy Duty Idling	2.029	4.06	4.06
Total		5.10	5.61

(1) Emfac2021 emission factors for theBAAQMD.

(2) Emission Calculations for travel on paved roads from EPA AP-42 Section 13.2.1, January 2011
E = k(sL)0.91 x (W)1.02
Where: k = 0.0022 lb/VMT for PM10 and k=0.00054 for PM2.5, sL = road silt loading (gms/m2) (0.03 for major/collector roads), W = weight of vehicles (2.5 tons for light; 5.5 for medium trucks, and 24 for heavy trucks)

Appendix A
Bay Area Air Quality Management District
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Air Quality Analysis
Offsite Construction Vehicle Trip Emissions

		Month (Vehicles per	
Vehicle	**Miles per Day**	**1**	**2**
Cars	29.4	5	20
Pickup Trucks	29.4	0	0
Total Light Vehicle Miles		147	588
Water Truck	50	0	0
Delivery Truck	50	1	2
1 Ton Truck	50		
Misc. MD Truck	50	1	1
Total Medium Truck Miles		100	150
Dump Truck	150		
Concrete Truck	100		
Boom Truck	50	1	1
Misc. HD Truck	50	1	1
Total Heavy Truck Miles		100	100

	Emission Rate (lb/mi)(1)	**Month (Vehicles per day)**	
ROG	**Month**	**1**	**2**
Light Duty	0.0000139	0.00	0.01
Medium Duty	0.0000324	0.00	0.00
Heavy Duty	0.0001081	0.01	0.01
Heavy Duty Idling	0.0007736	0.00	0.00
Total		0.02	0.03

CO	**Month**	**1**	**2**
Light Duty	0.0009095	0.13	0.53
Medium Duty	0.0014309	0.14	0.21
Heavy Duty	0.0004314	0.04	0.04
Heavy Duty Idling	0.0102637	0.02	0.02
Total		0.34	0.81

NOx	**Month**	**1**	**2**
Light Duty	0.0000680	0.01	0.04
Medium Duty	0.0002139	0.02	0.03
Heavy Duty	0.0063879	0.64	0.64
Heavy Duty Idling	0.0104926	0.02	0.02
Total		0.69	0.73

SOx	**Month**	**1**	**2**
Light Duty	0.0000030	0.00	0.00
Medium Duty	0.0000052	0.00	0.00
Heavy Duty	0.0000354	0.00	0.00
Heavy Duty Idling	0.0000183	0.00	0.00
Total		0.00	0.01

PM10	**Month**	**1**	**2**
Light Duty Exhaust	0.0000015	0.00	0.00
Medium Duty Exhaust	0.0000024	0.00	0.00
Heavy Duty Idle Exhaust	0.0000099	0.00	0.00
Heavy Duty Exhaust	0.0000863	0.01	0.01
Total Exhaust PM		0.01	0.01
Light Duty Tire and Brake Wear	0.0000155	0.00	0.01
Medium Duty Tire and Brake Wear	0.0000218	0.00	0.00
Heavy Duty Tire and Brake Wear	0.0002575	0.03	0.03
Light Duty Fugitive Road Dust(2)	0.000221	0.03	0.13
Medium Duty Fugitive Road Dust(2)	0.000467	0.05	0.07
Heavy Duty Fugitive Road Dust(2)	0.002314	0.23	0.23
Total Fugitive PM		0.34	0.47
Total		0.35	0.48

PM2.5	**Month**	**1**	**2**
Light Duty Exhaust	0.0000013	0.00	0.00
Medium Duty Exhaust	0.0000023	0.00	0.00
Heavy Duty Idle Exhaust	0.0000095	0.00	0.00
Heavy Duty Exhaust	0.0000825	0.01	0.01
Total Exhaust PM		0.01	0.01
Light Duty Tire and Brake Wear	0.0000046	0.00	0.00
Medium Duty Tire and Brake Wear	0.0000067	0.00	0.00
Heavy Duty Tire and Brake Wear	0.0000824	0.01	0.01
Light Duty Fugitive Road Dust(2)	0.000054	0.01	0.03
Medium Duty Fugitive Road Dust(2)	0.000115	0.01	0.02
Heavy Duty Fugitive Road Dust(2)	0.000568	0.06	0.06
Total Fugitive PM		0.09	0.12
Total		0.09	0.13

CO2e	**Month**	**1**	**2**
Light Duty	0.305	44.91	179.63
Medium Duty	0.529	52.89	79.34
Heavy Duty	3.922	392.17	392.17
Heavy Duty Idling	2.029	4.06	4.06
Total		494.02	655.19

(1) Emfac2021 emission factors for theBAAQMD.

(2) Emission Calculations for travel on paved roads from EPA AP-42 Section 13.2.1, January 2011

E = k(sL)0.91 x (W)1.02

Where: k = 0.0022 lb/VMT for PM10 and k=0.00054 for PM2.5, sL = road silt loading (gms/m2) (0.03 for major/collector roads), W = weight of vehicles (2.5 tons for light; 5.5 for medium trucks, and 24 for heavy trucks)

Appendix A
Bay Area Air Quality Management District
Regulation 2, Rules 1 and 5
Air Quality Analysis
Operational GHG Emissions from Electricity

Assumptions

Electrical Use for One Large Project	60000	kWh/yr
Total Electricity Usage (5 Projects)	300000	kWh/yr

Pollutant	CO2	CH4	N2O	CO2e
Emission Factors (lb/mwh)	204	0.033	0.004	206.017
Emissions (MT/yr)	27.8	0.0	0.0	28.0

Emission Factors from CalEEMod.

[DRAFT NEGATIVE DECLARATION FOR PUBLIC REVIEW AND COMMENT]

CALIFORNIA ENVIRONMENTAL QUALITY ACT
NEGATIVE DECLARATION

Proposed Amendments to
Regulation 2, Rule 1 (Permits – General Requirements) and
Regulation 2, Rule 5 (Permits – New Source Review of Toxic Air Contaminants)

Pursuant to the California Environmental Quality Act (CEQA), Public Resources Code §§ 21000 et seq, and Sections 15071 and 15074 of the CEQA Guidelines, the Board of Directors of the Bay Area Air Quality Management District (Air District) hereby adopts this Negative Declaration finding that the adoption of Proposed Amendments to Regulation 2, Rule 1 (Permits – General Requirements) and Regulation 2, Rule 5 (Permits – New Source Review of Toxic Air Contaminants) will not have a significant effect on the environment.

Project Name: Proposed Amendments to Regulation 2, Rule 1 (Permits – General Requirements) and Proposed Amendments to Regulation 2, Rule 5 (Permits – New Source Review of Toxic Air Contaminants).

Project Description: The Air District has regulatory authority over stationary sources of air pollution in the San Francisco Bay Area. The proposed amendments to Rules 2-1 and 2-5 address multiple components of the Air District's stationary source permitting program to make it more transparent and health protective.

The proposed amendments to Rule 2-1 add a definition for the term "Overburdened Community," expand the existing public notice requirement to require notification of nearby addresses if a project in an Overburdened Community will require a health risk assessment and extend the Air District's permit application times.

The proposed amendments to Rule 2-5 fall into three major categories: (1) Making the cancer risk limit more stringent in Overburdened Communities; (2) Updating the Air District's Health Risk Assessment Guidelines to include the most recent health risk procedures for gas station projects; and (3) Updating Table 2-5-1, the Toxic Air Contaminant Trigger Levels Table to reflect new health effects values from the California Office of Environmental Health Hazard Assessment and synchronizing the acute trigger levels with those used to implement Air District Regulation 11, Rule 18, which regulates facility-wide toxic air contaminant emissions from existing facilities.

Project Location: The nine-county jurisdiction of the Bay Area Air Quality Management District, which includes all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties, and portions of southwestern Solano County and southern Sonoma County. A map of the project location is provided in Figure 2-1 on page 2-16 of the Initial Study attached hereto.

Project Proponent and Lead Agency: The Bay Area Air Quality Management District.

Finding of No Significant Impact: The Board of Directors of the Bay Area Air Quality Management District hereby finds, using its own independent judgment and analysis, that based on the whole record (including the Initial Study and public comments received) there is no substantial evidence that the proposed

amendments to Regulation 2, Rule 1 (Permits – General Requirements) and Regulation 2, Rule 5 (Permits – New Source Review of Toxic Air Contaminants) will have a significant effect on the environment.

Initial Study: A copy of the Initial Study documenting the reasons supporting the finding of no significant impact is attached hereto.

Mitigation Measures: No mitigation measures need to be included in the project to avoid potentially significant effects, as the project will not have any potentially significant effects.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

APPENDIX F

Socioeconomic Impact Analysis

bae urban economics

Final

Socio-Economic Impact Study of the Proposed Amendments to Regulation 2: Permits, Rule 1: General Requirements and Regulation 2: Permits, Rule 5: New Source Review of Toxic Air Contaminants

Submitted to: Bay Area Air Quality Management District

October 2021

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DESCRIPTION OF PROPOSED RULE AMENDMENTS

The Bay Area Air Quality Management District ("Air District" or "BAAQMD") proposes to amend its permitting regulation (Regulation 2). Regulation 2 includes the District's rules that govern New Source Review ("NSR"), which is a comprehensive permitting program that applies to entities when they install new equipment or make modifications to existing equipment that will increase air pollution emissions. This section describes the proposed amendments to two permitting rules, Regulation 2, Rule 1 (Rule 2-1) and Regulation 2, Rule 5 (Rule 2-5), largely repeating the description found in the Staff Report describing the proposed amendments.[1]

Rule 2-1: General Requirements

The proposed changes to Rule 2-1 would include a new definition to identify areas that experience relatively high levels of cumulative impacts (areas where air pollution levels are higher and that are also more vulnerable to environmental, socioeconomic, and health stressors). Areas that experience high levels of cumulative impacts are called "Overburdened Communities" in the Proposed Amended Rule 2-1. Overburdened Communities are defined as census tracts that score at or above the 70th percentile in the California Communities Environmental Health Screening Tool (CalEnviroScreen), Version 4.0, as well as areas that are within one thousand feet of the boundaries of census tracts that score at or above the 70th percentile in CalEnviroScreen 4.0.

There are two additional significant changes to Rule 2-1. First, there is a new requirement for projects to notify surrounding addresses if the project will require a health risk assessment because of toxic air contaminant (TAC) emissions and the project will be located within or near an Overburdened Community. The proposed changes would also extend the Air District's permit application action times. The completeness review period will be increased from 15 working days (21 calendar days) to 30 days. The final action period (from date of completeness to the date of the Air Pollution Control Officer's decision) is currently 35 working days (49 calendar days) for all permit applications, except those subject to California Environmental Quality Act (CEQA) review, major facility review, or public notice requirements. Staff is proposing to replace this time period with two possible final action periods: 90 days, which will apply to most applications, and 180 days for more complex applications, unless the application is subject to CEQA review. Applications subject to CEQA review will continue to require approval of CEQA certification documents before the Air District may make a decision on the application. Staff is also proposing to increase the time period allowed for responding to public comments on applications from 30 days to 60 days.

These changes are meant to provide additional transparency and information to the public on active permit applications in communities that face environmental and health burdens. By making information more accessible to the public through physical mailing of information to residents and

[1] BAAQMD, 2021. Staff Report: Proposed Amendments to Regulation 2, Rule 1 (Permits—General Requirements) and Proposed Amendments to Regulation 2, Rule 5 (Permits—New Source Review of Toxic Air Contaminants). October.

posting notifications on the Air District website, the Air District would provide more awareness of permit applications and the proposed projects. Additionally, this change would include a written public comment period, which could enable members of the public to provide additional information for the Air District to consider in evaluating permit applications.

Rule 2-5: New Source Review of Toxic Air Contaminants

There are three overarching changes to the Air District's Air Toxics New Source Review Rule. First, the cancer risk limit in Rule 2-5 would be made more stringent in Overburdened Communities. To accomplish this, Rules 2-1 and 2-5 would utilize CalEnviroScreen as described above to identify areas where cumulative impacts are high in the Bay Area. The permit applications for projects that would be located within the high-scoring census tracts or in the one-thousand-foot area from the census tract boundary would be required to comply with the more stringent cancer risk requirement in Rule 2-5. The purpose of this amendment is to reduce exposure to toxic air contaminants from new and modified sources of air pollution in communities that are overburdened by pollution or face health vulnerabilities at the community level that could contribute to residents being more susceptible to the detrimental health effects from air pollution.

Second, proposed revisions to the Air District's Health Risk Assessment (HRA) Guidelines incorporate updates to the health risk assessment procedures for gasoline dispensing facilities, to be consistent with other permitted sources/facilities. In 2015, OEHHA approved and adopted updated Health Risk Assessment Guidelines (2015 Guidelines) that are used in the Air District's Health Risk Assessment Guidelines. Under this proposed change, the Air District would update and incorporate the 2015 Guidelines to its evaluation of new and modified gas dispensing facility projects. The 2015 Guidelines adjusted multiple additional factors used to prepare health risk assessments, including breathing rate assumptions, exposure frequency, and exposure duration, that in combination will result in higher calculated risks. Fully incorporating all the 2015 OEHHA health risk calculation procedures will result in cancer risk estimates for residents that are about 40 percent higher than the current procedures and will add a new limit on acute impacts. While these changes would not prevent gas stations from renewing permits, they could result in some existing gas stations being unable to increase throughput, or they could reduce the amount of gasoline throughput that might otherwise be allowed for a new station.

Third, the proposed amendments will update Table 2-5-1, the Toxic Air Contaminant Trigger Levels table, including updated trigger levels based on new and revised health effects values developed and approved by the California Office of Environmental Health Hazard Assessment (OEHHA).

METHODOLOGY

This report was prepared to meet the provisions Section 40728.5 of the California Health and Safety Code, which requires an assessment of the socioeconomic impacts of proposed air quality rules. The analysis begins with an overview of current demographic and economic conditions in the Air District region, to provide context for the impact analysis that follows. Following that overview, BAE provides more detail on specific industries that might have been affected by the rule revisions if they were in place when past projects were assessed. BAE's analysis includes data on the size of establishments as classified by number of employees, estimated revenues, and net profits for each affected industry. This analysis is not a prediction of the exact types of projects that will be affected in the future, rather, it shows the types of projects and industries that might have been affected by the proposed rule amendments if they were in already in place. The costs and economic impacts analyzed in this report are not costs associated with the compliance with a retrofit control requirement but are instead the potential cost of installing new equipment that is not already in place or modifying existing equipment.

This report relies on data from a number of sources, including County Business Patterns, the 2017 Economic Census, the State of California's Employment Development Department (EDD) Labor Market Information Division and Department of Finance, the Internal Revenue Service, and the Air District itself.

Using this information, BAE generated an overview of regional demographic and economic trends, developed a profile of potentially affected industries, and estimated net income as a percent of revenues for potentially impacted business establishments. These figures were then compared to the compliance costs associated with the revised Rules to determine the potential for these costs to be a significant portion of estimated profits (using a 10 percent impact threshold). Then, to the extent that the impacts on profit could result in job losses, direct and indirect job losses using the IMPLAN input-output model were estimated. Finally, the potential for impacts on small businesses was assessed.

REGIONAL TRENDS

Regional Demographic Trends

Table 1 shows the population and household trends for the nine county Bay Area and California between 2010 and 2020. During this time, the Bay Area's population increased by 8.6 percent, compared to 6.5 percent for California as a whole. The number of Bay Area households grew by 5.6 percent, compared to 5.4 percent growth statewide. Average household sizes increased in both geographies during this period.

Table 1: Population and Household Trends, 2010-2020

			2010-2020 Change	
Bay Area (a)	**2010**	**2020**	**Number**	**Percent**
Population	6,998,464	7,596,982	598,518	8.6%
Households	2,606,288	2,752,510	146,222	5.6%
Average Household Size	2.69	2.76		
California				
Population	36,412,191	38,796,056	2,383,865	6.5%
Households	12,568,167	13,246,622	678,455	5.4%
Average Household Size	2.90	2.93		

Note:
(a) Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma Counties.
Sources: California State Department of Finance; BAE 2021.

Regional Economic Trends

Table 2 shows jobs by sector in 2010 and 2020 for the Bay Area and California. In the period between 2010 and 2020, the Bay Area's employment base grew by 18.7 percent, increasing from 3.2 million jobs to 3.7 million jobs. The state saw somewhat smaller job growth, increasing by 12.8 percent from 14.7 million jobs in 2010 to 16.5 million jobs in 2020.

The largest non-government sectors in the Bay Area economy are Professional & Business Services; Education & Health Services; Manufacturing; and Retail Trade. Combined these sectors constituted approximately 53.5 percent of the region's total jobs in 2020. Overall, the Bay Area's economic base largely reflects the state's base, sharing a similar distribution of employment across sectors. One noteworthy variation is the high employment in the Professional & Business Services, which makes up 20.2 percent of employment in the Bay Area compared to only 14.2 percent statewide. The Information sector also makes up a higher share of jobs in the Bay Area (6.5 percent) than in California as a whole (2.9 percent).

Most industry sectors showed an increase in employment in the Bay Area between 2010 and 2020, with increases of greater than 20 percent in Information; Professional & Business Services; Transportation, Warehousing, and Utilities; and Educational & Health Services. Statewide growth

was also over 20 percent in all four of these sectors, in addition to the Mining, Logging, and Construction sector.

Table 2: Jobs by Sector, 2010-2020 (a)

	Bay Area			California		
Industry Sector	**2010** (b)	**2020** (c)	**% Change**	**2010** (b)	**2020** (c)	**% Change**
Agriculture	19,200	19,000	-1.0%	382,900	407,300	6.4%
Mining, Logging, and Construction	131,500	152,100	15.7%	584,600	874,900	49.7%
Manufacturing	305,400	353,300	15.7%	1,247,800	1,261,700	1.1%
Wholesale Trade	112,200	108,600	-3.2%	629,200	643,400	2.3%
Retail Trade	308,200	299,500	-2.8%	1,516,500	1,523,600	0.5%
Transportation, Warehousing & Utilities	88,300	116,900	32.4%	466,800	727,800	55.9%
Information	113,900	243,000	113.3%	428,500	529,000	23.5%
Financial Activities	168,000	193,300	15.1%	760,900	815,300	7.1%
Professional & Business Services	545,800	757,300	38.8%	2,084,300	2,595,200	24.5%
Educational & Health Services	474,200	593,400	25.1%	2,131,900	2,731,600	28.1%
Leisure & Hospitality	324,800	295,000	-9.2%	1,500,800	1,477,600	-1.5%
Other Services, except Public Admin.	108,100	103,500	-4.3%	483,600	473,200	-2.2%
Government (d)	455,200	459,500	0.9%	2,448,400	2,487,100	1.6%
Total, All Employment (e)	**3,154,400**	**3,743,100**	**18.7%**	**14,666,200**	**16,547,900**	**12.8%**

Notes:
(a) Includes all wage and salary employment.
(b) Represents annual average employment for calendar year 2010.
(c) Represents annual average employment for calendar year 2020.
(d) Government employment includes workers in all local, state and Federal workers, not just those in public administration. For example, all public school staff are in the Government category.
(e) Totals may not sum from parts due to independent rounding.
Sources: California Employment Development Department; BAE, 2021.

SOCIOECONOMIC IMPACTS

This section of the report analyzes socioeconomic impacts stemming from changes to Rule 2-1 and Rule 2-5. The Air District has identified a range of possible compliance measures as well as typical compliance costs for the types of projects that could potentially be impacted by the rule revisions. In order to estimate the direct impacts of the changes to the rules, this analysis compares the affected industries' annualized compliance costs with their profit ratios. The analysis relies on data from the Air District, 2019 US Census County Business Patterns, the Internal Revenue Service (IRS), and the 2017 US Economic Census.

Staff reviewed information from past permitting projects to identify the types of potentially impacted projects and contextualize how the changes might have impacted these projects had the proposed amendments been in place at that time. The list of potentially impacted projects includes facilities operated by both public and private sector entities across a broad range of industries, however public sector entities were omitted from the analysis because they would not generate any revenues. Detail on the types of projects and the industries affected can be found below.

In addition to direct impacts, any decline in revenues for the directly affected industries may result in a "ripple effect" through the regional economy. These effects are analyzed by utilizing the IMPLAN input-output model, as discussed in the section on regional indirect and induced impacts below.

Rule 2-5

The proposed amendments to Rule 2-5 would increase the stringency of the Air District's Air Toxics New Source Review Program in areas that currently experience relatively high levels of cumulative impacts as defined in the rule. Based on a review of permitting trends between February 2017 and February 2021, Air District staff identified the number and types of projects that might have been affected by the new reduced cancer risk limit if it had already been in place, as summarized in Table 3. This table also shows the potential modifications and controls available to meet the new revised rule and the industry or industries associated with each type of project based on permitting data. The Air District's lookback analysis of permitted projects between February 2017 and February 2021 examined projects in Bay Area census tracts that scored at or above the 70th percentile in Draft CalEnviroScreen 4.0. Final CalEnviroScreen 4.0 was subsequently released by OEHHA in October 2021. Air District staff reviewed the updates and changes included in the Final CalEnviroScreen 4.0 version, and determined that these updates do not result in substantial changes to the lookback analysis, nor do they result in additional affected projects or project types. While this lookback analysis is not a prediction of the exact types of projects that will be affected in the future, the analysis provides information on how past projects might have been affected by the proposed amendments.

Table 3: Summary of New or Modified Permits that Potentially Could Require Modifications and/or Controls with Revised Rule 2-5 (a)

Project Type	**Industry or Industries Associated w/ Project Type** (a)	**Typical Control Measure(s)**
Standby Diesel Engines	Lessors of Residential Buildings and Dwellings (NAICS 531110) Colleges, Universities, and Professional Schools (NAICS 611310) Lessors of Nonresidential Buildings (NAICS 531120) Wired and Wireless Telecommunications Carriers (NAICS 51731) Nursing and Residential Care Facilities (NAICS 623) Data Processing, Hosting, and Related Services (NAICS 518210)	Limit Throughput Rate / Operating Time, Increase Stack Height, Diesel Particulate Filters
Prime Diesel Engines	Fertilizer (Mixing Only) Manufacturing (NAICS 325314) Petroleum Bulk Stations and Terminals (NAICS 424710)	Limit Throughput Rate / Operating Time, Increase Stack Height, Diesel Particulate Filters
Soil Vapor Extraction	Lessors of Nonresidential Buildings (NAICS 531120) Remediation Services (NAICS 562910)	Limit Throughput Rate / Operating Time, Thermal or Catalytic Oxidizers, Carbon Adsorbers, Increase Stack Height
Crematory Project	Cemeteries and Crematories (NAICS 812220)	Limit Throughput Rate or Operating Time, Increase Stack Height
Metal Casting Facility Project	Foundries (NAICS 3315)	Limit Throughput or Operating Time, Enclosures/Baghouses, Carbon Adsorbers
Conveyors/Stockpiles at Waste Facility	Waste Treatment and Disposal (NAICS 56221)	Enclosures/Baghouses, Water Spray System
Concrete Manufacturing Facility Project	Cement and Concrete Product Manufacturing (NAICS 3273)	Limit Throughput Rate or Operating Time, Water Spray System,
Gas Station Project	Gasoline Stations (NAICS 4471)	Limit Throughput Rate or Operating Time, Revise Source Location (New Facilities)

Notes:
(a) Based on permitting trends between February 2017 and February 2021. All publicly owned facilities are excluded, regardless of sector. Note that some uses have an annual average occurrence of <1, but are shown here to show all impacted industries.
Sources: BAAQMD; BAE, 2021.

Table 4 below shows the characteristics of the average facility in each industry affected by the changes to Rule 2-5. The specific characteristics of future impacted facilities could differ from the averages shown below.

Table 4: Profile of Industries Affected by Revisions to Rule 2-5

NAICS	Industry Sector	Average per Establishment				Establishments by Size	
		Number of Employees	Annual Revenue	Profit Margin	Annual Profit	< 10 Employees	< 100 Employees
325314	Fertilizer (Mixing Only) Manufacturing	24	$8,743,704	9.09%	$795,012	44%	98%
3273	Cement and Concrete Product Manufacturing	31	$11,569,884	2.90%	$335,895	37%	94%
3315	Foundries	39	$9,164,326	7.97%	$730,159	41%	87%
424710	Petroleum Bulk Stations and Terminals	17	$92,056,060	1.02%	$935,441	52%	99%
4471	Gasoline Stations	9	$6,812,928	1.19%	$80,792	67%	100%
51731	Wired & Wireless Telecommunications Carriers	17	$10,134,191	7.09%	$718,939	68%	97%
518210	Data Processing, Hosting, and Related Services	37	$14,547,939	8.55%	$1,244,023	63%	92%
531110	Lessors of Residential Buildings and Dwellings	4	$1,944,132	23.83%	$463,287	93%	100%
531120	Lessors of Nonresidential Buildings	5	$3,534,984	23.83%	$842,387	90%	99%
56221	Waste Treatment and Disposal	23	$8,506,621	6.66%	$566,365	51%	97%
562910	Remediation Services	21	$3,991,996	6.66%	$265,784	54%	96%
611310	Colleges, Universities, and Professional Schools	290	$26,819,495	8.86%	$2,375,139	41%	77%
623	Nursing and Residential Care Facilities	30	$2,446,060	4.28%	$104,745	53%	90%
812220	Cemeteries and Crematories	13	$2,467,298	7.11%	$175,335	62%	99%

Sources: Economic Census, 2017; County Business Patterns 2019; Internal Revenue Service, 2009-2018; BAE, 2021.

Compliance Cost Impacts on Affected Industries

Since it is not possible to determine specific compliance measures and costs associated with particular facilities, BAE estimated compliance cost impacts based on available information from BAAQMD on typical compliance measures and a range of costs by type of project. While the potential compliance measures may not necessarily represent the costs any given facility would incur under the revised rule, they are analyzed here to provide an order of magnitude of compliance costs relative to the estimated revenues and profit levels for potentially affected facilities based on the available data. The findings and assumptions are discussed by project type below.

Standby Diesel Engines

The Air District estimates that in a given year, an average of five standby diesel engine projects will require potential modifications and/or controls to meet the more stringent cancer risk limit in Overburdened Communities. As can be seen above in Table 3, many types of facilities use emergency generators, ranging from owners of office buildings and residential buildings to nursing and residential care facilities to data centers.

Table 5 below shows potential impacts on profits estimated based on the assumption that users would be required to install diesel particulate filters, which is likely the highest cost solution for these projects. In 2016, District staff compiled data on control costs for diesel particulate filters and estimated typical annualized costs for these controls to be within the range of $3,500 and $11,400,

in 2016 dollars.[2] District staff also identified a maximum annualized control cost of $63,681 based on data from a specific project. After adjusting for inflation, typical annualized compliance costs for diesel particulate filters are estimated to range from $4,000 to $13,000 per engine, with maximum annualized control costs of up to $72,000 per engine for facilities needing to retrofit older model engines or larger engines.

Table 5 shows impacts on profits for the affected industries under the typical low, typical high, and maximum control cost scenarios described above. As shown, on average, typical compliance costs for diesel particulate filters are below the level of significance for most facilities in the affected industries. One possible exception is the nursing and residential care sector, which would incur costs equal to 12.4 percent of profits under the typical high-cost scenario. The analysis also shows that lessors of residential buildings could also potentially face impacts on profits greater than the 10 percent threshold under the maximum control cost estimated by staff. However, as detailed in Appendix A, this is due to the business data including a substantial number of establishments with only one to four employees; these are not likely to be the businesses undertaking this type of large residential project.

Table 5: Cost Impacts of Installing Diesel Particulate Filters for Diesel Engine Users

				Compliance Costs as % of Profits		
User Type	Avg. Annual Revenue per Establishment	Avg. Profit Margin 2009-2018	Avg. Annual Profit per Establishment	Typical Low Cost $4,000	Typical High Cost $13,000	Maximum Control Cost $72,000
Residential	$1,944,132	23.83%	$463,287	0.86%	2.81%	15.54%
Office/Retail Center	$3,534,984	23.83%	$842,387	0.47%	1.54%	8.55%
Educational Services	$26,819,495	8.86%	$2,375,139	0.17%	0.55%	3.03%
Telecommunications Carriers	$10,134,191	7.09%	$718,939	0.56%	1.81%	10.01%
Nursing and Residential Care	$2,446,060	4.28%	$104,745	3.82%	12.41%	68.74%
Data Center	$14,547,939	8.55%	$1,244,023	0.32%	1.04%	5.79%
Fertilizer Mixing Facility	$8,743,704	9.09%	$795,012	0.50%	1.64%	9.06%
Marine Oil Terminal	$92,056,060	1.02%	$935,441	0.43%	1.39%	7.70%

Sources: Economic Census, 2017; County Business Patterns 2019; Internal Revenue Service, 2009-2018; BAAQMD; BAE, 2021.

Prime Diesel Engines

Particulate filters are also the typical mitigation measure for prime diesel engines. Although these projects could have a variety of use types, there were only two facilities that had cancer risk greater than or equal to six in one million that would have required modifications and/or controls to comply with the lower cancer risk limit over the four-year period analyzed. The first project was a screening operation at a soil yard and the second project was a fuel storage facility at a marine oil terminal. Table 5 shows potential impacts on profits for these two industries based on the range of costs for

[2] BAAQMD, 2016. Regulation 2, Rule 5 Staff Report. September.

diesel particulate filters summarized above. As shown, annualized maximum control costs are below the level of significance for average businesses in both industries.

Soil Vapor Extraction (SVE) Projects

The companies conducting SVE projects can include a mix of business types, including owners of commercial and industrial sites, gas stations, refineries, and environmental remediation firms. For the purposes of the analysis here, the impacted industries are based on information from two past permitting projects with cancer risk greater than or equal to six in one million. The first project consisted of a soil remediation project to remediate contaminated soil at a retail center. In that particular case, the permit applicant for the project was a large national real estate investment trust specializing in shopping center ownership, management, and redevelopment. The second project was initiated by an environmental remediation firm with extensive experience managing and operating SVE projects within the district.

The possible controls for SVE projects include limiting throughput rate or operating time, carbon adsorbers, thermal or catalytic oxidizers, and increasing stack height/revising source location. The assumed control measure for this analysis is a thermal oxidizer, which is likely the highest cost solution. Annualized cost estimates were provided by District staff and are estimated to be within the range of $35,000 to $688,000. As shown below, for the average lessor of commercial buildings, impacts on profits are below the threshold of significance under the low-cost scenario. Impacts on profits would be significant under the average-cost and high-cost scenarios for the average business in this sector.

For remediation services businesses, impacts would be significant if these businesses had to absorb the increased compliance costs from the rule changes. However, these businesses are typically larger full-service firms that are hired to complete remediation projects for other parties and the increased compliance costs would be passed through to those clients. Thus, remediation service businesses would not be negatively impacted.

Table 6: Compliance Cost Impacts for Soil Vaper Extraction (SVE) Projects

SVE Project Type	Avg. Annual Revenue per Establishment	Avg. Profit Margin 2009-2018	Avg. Annual Profit per Establishment	Compliance Costs as % of Profits		
				Low Cost	Avg. Cost	High Cost
				$35,000	$361,000	$688,000
Remediation Firm	$3,991,996	6.66%	$265,784	13.2%	135.8%	258.9%
Owner of Retail Property	$3,534,984	23.83%	$842,387	4.2%	42.9%	81.7%

Sources: Economic Census, 2017; County Business Patterns 2019; Internal Revenue Service, 2009-2018; BAAQMD; BAE, 2021.

Crematory Projects

The two options presented for projects that might need to make project modifications or add controls are limiting operating time or increasing stack height. There were two projects with cancer risk greater than or equal to six in one million in the four-year period that would have been impacted by

the rule changes had they been in place during that time. Both of these projects reduced overall exposures by increasing stack heights. For the purposes of this analysis, it is assumed that the same control measure would be employed to meet the revised risk limit. Annualized compliance costs are estimated at $1,700. Overall, the compliance costs for crematories are well below the threshold of significance, at less than 1.0 percent of profits.

Table 7: Compliance Cost Impacts for Crematory Projects

Project Type	Avg. Annual Revenue per Establishment	Avg. Profit Margin 2009-2018	Avg. Annual Profit per Establishment	Compliance Costs per Establishment	Compliance Costs as % of Profits
Crematory	$2,467,298	7.11%	$175,335	$1,700	0.97%

Sources: Economic Census, 2017; County Business Patterns 2019; Internal Revenue Service, 2009-2018; BAAQMD; BAE, 2021.

Metal Casting Facility

For this type of project, possible controls include baghouses with HEPA filters and carbon adsorbers. The assumed control measure for this analysis is a baghouse. Staff provided estimates of the range of possible control costs for this option. Annualized control costs for this type of control mechanism can range from $76,000 to $2.3 million. Low-, average-, and high-cost estimates are assessed below in Table 8 to show the full range of potential impacts to these facilities.

Based on the control cost estimates provided by staff and summarized in Table 8, the impacts on profits are slightly above the threshold of significance for the average metal casting establishment under the low-cost scenario, at 10.4 percent of profits. Assuming a facility chooses to install equipment at the average cost ($1.2 million per year) or high cost ($2.3 million per year) levels estimated by staff, the impacts on profits would be fairly significant, ranging from 162.2 percent of profits under the average-cost scenario to 313.9 percent of profits under the high-cost scenario. However, it is important to note that some facilities might be able to undertake no- or lower-cost alternatives such as increased stack height or reduced operating hours to meet the revised rule. Thus, the percentages below likely reflect the "worst-case" compliance cost impacts on these businesses.

Table 8: Compliance Cost Impacts for Metal Casting Facilities

Project Type	Avg. Annual Revenue per Establishment	Avg. Profit Margin 2009-2018	Avg. Annual Profit per Establishment	Compliance Costs as % of Profits		
				Low Cost	Avg. Cost	High Cost
				$76,000	$1,184,000	$2,292,000
Metal Casting Facility	$9,164,326	7.97%	$730,159	10.4%	162.2%	313.9%

Sources: Economic Census, 2017; County Business Patterns 2019; Internal Revenue Service, 2009-2018; BAAQMD; BAE, 2021.

Waste Facility

Between February 2017 and February 2021, the District saw one waste facility project in a high-scoring area with a cancer risk greater than or equal to six in one million. For this particular project,

emissions from conveyors and stockpiles were abated through the use of a water spray system. The analysis here assumes that this type of facility would be able to install an additional water spray system to meet the new cancer risk limit. Based on cost data assessed by District staff, annualized compliance costs can range from $31,000 for a stockpile spray system to $130,000 for a mobile truck system.[3] Low and high-cost estimates are assessed below to show the full range of potential impacts. On average, compliance costs for a stockpile spray system are below the level of significance for this type of business. However, for the higher cost mobile truck system option, compliance costs would be above the level of significance for the average business in this industry, at 23.0 percent.

Table 9: Compliance Cost Impacts for Other Facilities

Project Type	Avg. Annual Revenue per Establishment	Avg. Profit Margin 2009-2018	Avg. Annual Profit per Establishment	Compliance Costs as % of Profits	
				Low Cost	High Cost
				$31,000	$130,000
Waste Facility	$8,506,621	6.66%	$566,365	5.5%	23.0%
Concrete Batching	$11,569,884	2.90%	$335,895	9.2%	38.7%

Sources: Economic Census, 2017; County Business Patterns 2019; Internal Revenue Service, 2009-2018; BAAQMD; BAE, 2021.

Concrete Batching

There was one project at a concrete batching facility that had a cancer risk greater than or equal to six in one million during the four-year period analyzed. Typically, options for modifications and controls for this type of project include limiting throughput rate or operating time, enclosures and baghouses, water spray systems, and increasing stack height or revising source location. The analysis here assumes the use of an additional water spray system, which is consistent with past permitting trends. Like the analysis for waste facilities, low- and high-cost estimates are assessed to show the full range of potential impacts. The resulting analysis shows profit impacts slightly below the significance threshold under the low-cost scenario, at 9.2 percent. Under the high-cost scenario, the average impacts on profit are estimated at 38.7 percent, which is above the threshold of significance for the average business in this industry.

[3] BAAQMD, 2018. Regulation 6, Rule 1 Staff Report. June.

Gasoline Dispensing Facilities

Gasoline dispensing facilities will be affected by updates to Rule 2-5 as well as the updates to the health risk calculation procedures for gas stations being considered in the District's Health Risk Assessment (HRA) Guidelines. The revisions to the HRA procedures for gasoline dispensing facilities would apply to all gasoline dispensing facilities within the District that are subject to Rule 2-5. Gas stations that are located in areas that receive higher CalEnviroScreen scores would be subject to the more stringent cancer risk standard of six in one million. The cancer risk limit for gasoline dispensing facilities located outside of Overburdened Communities would remain ten in one million.

Rather than requiring new emission-control technology or equipment, gasoline dispensing facilities impacted by the proposed changes will either be prevented from expanding capacity or will be allowed to expand capacity by a certain amount specified by Rule 2-5 and the new Health Risk Assessment Guidelines. Based on an evaluation of permit applications submitted between February 2017 and February 2021, staff identified a total of eleven permitted facilities in Overburdened Communities that would have had a cancer risk greater than or equal to six in one million under the revised HRA Guidelines. These facilities were identified based on health risks from previously approved HRAs and the estimated increase in cancer risk using the revised guidelines, assuming that each facility had a primary residential receptor.[4] If the new cancer risk for a project was calculated to be higher than the allowable limit of six in one million, then it was determined that the facility (or a similar future facility), would be potentially impacted by the proposed changes.

According to estimates published by the California Energy Commission, there are approximately 1,775 retail fuel outlets in the Bay Area with combined annual retail gasoline sales of approximately 2.7 billion gallons.[5] Based on this data, the average Bay Area retail fuel outlet sells approximately 1.5 million gallons of gasoline per year. Table 10 provides a summary of the eleven gasoline dispensing facilities that would have exceeded the cancer risk limit if the new HRA procedures had been in place throughout the four-year analysis period. The table shows that current permitted throughput levels for potentially affected facilities vary considerably, ranging from a low of 1.5 million gallons to a high of 36.0 million gallons for the sample of eleven facilities. The average current permitted throughput is approximately 16.8 million gallons per year, while the median is 10.0 million gallons per year.

[4] For gas dispensing facilities, maximum cancer risk is a function of maximum permitted throughput, type of primary receptor, distance to the nearest receptor, and other site-specific factors. Each facility was assumed to have a primary residential receptor in order to provide a more conservative estimate of the number of potentially impacted facilities.

[5] California Energy Commission, 2019 California Retail Fuel Outlet Annual Reporting (CEC-A15) Results.

Table 10: Summary of Gas Dispensing Facilities Potentially Requiring Modifications in Overburdened Communities Between February 2017 and February 2021

Facility	Current Permitted Throughput (Gallons/yr)	Draft New Throughput Limit	Net Change in Maximum Throughput		Actual Throughput (a)
			Number	Percent	
A	1,490,000	646,700	-843,300	-57%	335,271
B	2,500,000	2,287,500	-212,500	-9%	Unknown
C	2,560,000	1,111,040	-1,448,960	-57%	698,701
D	2,670,000	1,158,780	-1,511,220	-57%	789,134
E	3,000,000	1,791,000	-1,209,000	-40%	1,734,973
F	10,000,000	6,140,000	-3,860,000	-39%	N/A (b)
G	28,500,000	12,369,000	-16,131,000	-57%	813,623
H	29,800,000	12,814,000	-16,986,000	-57%	17,127,653
I	31,800,000	13,674,000	-18,126,000	-57%	12,207,344
J	36,000,000	16,632,000	-19,368,000	-54%	817,000
K	36,000,000	35,172,000	-828,000	-2%	14,420,000
Total	**184,320,000**	**103,796,020**	**-80,523,980**	**-44%**	**48,943,699**
Average	**16,756,364**	**9,436,002**	**-7,320,362**	**-44%**	**9,788,740**
Median	**10,000,000**	**6,140,000**	**-1,511,220**	**-57%**	**817,000**

Notes:
(a) Actual throughput data is shown for the most recent year for which this data was available. Data may not accurately reflect current operating conditions at each facility.
(b) Facility has Authority to Construct permit; it is not yet permitted to operate.

Sources: BAAQMD; BAE, 2021.

Since the control measure for gasoline dispensing facilities is limited to reducing throughput, there are no compliance costs to estimate as a share of profits for these facilities. Assuming that the proposed revisions were in place during the four-year analysis period, the impacts on actual and permitted throughput for the facilities in Table 10 would be summarized as follows:

- Compared to current permitted throughput levels, the new throughput limits under the revised guidelines are approximately 44 percent lower, on average, for the potentially impacted facilities. Most (seven) of the eleven facilities have new throughput limits equal to less than fifty percent of their current permitted limits. By volume, impacts on maximum annual throughput range from a decrease of 828,000 gallons per year for Facility K to a decrease of 19.4 million gallons per year for Facility J.

- One of the eleven facilities (Facility H) has a current actual throughput level that is higher than the throughput limit calculated for the facility using the new HRA procedures. Based on the most current data available, this facility dispenses more than 17.1 million gallons per year (2018 data). The calculated new throughput limit for Facility H is roughly 12.8 million gallons, meaning that if this facility applied for a permit for a modification with the new HRA procedures in place, it would need to reduce its actual throughput by approximately 4.3 million gallons per year, or 25 percent, assuming no other modifications could be made to

reduce cancer risk.[6] Facility E, which has a current actual throughput equal to approximately 97 percent of its new throughput limit, could also be adversely impacted by the new rules and procedures assuming it was prevented from expanding via additional throughput.

- Aside from the significant negative impacts to Facility H and the potential impacts to Facility E, the new throughput limits do not appear to inhibit existing throughput capacity for any of the other facilities that have actual throughput data. Of the remaining facilities with actual throughput data, four would be able to expand actual throughput by more than one million gallons per year with the new throughput limits in place. However, it is important to note that these stations are extremely high-volume facilities that already have current permitted throughput levels well above the average. [7]

- Five of the eleven facilities have current permitted throughput limits below 3.6 million gallons per year. Actual throughput averages 890,000 gallons per year at the four facilities with actual throughput data. Currently all four of these facilities would be able to expand annual throughput by more than one million gallons under the current permitted throughput limits. The potential reductions in additional throughput capacity under the new throughput limits could be significant for these facilities, with new growth capacity ranging from just 56,000 gallons per year at Facility E to 412,000 gallons per year at Facility C based on the new throughput limits.

Table 11 summarizes the twenty gasoline dispensing facilities that would have exceeded the cancer risk limit of ten in one million outside of Overburdened Communities if the new HRA procedures had been in place throughout the four-year analysis period. As shown, current permitted throughput ranges from 600,000 gallons per year to 36.6 million gallons per year at these facilities. The average current permitted throughput is approximately 15.9 million gallons per year, while the median is 6.5 million gallons per year.

[6] A closer look at recent permit applications for this facility shows that its maximally exposed receptor is actually a worker. Since the new throughput limits were calculated based on the assumption that every project has a maximally exposed residential receptor, the impacts on maximum throughput for this facility are very likely overstated.

[7] According to the California Air Resources Board, a typical gas dispensing facility in California dispenses under 3.6 million gallons of gasoline per year. See: California Environmental Protection Agency California Air Resources Board, 2005. Air Quality and Land Use Handbook: A Community Health Perspective. April.

Table 11: Summary of Gas Dispensing Facilities Potentially Requiring Modifications Outside of Overburdened Communities, February 2017 through February 2021

Facility	Current Permitted Throughput (Gallons/yr)	Draft New Throughput Limit	Net Change in Maximum Throughput		Actual Throughput (a)
			Number	Percent	
AA	600,000	510,000	-90,000	-15%	Unknown
BB	1,560,000	1,113,840	-446,160	-29%	912,430
CC	2,100,000	1,562,500	-537,500	-26%	1,118,721
DD	3,000,000	2,164,502	-835,498	-28%	404,054
EE	3,000,000	2,676,000	-324,000	-11%	650,000
FF	3,000,000	2,490,000	-510,000	-17%	2,878,305
GG	3,000,000	2,856,000	-144,000	-5%	2,214,381
HH	3,730,000	2,663,220	-1,066,780	-29%	N/A (b)
II	5,090,000	3,634,260	-1,455,740	-29%	Unknown
JJ	6,450,000	4,605,300	-1,844,700	-29%	N/A (b)
KK	6,450,000	4,650,450	-1,799,550	-28%	N/A (b)
LL	16,000,000	11,424,000	-4,576,000	-29%	N/A (b)
MM	20,000,000	14,280,000	-5,720,000	-29%	11,059,778
NN	29,750,000	21,241,500	-8,508,500	-29%	Unknown
OO	34,500,000	24,633,000	-9,867,000	-29%	N/A (b)
PP	35,300,000	25,204,200	-10,095,800	-29%	15,130,000
QQ	36,000,000	28,260,000	-7,740,000	-22%	14,310,000
RR	36,000,000	25,704,000	-10,296,000	-29%	17,020,000
SS	36,000,000	32,536,709	-3,463,291	-10%	15,250,000
TT	36,600,000	27,221,250	-9,378,750	-26%	15,701,237
Total	**318,130,000**	**239,430,731**	**-78,699,269**	**-25%**	**96,648,906**
Average	**15,906,500**	**11,971,537**	**-3,934,963**	**-24%**	**8,054,076**
Median	**6,450,000**	**4,627,875**	**-1,822,125**	**-28%**	**6,969,042**

Notes:
(a) Actual throughput data is shown for the most recent year for which this data was available. Data may not accurately reflect current operating conditions at each facility.
(b) Facilities are under authority to construct, but are not yet permitted to operate.

Sources: BAAQMD; BAE, 2021.

Following is a summary of how the new HRA procedures would have affected these gasoline dispensing facilities if the procedures had been in place throughout the four-year analysis period.

- Compared to current permitted throughput levels, the calculated new throughput limits are approximately 25 percent lower for the affected gasoline dispensing facilities outside of Overburdened Communities during the four-year analysis period. Permitted allowable throughput ranges from a low of 510,000 gallons per year for Facility AA to a high of roughly 32.5 million gallons per year for Facility SS. On average, facilities outside of Overburdened Communities would see their maximum permitted throughputs decrease by approximately 3.9 million gallons per year with the new procedures in place.

- One of the twenty facilities (Facility FF) likely has a current actual throughput rate that is greater than its new permitted limit. Based on the most current data available (2016), this

facility dispenses more than 2.8 million gallons per year and operates at approximately 96 percent of its current permitted throughput limit. Assuming the new HRA procedures had been in place throughout the four-year period, this facility would have needed to reduce actual throughput by approximately 388,300 gallons per year (13 percent) to meet the cancer risk limit of ten in one million outside of Overburdened Communities, assuming no other modifications could have been made to reduce cancer risk.

- Aside from the significant impacts to Facility FF, the new throughput limits do not appear to significantly inhibit throughput capacity for the other facilities outside of Overburdened Communities that have actual throughput data. Most (seven) of the facilities would be able to expand actual throughput by more than one million gallons per year with the new limits in place. For the remaining three facilities with actual throughput data, expansion potential would range from 201,400 gallons per year at Facility BB to 641,600 gallons per year at Facility GG.

- Five of the twenty affected facilities outside of Overburdened Communities are facilities that have obtained authority to construct permits but have not yet been permitted to operate. These new facilities have an average current permitted throughput of approximately 13.4 million gallons per year and a median permitted throughput of roughly 6.5 million gallons per year. Compared to current throughput levels, their new throughput limits with the revised procedures would be 28.5 percent lower, averaging 9.6 million gallons per year.

Summary of Potential Economic Impacts on Gasoline Dispensing Facilities

A comparison of actual and permitted throughput levels for the 21 facilities with actual throughput data shows that actual throughput levels can vary widely with respect to maximum permitted throughput limits for potentially affected gasoline dispensing facilities. Thus, it is not possible to predict actual throughput and the potential impacts on profits for future facilities that might be subject to the new HRA procedures. Based on a detailed analysis of the data for the facilities shown in Table 10 and Table 11 above, BAE was able to identify at least two facilities that would have potentially needed to reduce actual throughput as a direct result of the proposed changes during the four-year analysis period. The potential impacts on gasoline sales and associated profits from gasoline sales are summarized in Table 12 below.[8]

[8] It is important to note that potential impacts shown in Table 12 are limited to gasoline sales at these two facilities. Most retail fuel outlets have convenience stores and generate additional revenues from in-store sales of consumable products or other services. For retail outlets with convenience stores, in-store sales can be significant. See: National Association of Convenience Stores, 2019. Convenience Stores and Their Communities. April.

Table 12: Estimated Net Impacts on Gasoline Sales and Profits of Impacted Gasoline Dispensing Facilities

	Facility H (Table 10)	Facility FF (Table 11)
Facility Located in Overburdened Community?	Yes	No
Most Recent Actual Annual Throughput (a)	17,127,653	2,878,305
Est. Annual Revenues from Gasoline Sales (b) (c)	$61,228,395	$10,289,442
Est. Annual Profits from Gasoline Sales (c)	$726,082	$122,018
Draft New Throughput Limit	12,814,000	2,490,000
Required Actual Throughput Reduction w/ Draft Limit	-4,313,653	-388,305
Estimated Net Impact on Profits	**-$182,866**	**-$16,461**
Net Impact as a % of Existing Profits from Gasoline Sales (d)	-25.2%	-13.5%

Notes:
(a) Actual throughput for the most recent year available for Facility H (2018) and Facility F (2016). Data may not reflect current operating conditions.
(b) Gasoline sales based on the average retail gasoline price for unbranded gasoline in California during the months of September 2020 through August 2021.
(c) Estimate of existing revenues and profits associated with gasoline sales at each facility. Most retail fuel outlets generate additional revenues from convenience store sales or other services. For retail fuel outlets with convenience stores, in-store sales can be significant and would typically drive profits.
(d) Reflects net impacts as a share of existing profits associated with gasoline sales. Total revenues and profits at each facility could be higher than shown here.

Sources: BAAQMD; California Energy Commission; Internal Revenue Service, 2009-2018; BAE, 2021.

Rule 2-1

The revised Rule 2-1 requires some projects in Overburdened Communities to provide public notice. The rule would only apply to projects that require health risk assessments and are located in areas that have high CalEnviroScreen scores. The language would require the same type of notification that is currently required for projects that will result in an increase in toxic air contaminant emissions that are proposed to be located near K-12 schools. Applicants that propose projects that will require a Health Risk Assessment would be required to distribute the notice to surrounding addresses located within one thousand feet of the proposed source.

The proposed amendments to Rule 2-1 would affect businesses in a variety of industries and businesses are expected to vary significantly in terms of size, revenue, and profits. Based on permitting trends, the industries shown in Table 13 would be generally affected.

Compliance costs for the enhanced notification requirement would be one-time costs and average annualized compliance costs would be minimal. The impacts on profits would be negligible for the average affected business.

Table 13: Summary of Required Public Notifications by Affected Industry, February 2017 – February 2021

Industry Sector	Total Permits Requiring Public Notifications (a) Total	Percent	Estimated Notifications per Year
Utilities	5	1.9%	1.25
Construction	1	0.4%	0.25
Manufacturing	42	15.8%	10.5
Wholesale Trade	17	6.4%	4.25
Retail Trade	30	11.3%	7.5
Transportation and Warehousing	11	4.1%	2.75
Information	19	7.1%	4.75
Real Estate and Rental and Leasing	57	21.4%	14.25
Professional, Scientific, and Technical Svcs	3	1.1%	0.75
Admin. & Waste Mgmt and Remediation	18	6.8%	4.5
Educational Services	4	1.5%	1
Health Care and Social Assistance	7	2.6%	1.75
Arts, Entertainment, and Recreation	1	0.4%	0.25
Accommodation and Food Services	5	1.9%	1.25
Other Services (exc. Public Admin.)	6	2.3%	1.5
Government (b)	39	14.7%	9.75
Unknown	1	0.4%	0.25
All Industries	**266**	**100.0%**	**66.5**

Notes:
(a) Based on permitting trends between February 2017 and February 2021.
(b) Government includes all publicly owned facilities, regardless of sector.
Sources: BAAQMD; BAE, 2021.

Regional Impacts

IMPLAN was used to assess direct impacts on employment, indirect impacts, and induced impacts from compliance costs under the revised rules. The IMPLAN analysis is based on average permitting activity in a typical year and models the impacts based on the highest cost scenarios for each of the industries and types of projects summarized in Table 3 above.

It is assumed that the costs of new control equipment would result in equivalent lower total revenues, and that the expenditures for additional abatement equipment would not circulate through the local economy. Actual impacts would be lower than shown here, since some equipment could be purchased and/or produced locally, and costs would not necessarily translate to a decline in gross revenues, e.g., the costs could be expensed to lower taxes. Furthermore, the analysis is based on the highest control cost scenario assumed for each industry and type of project, even though less expensive control options would be available. While the particular facilities to be affected are not necessarily known, the overall cost impacts as estimated by sector are assumed to occur somewhere in the local economy and thus have a direct effect on jobs and the impact equivalent to a decline in output (total revenues).

In addition to these direct impacts, there would be indirect and induced impacts on the regional

economy. Indirect and induced impacts refer to regional multiplier effects of increasing or decreasing regional economic activity. If the rules were to significantly impact local businesses, any closures would result in direct regional economic losses. Firms would no longer buy goods from local suppliers, thereby resulting in reduced indirect impacts, or business-to-business expenditures. In addition, firms would no longer employ regional residents, resulting in induced impacts due to decreases in household spending. Because there is the potential for the proposed rules to result in significant direct impacts for the sectors listed above, the analysis uses the IMPLAN input-output model to estimate the indirect or induced impacts.

Economic Impacts of Increased Costs in Impacted Industries

Table 14 shows the direct, indirect, and induced regional impacts due to the decline in operating revenues for affected businesses. Taken together, total impacts on annual economic output are estimated to equal $2.1 million with a related annual loss of 8.1 jobs. It should be noted that this is based on specific assumptions regarding the different combinations of potential controls, compliance costs, and affected industries as grouped into different project types.

Table 14: Regional Economic Impacts

High Cost Scenario	Employment	Output
Direct (a)	-4.52	-$1,306,850
Indirect (b)	-1.97	-$492,737
Induced (c)	-1.61	-$345,320
Total	**-8.09**	**-$2,144,907**

Notes:
(a) Based on the initial decline in revenues (increase in costs), direct impacts measure the reduction of dollars available to then flow through the local economy.
(b) Indirect impacts refer to business-to-business impacts.
(c) Induced impacts occur when workers spend their household incomes throughout the local economy.
Sources: IMPLAN; BAAQMD; BAE, 2021.

Impacts on Small Businesses

According to California Government Code 14835, a small business is any business that meets the following requirements:

- Must be independently owned and operated;
- Cannot be dominant in its field of operation;
- Must have its principal office located in California;
- Must have its owners (or officers in the case of a corporation) domiciled in California; and
- Together with its affiliates, be either:
    - A business with 100 or fewer employees, and average annual gross receipts of $15 million or less over the previous three tax years, or
    - A manufacturer with 100 or fewer employees

All of the rule changes will be forward-looking and will not apply to specific facilities or previously issued permits. Although it is not possible to predict how many future affected projects would be classified as small businesses, based on the permits that were issued between February 2017 and February 2021, small businesses in the following industries would have been affected by the reduced cancer risk limit in high-scoring areas:

- Fertilizer (Mixing Only) Manufacturing (NAICS 325314)
- Cemeteries and Crematories (NAICS 812220)
- Remediation Services (NAICS 562910)
- Nursing and Residential Care Facilities (NAICS 623)
- Gasoline Stations (NAICS 4471)

Based on the analysis detailed in Appendix A and Appendix B, at the assumed compliance costs, it is possible that some small businesses in affected industries would be significantly impacted as measured by a 10 percent or greater impact on net income. Following is a brief discussion of the potential impacts on small businesses in each of the affected industries.

- Lessors of Residential Buildings. These users are listed due to their potential use of diesel backup generators. Small businesses are not likely to be the businesses undertaking these types of large projects, but assuming that they were affected, it is possible that a small business with less than ten employees would be impacted in a "worst-case" scenario with maximum control costs of $72,000 per year. If compliance costs were within the typical range estimated, no small businesses would be impacted.

- Colleges, Universities, and Professional Schools. These institutional users are also listed due to their potential use of diesel backup generators. The analysis shows that small businesses with less than 100 employees would be significantly impacted if maximum annualized control costs were $72,000. For extremely small businesses with less than five employees, these businesses would experience significant impacts even if compliance costs were at the low end of the typical range. However, based on permitting data since 2017, the use of backup generators is associated with much larger institutions with a total number of

employees much greater than the 100+ employment threshold. Some of these users are non-profit universities.

- Telecommunications Carriers. Based on permitting data since 2017, businesses with standby diesel engines in this sector have overwhelmingly consisted of large corporations with well over 100 employees. Assuming a small business in this sector was affected by the rule change, businesses with less than twenty employees would experience significant impacts on profits if compliance costs were at the maximum level estimated by staff. If compliance costs were within the typical range estimated, only extremely small businesses with less than five employees would be impacted. As mentioned, these are not likely the types of businesses that will be undertaking this type of project.

- Data Processing, Hosting, and Related Services. Data center users are listed due to their frequent use of diesel backup generators. Although the size of data centers can vary, most permits since 2017 have been for large facilities owned by major cloud providers or multi-tenant colocation facilities developed by large real estate investment firms. Many of these facilities have more than one backup generator. Although it would be an unlikely scenario, the analysis shows that a small business in this sector with less than 20 employees would be significantly impacted assuming "worst-case" scenario control costs.

- Nursing and Residential Care. During the four-year period, there were two smaller (<350 bhp) diesel engine projects in this sector that would have needed additional controls to meet the reduced risk limit in high-scoring areas. According to website descriptions and publicly available data, it is possible that one of these businesses would be defined as a small business.[9] All small businesses in this sector would see substantial impacts on net income under the "worst-case" control costs scenario. However, less expensive control options would be available for smaller diesel engine users. Assuming compliance costs were somewhere within the typical range, businesses with less than 50 employees would be significantly impacted. Based on permitting data, these are not likely to be the types of businesses undertaking this type of project.

- Lessors of Nonresidential Buildings. Based on permitting data, some of the firms associated with SVE projects fall in this industry. As shown in Appendix B, small businesses with less than fifty employees would see significant impacts on net income assuming worst-case control costs. Assuming average control costs, businesses with less than twenty employees would be significantly impacted. Extremely small businesses with less than five employees would see significant impacts on their net income even under the low-cost scenario.

[9] According to Dun and Bradstreet data, this facility has 50 total employees and estimated sales of approximately $3.3 million. However, data from Infogroup indicate that the business employs between 100 and 250 workers.

- **Fertilizer (Mixing Only) Manufacturing.** There was one permitted facility in this sector that would have needed to install additional controls during the four-year period. It is likely that this facility would be classified as a small business based on available data.[10] Based on the analysis shown in Appendix B, small businesses with less than twenty employees would see significant impacts on net income assuming worst-case control costs. If control costs were within the typical range, only extremely small businesses with less than five employees would be impacted.

- **Petroleum Bulk Stations and Terminals.** Based on a review of past permitting data, these projects include facilities at bulk stations and terminals that support existing large refineries in the Bay Area. None of these are small businesses as considered here.

- **Remediation Services.** This industry includes the firms that would be associated with SVE projects. Based on permitting data, businesses in this industry include full-service remediation and environmental firms. While some of these firms have less than 100 employees total, they are hired by other entities to complete cleanup projects and would not be absorbing any increased costs. The compliance cost impacts on net income would thus be zero for small businesses in this sector.

- **Crematories.** There was one permitted crematory project that would be classified as a small business that would have needed to install additional controls during the period analyzed. Annualized control costs are expected to be low, at $1,700 per year. Based on the analysis, the impacts on profits would be less than significant for all businesses, including small businesses, in this sector.

- **Foundries.** Based on the analysis shown in Appendix B, small businesses in this sector would see substantial impacts on net income even under the low-cost scenario. There were no permitted projects for small businesses in this sector during the four-year period.

- **Waste Treatment and Disposal.** Although there were no permitted projects for small businesses in this sector during the four-year period, the analysis shows that small businesses in this sector with less than fifty employees would be significantly impacted under the high-cost scenario. Under the low-cost scenario, compliance cost impacts would be significant for businesses with less than ten employees.

- **Cement and Concrete Product Manufacturing.** The analysis shows that small business impacts would be significant under the high-cost scenario. Under the low-cost scenario, businesses with less than twenty employees would be see compliance cost impacts above the level of significance. The facility that was permitted in this sector during the four-year

[10] According to website descriptions, the facility is owned by a company that operates three material supply locations in Sonoma County. The company employs 18 workers across the three locations according to Dun and Bradstreet data.

period is owned by a larger corporation and would not be considered a small business under the definition above.

- **Gas Stations.** Given that so many gasoline dispensing facilities are independently owned small businesses, it is likely that small businesses will be affected by the new HRA procedures. One of the two impacted gasoline dispensing facilities shown in Table 12 is an independently owned business and would be considered a small business based on the annual sales estimate shown in the table.

APPENDICES

Appendix A: Detailed Cost Impacts of Diesel Particulate Filters for Diesel Engine Users

Residential NAICS 531110

Number of Employees	Percent of Establish-ments	Average Employees per Establishment	Average Annual Sales per Establishment	Average Annual Profit per Establishment	Compliance Costs as % of Profits: Typical Low Cost $4,000	Typical High Cost $13,000	Maximum Control Cost $72,000
1-4	78.1%	1.7	$772,954	$184,195	2.17%	7.06%	39.09%
5-9	14.6%	6.4	$2,859,404	$681,396	0.59%	1.91%	10.57%
10-19	5.0%	12.9	$5,755,735	$1,371,592	0.29%	0.95%	5.25%
20-49	1.6%	28.7	$12,785,046	$3,046,677	0.13%	0.43%	2.36%
50-99	0.5%	69.9	$31,112,830	$7,414,188	0.05%	0.18%	0.97%
100+	0.3%	202.9	$90,297,710	$21,517,946	0.02%	0.06%	0.33%
Total/Average	**100.0%**	**4.4**	**$1,944,132**	**$463,287**	**0.86%**	**2.81%**	**15.54%**

Based on 2017 Economic Census data for NAICS 531110, Lessors of Residential Buildings and Dwellings
Average revenues per employee $445,022
Average Profit Margin, 2009-2018 23.83%

Office/Retail Centers NAICS 531120

Number of Employees	Percent of Establish-ments	Average Employees per Establishment	Avg. Annual Revenue per Establishment	Avg. Annual Profit per Establishment	Compliance Costs as % of Profits: Typical Low Cost $4,000	Typical High Cost $13,000	Maximum Control Cost $72,000
1-4	75.0%	1.7	$1,101,635	$262,520	1.52%	4.95%	27.43%
5-9	14.6%	6.4	$4,239,079	$1,010,173	0.40%	1.29%	7.13%
10-19	6.5%	13.0	$8,552,090	$2,037,963	0.20%	0.64%	3.53%
20-49	2.7%	30.6	$20,178,056	$4,808,431	0.08%	0.27%	1.50%
50-99	0.7%	74.1	$48,902,542	$11,653,477	0.03%	0.11%	0.62%
100+	0.5%	199.9	$131,941,414	$31,441,642	0.01%	0.04%	0.23%
Total/Average	**100.0%**	**5.4**	**$3,534,984**	**$842,387**	**0.47%**	**1.54%**	**8.55%**

Based on 2017 Economic Census data for NAICS 531120, Lessors of Nonresidential Buildings (except Miniwarehouses)
Average revenues per employee $659,982
Average Profit Margin, 2009-2018 23.83%

Educational Services NAICS 611310

Number of Employees	Percent of Establish-ments	Average Employees per Establishment	Average Annual Sales per Establishment	Average Annual Profit per Establishment	Compliance Costs as % of Profits: Typical Low Cost $4,000	Typical High Cost $13,000	Maximum Control Cost $72,000
1-4	28.6%	2.1	$191,944	$16,999	23.53%	76.48%	423.57%
5-9	12.4%	7.2	$662,489	$58,670	6.82%	22.16%	122.72%
10-19	10.1%	14.0	$1,292,766	$114,488	3.49%	11.35%	62.89%
20-49	17.4%	32.9	$3,048,216	$269,951	1.48%	4.82%	26.67%
50-99	8.6%	69.5	$6,436,846	$570,048	0.70%	2.28%	12.63%
100+	22.9%	1,200.2	$111,080,812	$9,837,335	0.04%	0.13%	0.73%
Total/Average	**100.0%**	**289.8**	**$26,819,495**	**$2,375,139**	**0.17%**	**0.55%**	**3.03%**

Based on 2017 Economic Census data for NAICS 611, Educational Services
Average revenues per employee $92,554
Average Profit Margin, 2009-2018 8.86%

(continued on next page)

Appendix A: Detailed Cost Impacts of Diesel Particulate Filters for Diesel Engine Users (continued)

Telecommunications Carriers NAICS 51731

Number of Employees	Percent of Establish-ments	Average Employees per Establishment	Average Annual Sales per Establishment	Average Annual Profit per Establishment	Compliance Costs as % of Profits: Typical Low Cost $4,000	Typical High Cost $13,000	Maximum Control Cost $72,000
1-4	44.5%	2.0	$1,221,293	$86,641	4.62%	15.00%	83.10%
5-9	23.6%	6.8	$4,151,790	$294,536	1.36%	4.41%	24.45%
10-19	17.1%	13.6	$8,329,214	$590,890	0.68%	2.20%	12.19%
20-49	8.7%	31.5	$19,304,168	$1,369,474	0.29%	0.95%	5.26%
50-99	3.6%	71.9	$44,045,761	$3,124,689	0.13%	0.42%	2.30%
100+	2.5%	254.6	$155,907,335	$11,060,359	0.04%	0.12%	0.65%
Total/Average	**100.0%**	**16.6**	**$10,134,191**	**$718,939**	**0.56%**	**1.81%**	**10.01%**

Based on 2017 Economic Census (United States) data for NAICS 51731, Wired and Wireless Telecommunications Carriers

Average revenues per employee $612,266

Average Profit Margin, 2009-2018 7.09%

Data Centers NAICS 518210

Number of Employees	Percent of Establish-ments	Average Employees per Establishment	Average Annual Sales per Establishment	Average Annual Profit per Establishment	Compliance Costs as % of Profits: Typical Low Cost $4,000	Typical High Cost $13,000	Maximum Control Cost $72,000
1-4	48.9%	1.6	$630,013	$53,874	7.42%	24.13%	133.65%
5-9	13.7%	6.7	$2,656,718	$227,181	1.76%	5.72%	31.69%
10-19	12.1%	13.4	$5,264,796	$450,203	0.89%	2.89%	15.99%
20-49	11.8%	31.9	$12,552,805	$1,073,416	0.37%	1.21%	6.71%
50-99	5.5%	69.6	$27,426,033	$2,345,255	0.17%	0.55%	3.07%
100+	8.0%	327.6	$128,989,417	$11,030,144	0.04%	0.12%	0.65%
Total/Average	**100.0%**	**36.9**	**$14,547,939**	**$1,244,023**	**0.32%**	**1.04%**	**5.79%**

Based on 2017 Economic Census data for NAICS 518210, Data Processing, Hosting, and Related Services

Average revenues per employee $393,798

Average Profit Margin, 2009-2018 8.55%

Nursing and Residential Care NAICS 623

Number of Employees	Percent of Establish-ments	Average Employees per Establishment	Average Annual Sales per Establishment	Average Annual Profit per Establishment	Compliance Costs as % of Profits: Typical Low Cost $4,000	Typical High Cost $13,000	Maximum Control Cost $72,000
1-4	32.2%	1.9	$152,993	$6,551	61.05%	198.43%	1098.99%
5-9	20.7%	6.9	$558,212	$23,904	16.73%	54.38%	301.21%
10-19	17.4%	13.4	$1,086,834	$46,540	8.59%	27.93%	154.70%
20-49	12.3%	30.9	$2,507,352	$107,370	3.73%	12.11%	67.06%
50-99	7.8%	71.7	$5,810,970	$248,837	1.61%	5.22%	28.93%
100+	9.5%	171.9	$13,937,919	$596,849	0.67%	2.18%	12.06%
Total/Average	**100.0%**	**30.2**	**$2,446,060**	**$104,745**	**3.82%**	**12.41%**	**68.74%**

Based on 2017 Economic Census data for NAICS 623, Nursing and Residential Care Facilities

Average revenues per employee $81,074

Average Profit Margin, 2009-2018 4.28%

(continued on next page)

Appendix A: Detailed Cost Impacts of Diesel Particulate Filters for Diesel Engine Users (continued)

Fertilizer Mixing Facility NAICS 325314

Number of Employees	Percent of Establish-ments	Average Employees per Establishment	Average Annual Sales per Establishment	Average Annual Profit per Establishment	Compliance Costs as % of Profits: Typical Low Cost $4,000	Typical High Cost $13,000	Maximum Control Cost $72,000
1-4	26.7%	2.3	$854,036	$77,652	5.15%	16.74%	92.72%
5-9	17.8%	6.3	$2,287,597	$207,997	1.92%	6.25%	34.62%
10-19	13.3%	14.8	$5,429,230	$493,647	0.81%	2.63%	14.59%
20-49	22.2%	28.0	$10,248,434	$931,828	0.43%	1.40%	7.73%
50-99	17.8%	66.8	$24,431,535	$2,221,411	0.18%	0.59%	3.24%
100+	2.2%	94.0	$34,405,457	$3,128,280	0.13%	0.42%	2.30%
Total/Average	**100.0%**	**23.9**	**$8,743,704**	**$795,012**	**0.50%**	**1.64%**	**9.06%**

Based on 2017 Economic Census data for NAICS 325314, Fertilizer (Mixing Only) Manufacturing
Average revenues per employee $366,016
Average Profit Margin, 2009-2018 9.09%

Fuel Storage NAICS 424710

Number of Employees	Percent of Establish-ments	Average Employees per Establishment	Average Annual Sales per Establishment	Average Annual Profit per Establishment	Compliance Costs as % of Profits: Typical Low Cost $4,000	Typical High Cost $13,000	Maximum Control Cost $72,000
1-4	28.6%	2.1	$11,232,093	$114,136	3.50%	11.39%	63.08%
5-9	23.3%	6.9	$37,557,503	$381,646	1.05%	3.41%	18.87%
10-19	20.5%	13.3	$72,325,589	$734,947	0.54%	1.77%	9.80%
20-49	20.8%	29.7	$161,590,298	$1,642,023	0.24%	0.79%	4.38%
50-99	5.3%	68.9	$375,178,816	$3,812,432	0.10%	0.34%	1.89%
100+	1.4%	151.8	$826,719,051	$8,400,822	0.05%	0.15%	0.86%
Total/Average	**100.0%**	**16.9**	**$92,056,060**	**$935,441**	**0.43%**	**1.39%**	**7.70%**

Based on 2017 Economic Census data for NAICS 424710, Petroleum Bulk Stations and Terminals
Average revenues per employee $5,447,901
Average Profit Margin, 2009-2018 1.02%

Sources: Economic Census, 2017; County Business Patterns 2019; Internal Revenue Service, 2009-2018; BAAQMD; BAE, 2021.

Appendix B: Detailed Cost Impacts for Other Projects by Industry

SVE Project - Remediation Services NAICS 562910

Number of Employees	Percent of Establish-ments	Average Employees per Establishment	Average Annual Sales per Establishment	Average Annual Profit per Establishment	Compliance Costs as % of Profits Low Cost $35,000	Avg. Cost $361,000	High Cost $688,000
1-4	38.5%	1.9	$364,444	$24,264	144.2%	1487.8%	2835.4%
5-9	15.7%	7.1	$1,360,633	$90,590	38.6%	398.5%	759.5%
10-19	18.5%	14.3	$2,731,286	$181,847	19.2%	198.5%	378.3%
20-49	16.4%	31.4	$5,997,860	$399,333	8.8%	90.4%	172.3%
50-99	6.7%	64.9	$12,398,919	$825,512	4.2%	43.7%	83.3%
100+	4.3%	162.2	$30,984,788	$2,062,946	1.7%	17.5%	33.4%
Total/Average	**100.0%**	**20.9**	**$3,991,996**	**$265,784**	**13.2%**	**135.8%**	**258.9%**

Based on 2017 Economic Census data for NAICS 562910, Remediation Services
Average revenues per employee $191,068
Average Profit Margin, 2009-2018 6.66%

SVE Project - Retail Center NAICS 531120

Number of Employees	Percent of Establish-ments	Average Employees per Establishment	Average Annual Sales per Establishment	Average Annual Profit per Establishment	Compliance Costs as % of Profits Low Cost $35,000	Avg. Cost $361,000	High Cost $688,000
1-4	75.0%	1.7	$1,101,635	$262,520	13.3%	137.5%	262.1%
5-9	14.6%	6.4	$4,239,079	$1,010,173	3.5%	35.7%	68.1%
10-19	6.5%	13.0	$8,552,090	$2,037,963	1.7%	17.7%	33.8%
20-49	2.7%	30.6	$20,178,056	$4,808,431	0.7%	7.5%	14.3%
50-99	0.7%	74.1	$48,902,542	$11,653,477	0.3%	3.1%	5.9%
100+	0.5%	199.9	$131,941,414	$31,441,642	0.1%	1.1%	2.2%
Total/Average	**100.0%**	**5.4**	**$3,534,984**	**$842,387**	**4.2%**	**42.9%**	**81.7%**

Based on 2017 Economic Census data for NAICS 531120, Lessors of Nonresidential Buildings (except Miniw arehouses)
Average revenues per employee $659,982
Average Profit Margin, 2009-2018 23.83%

Metal Casting Facility Project NAICS 3315

Number of Employees	Percent of Establish-ments	Average Employees per Establishment	Average Annual Sales per Establishment	Average Annual Profit per Establishment	Compliance Costs as % of Profits Low Cost $76,000	Avg. Cost $1,184,000	High Cost $2,292,000
1-4	27.1%	1.9	$433,816	$34,564	219.9%	3425.5%	6631.2%
5-9	14.3%	6.5	$1,521,254	$121,204	62.7%	976.9%	1891.0%
10-19	17.3%	14.1	$3,283,603	$261,618	29.1%	452.6%	876.1%
20-49	17.3%	30.7	$7,165,147	$570,876	13.3%	207.4%	401.5%
50-99	11.3%	70.3	$16,394,370	$1,306,205	5.8%	90.6%	175.5%
100+	12.8%	173.6	$40,476,314	$3,224,911	2.4%	36.7%	71.1%
Total/Average	**100.0%**	**39.3**	**$9,164,326**	**$730,159**	**10.4%**	**162.2%**	**313.9%**

Based on 2017 Economic Census data for NAICS 3315, Foundries
Average revenues per employee $233,095
Average Profit Margin, 2009-2018 7.97%

(continued on the next page)

Appendix B: Detailed Cost Impacts for Other Projects by Industry (continued)

Crematories NAICS 81222

Number of Employees	Percent of Establish-ments	Average Employees per Establishment	Average Annual Sales per Establishment	Average Annual Profit per Establishment	Compliance Costs per Establishment	Compliance Costs as % of Profits
1-4	38.3%	2.4	$456,391	$32,433	$1,700	5.24%
5-9	24.2%	7.1	$1,363,418	$96,889	$1,700	1.75%
10-19	21.9%	14.4	$2,778,831	$197,473	$1,700	0.86%
20-49	11.5%	29.3	$5,642,983	$401,010	$1,700	0.42%
50-99	3.3%	67.2	$12,950,825	$920,331	$1,700	0.18%
100+	0.7%	188.5	$36,315,827	$2,580,729	$1,700	0.07%
Total/Average	**100.0%**	**12.8**	**$2,467,298**	**$175,335**	**$1,700**	**0.97%**

Based on 2017 Economic Census data for NAICS 81222, Crematories
Average revenues per employee $192,657
Average Profit Margin, 2009-2018 7.11%

Conveyors/Stockpiles at Waste Facility NAICS 56221

Number of Employees	Percent of Establish-ments	Average Employees per Establishment	Average Annual Sales per Establishment	Average Annual Profit per Establishment	Compliance Costs as % of Profits	
					Low Cost	High Cost
					$31,000	$130,000
1-4	31.5%	1.8	$670,033	$44,610	69.5%	291.4%
5-9	19.2%	6.9	$2,594,713	$172,754	17.9%	75.3%
10-19	14.6%	14.0	$5,281,437	$351,635	8.8%	37.0%
20-49	25.4%	31.6	$11,925,150	$793,968	3.9%	16.4%
50-99	6.1%	70.7	$26,668,356	$1,775,561	1.7%	7.3%
100+	3.3%	191.7	$72,323,356	$4,815,240	0.6%	2.7%
Total/Average	**100.0%**	**22.5**	**$8,506,621**	**$566,365**	**5.5%**	**23.0%**

Based on 2017 Economic Census data for NAICS 56221, Waste Treatment and Disposal
Average revenues per employee $377,246
Average Profit Margin, 2009-2018 6.66%

Concrete Manufacturing Facility Project NAICS 3273

Number of Employees	Percent of Establish-ments	Average Employees per Establishment	Average Annual Sales per Establishment	Average Annual Profit per Establishment	Compliance Costs as % of Profits	
					Low Cost	High Cost
					$31,000	$130,000
1-4	21.4%	1.9	$694,563	$20,164	153.7%	644.7%
5-9	15.5%	7.0	$2,599,792	$75,477	41.1%	172.2%
10-19	23.1%	14.1	$5,224,595	$151,680	20.4%	85.7%
20-49	24.0%	30.2	$11,174,258	$324,409	9.6%	40.1%
50-99	9.5%	67.4	$24,927,091	$723,679	4.3%	18.0%
100+	6.4%	201.4	$74,447,237	$2,161,341	1.4%	6.0%
Total/Average	**100.0%**	**31.3**	**$11,569,884**	**$335,895**	**9.2%**	**38.7%**

Based on 2017 Economic Census data for NAICS 3273, Cement and Concrete Product Manufacturing
Average revenues per employee $369,639
Average Profit Margin, 2009-2018 2.90%

Sources: Economic Census, 2017; County Business Patterns 2019; Internal Revenue Service, 2009-2018; BAAQMD; BAE, 2021.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

APPENDIX G

Overburdened Community Census Tracts

Appendix G: Overburdened Community Census Tracts based on Proposed Amended Rule 2-1 definition of Overburdened Community

TRACT NUMBER
6095250701
6001407300
6001409000
6001408800
6013365002
6001409100
6095250900
6001406100
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6013376000
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6013382000
6013379000
6013305000
6085512603
6075023200
6013377000
6001409500
6001403000
6001410500
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6001408900
6001402500
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6013381000
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6013358000
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6013375000
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6001407200
6013311000
6085503601
6013368001
6085501600
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6013392200
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6001400700
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BAY AREA AIR QUALITY MANAGEMENT DISTRICT

APPENDIX H

Response to Comments

Summary of Comments and Response on the Regulatory Package for Proposed Amendments to Regulation 2, Rule 1: General Requirements and Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants

Table of Contents

List of Commenters

The following table lists the individuals and organizations from whom Air District staff received written comments prior to the November 18, 2021 comment deadline.

Commenter	Contact Information
California Council for Environmental and Economic Balance (CCEEB)	Christine Wolfe Policy and Communications Director Letter, November 18, 2021
Environmental Law and Justice Clinic at Golden Gate University School of Law (GGU)	Lucas Williams Visiting Associate Professor of Law and Staff Attorney Susann Bradford Graduate Fellow
	First Generation Environmental Health & Economic Development Communities for a Better Environment West Oakland Environmental Indicators Project Greenaction for Health and Environmental Justice The Environmental Justice Committee of the National Lawyers Guild's San Francisco Chapter Dr. Raymond J. Tompkins All Positives Possible
	Letter, November 18, 2021
Illingworth & Rodkin, Inc. (I&R)	James Reyff Principal Email, November 18, 2021
Tesla	Yesenia Villasenor Associate General Counsel Letter, November 18, 2021

General Comments

General Support for proposed amendments

Comment: The commenter provided general support of the proposed amendments.

Tesla

Response: The Air District appreciates the comments in support of the proposed amendments.

Support for additional measures in Overburdened Communities

Comment: The commenter expressed support for further expansion of enhanced public noticing beyond the proposed amendments. Additionally, the commenter expressed support of an equity checklist in all permitting decisions.

GGU

Response: The Air District appreciates the opportunity to identify additional measures to increase health protection in Overburdened Communities. The Air District will continue to engage stakeholders to help guide future rulemaking and program development to support emissions reductions, especially in Overburdened Communities.

Cancer Risk

Different standards may lead to undesired outcomes for business activity, provision of essential public services, and public participation throughout the region

Comment: Comments suggested differential cancer risk standards may have unintended consequences, including the reduction of services in Overburdened Communities and may impact the ability of essential public services to provide reliable and safe service. Additionally, the public right-to-know would be guided by the characteristics of census tracts, which would mean that different projects with identical risk profiles are noticed in some communities but not others even within the same city.

CCEEB

Response: The goal of amending the Air District's Permitting Regulation, including the proposed cancer risk limits for new and modified projects in Overburdened Communities is to mitigate disproportionate impacts and health vulnerabilities to air pollution in Overburdened Communities. Additionally, limiting the risk posed by projects in Overburdened Communities helps to reduce the disparity between these communities and the rest of the Bay Area in a way a singular risk limit would not.

Further, the proposed amendments do not preclude or prohibit the permitting of sources to support public services. Projects that do not meet the proposed standards may amend their projects to adjust operations or configurations, install control technology, adjust throughputs or a combination of measures to meet the proposed standards.

Adequate communications about what cancer risk means is important

Comment: Commenter stated providing adequate communications about what cancer risk does and doesn't mean is important so that individual residents are armed with accurate and understandable information. Contextualization about the relative contribution of risk generated by a facility is important. For example, the allowable threshold of additional incremental cancer risk from a project is currently 10 in one million (10/M), or a 0.001 percent chance, and the proposed amendments would add an additional project-level threshold of six in one million

(6/M), or a 0.0006 percent chance. A cancer risk threshold of 10/M represents the chance that, in a population of one million people, not more than ten additional people would be expected to develop cancer as the result of the exposure to the substance causing that risk at outdoor air levels 24 hours a day, 350 days a year, for 70 years. Because of these conservative exposure assumptions, an individual's actual risk of contracting cancer from exposure to air pollution from a project is often less than the theoretical risk to the entire population calculated in the risk assessment for that project.

CCEEB

Response: The Air District has noted this comment and aims to provide clarity on the topic of cancer risk. As defined in the proposed amendments and stated in the staff report, cancer risk is an estimate of the chance that an individual may develop cancer as a result of exposure to emitted carcinogens at a given receptor location, and considering, where appropriate, age sensitivity factors to account for inherent increased susceptibility to carcinogens during infancy and childhood. As this comment states, cancer risk is *not* the chance that an individual *will* develop cancer as a result of exposure to toxic air contaminants.

The Air District will strive to continuously improve how we communicate the results of health risk calculations.

California Environmental Quality Act (CEQA)

CEQA Thresholds

Comment: The commenter requested clarity on how the proposed amendments would affect CEQA review for lead agencies and whether the Air District has engaged other lead agencies, especially in Overburdened Communities to communicate these proposed amendments and receive feedback.

I&R

Response: The Air District provides guidance to lead agencies on how to determine significant air quality and greenhouse gas impacts under the California Environmental Quality Act (CEQA), and how to mitigate such impacts. The Air District's current recommended threshold of significance for project-level local cancer risk is 10 in one million. The proposed amendments to Rule 2-5 would reduce the risk limit to 6 in one million for new and modified permitted sources of toxic air contaminants in overburdened communities for the purpose of the Air District's permitting program. The Air District's CEQA threshold for cancer risk encompasses both regulated (e.g., permitted sources) and unregulated (e.g., mobile sources) activities for projects in the Bay Area. The proposed amendments to Rule 2-1 and Rule 2-5 will have no immediate direct impact on CEQA project review, and if the Air District determines an update to the CEQA thresholds of significance for cancer risk are necessary, there will be a public engagement process to seek input.

Regulation 2's Exemption for Permitting Decisions from CEQA should be eliminated

Comment: The commenter stated that Regulation 2 does not comply with the California Environmental Quality Act. The current rules exempt nearly all of the Air District's permitting

decisions from CEQA review on the ground that permit approvals are ministerial—as opposed to discretionary—decisions. However, the Air District's decisions to grant permits to facilities—particularly facilities located in overburdened communities—involve significant discretion and judgment concerning air pollution controls. The commenter stated that the California Supreme Court's recent decision in Protecting Our Water & Env't Res. v. Cty. of Stanislaus (2020) 10 Cal. 5th 479, confirms that permitting decisions that allow agencies to determine appropriate mitigation of environmental impacts cannot be categorically classified as ministerial, and therefore, Rule 2, Section 2-2-311 should be deleted, and Section 2-2-310 should be revised to omit the reference to Section 2-2-311.

GGU

Response: The Air District's practice is to review permits on a case-by-case basis to ensure consistency with the CEQA statute, guidelines, and court decisions. Revision to the CEQA provisions of Rule 2-1, including those addressing exemptions, is outside the scope of the proposed amendments. The Air District will, in the future, review Rule 2-1 for consistency with CEQA and current Air District practice, and will propose revisions if appropriate.

Implementation and Effective Date

Effective dates for proposed amendments

Comment: The commenter supports staff's suggestion that the amendments not take effect until an analysis of the resources needed to process the permits according to the proposed timelines has been completed, whether these resources come from efficiencies identified as part of the upcoming management audit and/or from additional staff resources. The Air District should explicitly memorialize the proposed July 1, 2022 effective date in the final rule. The commenter states that having a clear effective date ensures that stakeholders and regulated entities are afforded adequate certainty for project scheduling and implementation. However, for certain projects, such as diesel engines that will require retrofits, implementing compliance measures will take more time. A proposed July 1, 2022 effective date will afford these entities appropriate time in which to safely and effectively secure compliance, which will in turn allow for more efficient and effective implementation of the proposed amendments.

CCEEB

Response: This comment is noted. Section VII, Economic Impacts of the staff report contains discussion on the additional Air District staff resources to support this proposed amendment. To confirm, the proposed amendments are to take effect July 1, 2022 should the Board of Directors adopt the proposed amendments at the Public Hearing and that date will be reflected in the final rule.

Enhanced Notifications

The Air District should provide permit processing information that is accessible to the public

Comment: In general, commenters supported the proposed enhanced notification requirements in Rule 2-1. Commenters expressed interest in accessing not just information subject to the Public Noticing requirements, but all permit application information. Commenters provided feedback that the Air District should implement an online dashboard that shows permit activity across the region.

CCEEB, GGU

Response: The proposed amendments to Rule 2-1, Section 412 require new and modified sources located within an Overburdened Community and for which a Health Risk Assessment is required to prepare and distribute a public notice to the local community. This public notice must describe the source and anticipated emissions.

This enhanced public notice builds upon existing public noticing for new and modified sources located within 1,000 feet of a K-12 school site, which are required to undergo the same public noticing procedure.

Additionally, all permit applications received are posted to the Air District website here: https://www.baaqmd.gov/permits/public-notices/permit-applications-received. Applications can be filtered by number, facility name, project title, date received, city, county, status, and various alerts. Additional information such as Overburdened Community status and application status start dates may be considered in the future.

The public may submit public comments on any permit application. In addition to the public noticing described under proposed amendments to Rule 2-1, Section 2-1-412, a ten-day public comment period is available for all permit applications.

Interested parties may also sign up for email notifications to receive weekly updates of new permit applications.

Expansion of the Public Notification requirement to all projects located in Overburdened Communities

Comment: The commenter stated that public notice requirement for new or modified facilities located in overburdened communities should be expanded. The Air District proposes to amend Rule 2-1, Section 2-1-412 to require notice of new permitting actions for facilities in overburdened communities. But the notice will be provided only when a project requires a health risk assessment. The notice requirement should not be limited to projects that trigger a health risk assessment. Overburdened communities are impacted not only by facilities that emit TACs but also by criteria pollutants including particulate matter. Indeed, the Air District acknowledges that "particulate matter is the most important health risk driver in Bay Area air quality, and that there is no known threshold for harmful health effects from particulate matter in the form of PM2.5." Accordingly, all new projects that will increase emissions of criteria or toxic pollutants in overburdened communities should be subject to public notice. Thus, Rule 2-1, Section 2-1-412

should omit the reference to health risk assessments as a trigger for the public notice requirement.

GGU

Response: The Air District recognizes the need for increased transparency and access to permit details and information. The proposed amendments to Rule 2-1, Section 2-1-412 provide expanded public notifications for projects located in Overburdened Communities and subject to health risk assessments.

All other permit applications are available on the Air District website, and can be accessed here: https://www.baaqmd.gov/permits/public-notices/permit-applications-received. Additionally, the Air District provides a ten-day public comment period. All Title V initial and significant permits revisions also have a public notice and comment period.

Clarification on Air District Implementation of Enhanced Public Notification

Comment: The commenter noted that the Staff Report states that "applicants…will be required" to give notice. The commenter questions whether the Air District intends to rely on applicants to provide notice, when the agency would be in a better position to track this and guarantee that the requirement is met.

GGU

Response: The public noticing requirement is administered by the Air District. Air District staff will identify, draft, and mail the public notices to recipients, as required by Rule 2-1, Section 2-1-412. The Final Staff Report has been updated to clarify the roles of the Air District and applicants in distributing public notices.

Essential Public Services

Definition of Essential Public Services

Comment: The commenter stated the most appropriate definition of Essential Public Services is from the California Air Resources Board's definition of Provider of Essential Public Services provided in 2452(hh) of the PERP regulation. The Air District should explicitly exempt equipment used in firefighting, flood prevention, and emergency response.

CCEEB

Response: The goal of this rule amendment is to provide greater health protections in communities disproportionately impacted by air pollution. The Air District provides exemptions to police or firefighting facilities, hospitals and other medical emergency facilities, and buildings designated as emergency shelter locations. Increasing the scope of essential public services to additional facility types could significantly reduce the effectiveness of the intended goal of this rule amendment. Additionally, the proposed amendments do not prohibit the permitting of these sources, but require sources to meet the standards by implementing additional control technology, adjusting project parameters and operations, limiting throughputs or a combination of these measures to protect public health in Overburdened Communities.

Further, the narrow scope of Essential Public Services provides regulatory clarity for facilities to plan projects based on the requirements of Rule 2-1 and Rule 2-5 as in many instances, additional control technology is available to achieve the standards.

Equity and Environmental Justice

Equity and Environmental Justice in Air District permitting decisions

Comment: One commenter recommended the Air District incorporate an equity checklist and health impact assessments in all permitting decisions.

GGU

Response: As proposed, amendments to Rule 2-1 and Rule 2-5 augment numerous requirements to provide greater transparency and reduce emissions exposures in Overburdened Communities. An equity checklist and health impact assessment was not considered as part of this rule amendment effort although Health Risk Screening Analysis (HRSA) are required for a number of projects. The Air District looks forward to collaborating with stakeholders to identify opportunities to further protect public health, especially in overburdened communities.

Regulation Exemptions

The Air District should eliminate Rule 2's exemptions for polluting industries and equipment

Comment: The commenter suggested the Air District eliminate permitting exemptions for sources that negatively impact overburdened communities, including exemptions for metal finishing and plating operations (Rule 2-1, Section 2-1-127.3) and concrete facilities (Rule 2-1, Section 2-1-115.1, subd. (1.2)). Additionally, Rule 2-1, Section 2-1-112.1 exemption has allowed the pipe casting machines at AB&I Foundry to operate for decades unabated and without a permit.

GGU

Response: The proposed amendments to Rule 2-1 and Rule 2-5 address how the Air District issues permits for sources of air pollution, with particular emphasis on increasing health protections in overburdened communities. While the Air District has not evaluated potential modifications to these specific exemptions beyond the intended scope of this rule development effort, the Air District welcomes further engagement to help guide future rule development efforts, including reviewing and evaluating exemptions. The Air District continues to evaluate and consider potential efforts to further strengthen and improve permitting processes in collaboration with community stakeholders.

Additionally, as the requirements of the Air District Permitting regulations evolve to meet newly discovered and better understood challenges, the Air District recognizes that permit conditions for older facilities may lag unless there is an opportunity for a new source review (and potentially a permit modification that could trigger Best Available Control Technology

requirements) or a specific rule or regulation is adopted affecting the source of pollution. Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities is an example of such a rule that has been adopted by the Air District to evaluate and reduce the impact of emissions from the existing facilities in the Bay Area, including facilities such as AB&I Foundry.

The proposal should not expand exemptions for small engines

Comment: The commenter stated the proposed amendments to Rule 2-1-114 would unacceptably expand the existing exemptions for small engines to include small boilers and combustion equipment and portable engines. These exemptions are contrary to the purpose of enhancing protections for Overburdened Communities and should be rejected.

GGU

Response: The goal of proposed amendments to Rule 2-1, Section 2-1-114 are to streamline and simplify the regulatory language, and are not expanding permit exemptions to new equipment. The proposed amendments to this section have been transcribed from Rule 2-5, Section 2-5-113 and there are no changes to the administration of this exemption. Because of this, Rule 2-5, Section 2-5-113 is subsequently rendered moot, and proposed for deletion.

The Final Staff Report has been updated to clarify the intent of the proposed amendments to Rule 2-1, Section 2-1-114 and Rule 2-5, Section 2-5-113.

Overburdened Community Identification and Definition

Definition of Overburdened Community

Comment: The commenter requested clarity on the definition of Overburdened Communities in proposed Rule 2-1, Section 243. As written, Overburdened Communities are defined as:

"An area located (i) within a census tract identified by the California Communities Environmental Health Screening Tool (CalEnviroScreen), Version 4.0, as having an overall CalEnviroScreen score at or above the 70th percentile, or (ii) within 1,000 feet of any such census tract."

The commenter asks if the amendments lock the Air District into defining communities based on Version 4 of this tool, and suggests considering flexibility in the definition so the Air District can use newer and more accurate information as that becomes available.

I&R

Response: As proposed, the definition of Overburdened Community includes census tracts identified by the California Environmental Protection Agency (CalEPA) CalEnvironScreen 4.0 tool scoring at or above the 70th percentile, or within 1,000 feet of any such tract.

As written, any updates to existing CalEnviroScreen 4.0 will be incorporated and reflected by the definition of Overburdened Community in Rule 2-1. Subsequent versions of CalEnviroScreen

would not be incorporated directly by reference. The Air District will review any proposed updates or subsequent versions of the CalEnviroScreen tool and determine whether a rule amendment to update the definition of Overburdened Community is warranted.

The 1,000 foot threshold for the definition of Overburdened Community should be expanded

Comment: The commenter suggested the Air District should increase the 1,000 foot buffer included in the definition of Overburdened Community (Rule 2-1, Section 243) to 2,000 feet. The 1,000 foot trigger is arbitrary and not protective of public health.

GGU

Response: As discussed in the Staff Report, staff reviewed and evaluated health risk assessments for several common project types and found that impacts decreased by at least 56 percent at a distance of 1,000 feet. Based on this analysis, a new project located just outside the 1,000-foot buffer zone and permitted at the maximum impact level of 10 in a million cancer risk would be anticipated to result in a cancer risk of less than 5 in a million in the overburdened community (excluding the buffer zone). As shown in Table 4 of the Staff Report, the health risk typically declines with distance at a faster rate than this single example project; for many projects, the cancer risk is reduced by more than 80 percent at a distance of 1,000 feet. Therefore, it is not necessary to extend the buffer zone to 2,000 feet.

Permit Review Timeline

Increased project review timelines could exacerbate the existing permit backlog

Comment: Generally, commenters were not supportive of the proposed permitting review timelines. Commenters expressed concern regarding the existing permitting backlog and delays. The proposed amendments may introduce additional delays.

Commenters also expressed concern surrounding extending permitting timelines for all projects. Specifically, a commenter believes the permitting review timeline should not be increased across-the-board for all permit applications.

Commenters expressed concern surrounding the effectiveness of Air District's permitting program and suggested the underlying issue resides in an under-resourced permitting program, that should also be simplified.

CCEEB, Tesla

Response: The Air District has reviewed the scope of work currently involved in reviewing applications for completeness, evaluating routine applications including conducting the health risk assessment that is often required, conducting public notices, and evaluating complex permit applications and applications at Title V facilities. The Air District has proposed permit review timelines that are reasonable and achievable considering the scope of work for each step in the review process and the Air District's permit processing history.

For 1,730 permit applications processed during the last three years that were not subject to public noticing or Title V review requirements, the average completeness review period was 23 days, and the completeness review was completed within the proposed 30-day period for 86 percent of the applications. For the final action period, the average processing time was 51 days, and 85 percent of the applications were processed within the proposed 90-day period. For 302 applications processed for Title V facilities, the average review period was 145 days and 81 percent of the applications were completed within the proposed 180-day review period.

Although most of the permit applications are currently processed within the proposed processing time periods, the Air District is taking steps to increase the percentages of applications that are processed within the proposed action periods while also reducing the current permit back-log. The Air District is increasing permitting staff resources and has requested the additional resources needed to address these issues and to ensure that the proposed permit processing timelines are achieved for all applications.

Additionally, it is often not clear at the initial submittal of an application if the application will be subject to a health risk assessment. Therefore, processing times for health risk assessments are built into the internal review procedures for all permit applications. Applications that are not subject to an HRA will be processed in the time period allotted for the non-HRA review stages and will be issued in much less time than the allotted 90-day review period.

Furthermore, the Air District's proposed permit review timelines are consistent with or shorter than the permit review timelines authorized by most large air districts for similar activities. To clarify, the current 49-calendar day (35-working day) final action review period does not apply to major facilities that are subject to Rule 2-6. The final action review period for major facilities subject to Rule 2-6 is not specifically stated in Rule 2-1, Section 2-1-408. The Air District is proposing to correct this oversight by stating in Rule 2-1, Section 2-1-408 that permit applications for major facilities will be subject to a 180-day final action review period. As shown in Table 5 of the Staff Report, the Bay Area's proposed 180-day final action review period for major facilities (i.e., Title V facilities) is consistent with the review periods authorized for major facilities by the following air districts: South Coast, San Joaquin Valley, San Diego, Ventura, Santa Barbara, and Monterey Bay. South Coast, San Diego, Ventura and Santa Barbara air districts recognize the added complexity of the permit review process for major facilities and have specifically authorized additional review time (180 days instead of 90 days) for major facilities, while San Joaquin Valley and Monterey Bay give 180-day review periods for all applications. Therefore, staff conclude that the Bay Area's proposed 180-day review period for permit applications at major facilities is reasonable.

Impact of regulations on "common" source category permit applications

Comment: The commenter requested further clarification and justification on which "common" source categories are impacted by Airborne Toxic Control Measures (ATCM), New Source Performance Standards (NSPS) and National Emission Standards for Hazard Air Pollutants (NESHAP) prior to 2005 and the ability of the Air District to effectively process permits under the existing timeframe authorized by the Air District Board of Directors.

Tesla

Response For fiscal year 2021, the new source review permit applications included: 50 percent internal combustion engines, 20 percent gasoline dispensing facilities, six percent coating and solvent sources, three percent soil vapor extraction operations, three percent other combustion sources, and 11 percent other source types.

Internal combustion engines are subject to:

- ATCM for Stationary Compression Ignition Engines adopted November 20, 2003, amended November 16, 2006, October 21, 2010, and May 19, 2011
- 40 CFR Part 60, Subpart IIII "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines" adopted July 11, 2006; amended June 28, 2011, January 30, 2013, August 15, 2014, July 7, 2016, and November 13, 2019
- 40 CFR Part 60, Subpart JJJJ Standards of Performance for Stationary Spark Ignition Internal Combustion Engines adopted January 18, 2008; amended June 28, 2011, January 30, 2013, and August 15, 2014
- 40 CFR Part 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines adopted June 15, 2004, amended January 18, 2008, March 3, 2010, August 20, 2010, January 30, 2013, and August 15, 2014

In addition to these requirements for engines, many other source types are subject to NSPSs, NESHAPs, and ATCMs that were adopted or amended after 2005. Overall, the complexity of the engineering review and health risk assessments has increased significantly since 2005.

2001 rule changes affecting diesel engines do not support the need for longer processing times

Comment: Commenter stated the 2001 regulatory changes affecting diesel engines did not result in an overwhelming workload for Air District staff. The Air District had reduced the number of overdue permit applications to zero in 2005, four years after the regulatory change. The Air District was able to accomplish this while permitting staff was also expending a considerable effort with the initial issuance of Title V permits. The increase in the number and complexity of routine permit applications reviewed by the Air District is within the Air District's capacity.

Tesla

Response: The initial permitting effort for diesel engines during the 2001-2005 timeframe involved a streamlined review process for diesel engines that lost the exemption from permitting requirements due to regulation changes. This streamlined process did not require a new source review analysis, a public notice for proximity within 1,000 feet of a school or health risk assessment for the majority of the emergency engine applications processed. Since 2005, the scope of the engine permit applications has shifted from streamlined loss of exemption applications to new source review applications with health risk assessment and public notice requirements if located within 1,000 feet of a K-12 school. In addition, the engines are subject to an increasing number of state and federal regulations. The complexity of the required health risk analysis has also increased due to additional regulations and more complex risk assessments since the 2015 OEHHA changes to California's HRA Guidelines. Furthermore, the number of engine applications received per year has increased by 30 percent in recent years. The increase in

both the number and complexity of permit applications processed and additional program responsibilities has resulted in the need for additional staff resources.

Justification for treating applications at Major Facilities differently

Comment: Commenter requested justification in increasing permit review timelines across the board, as the proposed amendments would introduce unreasonable delays in the installation of abatement devices, small routine sources, and minor upgrades. The processing time should be a function of the process being permitting, not the existing facility.

The Staff Report suggests several examples of "extra review" in its effort to justify a four-fold increase in processing time:

- BACT is triggered.
- Inclusion of multiple sources in the health risk analysis (HRA).
- NSPS and NESHAP are sometimes applicable.
- More detailed permit conditions are required.
- CEQA Notice of Determination (NOD) or Notice of Exemption (NOE) may be required.

The commenter provided counterpoints including:

- BACT/TBACT workbook exists in order to streamline BACT analysis. As such, BACT does not justify a four-fold increase in permit processing times.
- While multipoint HRA is more complex than single point HRA, this does not justify 90 extra days of processing time.
- The staff report does not indicate what fraction of NSPS and NESHAP permits occur at Title V facilities, nor how much additional processing time this extra review actually incurs.
- Permit conditions should be based on the process, not the operator. Permit conditions are intended to be reasonably uniform, following templates in the board-approved permit. handbook. In addition, customization of permit conditions for routine or small equipment may be a significant contributor to staff workload and processing time, with very little added value.
- CEQA NOD and NOE are triggered by project and not facility, and thus does not justify extra processing time for all Major Facilities.

Tesla

Response: Major facilities are inherently more complex to analyze than minor facilities because of BACT and offset requirements, de-bottlenecking analyses, related application reviews, NSPS and NESHAP requirements, and preparation of Title V permit changes. Major facilities will often ask for changes to the project scope during permit condition review that impact the analysis causing re-work and increasing the amount of required staff effort. These actions can occur for even seemingly routine applications such as an abatement device replacement with non-identical equipment. However, projects that meet accelerated permit requirements will be issued a temporary permit to operate to ensure that application processing time does not hold up applications that do not involve emission increases or new regulatory requirements.

- While BACT Guidelines are available for many common source types, BACT is a case-by-case analysis. Large facilities including many Title V facilities often have more unusual source proposals and site-specific details that need to be considered in a case-by-case BACT analysis.
- Title V facilities commonly submit multiple applications per year, which must be considered in determining related projects for the risk assessment. It is not just the number of sources included that determines the complexity of the HRA. The complexity is also affected by the type of emission point, related projects, the location of facility, and the extent to which neighbors and workers are impacted by a proposed project. All of these points together are often more complex for Title V facilities.
- Facilities may be subject to Title V requirements due to facility emissions exceeding major facility thresholds or because the site is designated as subject to Title V by an applicable NSPS or NESHAP.
- Review and compliance determinations with the federal regulations take time for analysis in addition to drafting permit conditions to assure compliance.
- Standard permit conditions are used whenever possible. Title V facilities are complex and while some sources allow for the use of standard or template permit conditions, a large majority or large fraction does not, and custom conditions are required.
- Title V facilities require additional compliance checks, reporting, monitoring, and testing. Additional time is required to establish these requirements and consultation with other divisions at the Air District is required.
- Many projects at Title V facilities are controversial, therefore the Air District has a policy to file Notice of Exemptions in cases where such projects are exempt from CEQA. Although the filing a Notice of Exemption is optional, the Air District files the notices to notify the county of the permit action and to be transparent with the public by sending a copy of the notice to the interested party list for the facility.

Socioeconomic Impact Analysis

Further clarification on the detail to evaluating impacts

Comment: Commenter stated the Socioeconomic Impact Analysis acknowledges the potential for significant impacts and there are negligible details provided as to what was considered in evaluating these impacts. Further, while the analysis provides cost ranges for affected industries, it does not discuss the range of probable costs that may result outside of the affected industries, including consumer impacts, whether increased consumer prices or disproportionate access may result from implementation of the proposed amendments.

For example, the Socioeconomic Impact Analysis finds that, for at least two gasoline dispensing facilities in Overburdened Communities, the proposed amendments will result in a net impact of as much as 25 percent decrease on existing profits based on reduced throughput. While the District considers these net profit impacts, it does not consider the likely accompanying impacts on consumer costs and access to affordable fuel. As the Socioeconomic Impact Analysis indicates, "many gasoline dispensing facilities are independently owned small businesses." It is

possible that these facilities may pass on some or all of these losses onto consumers through higher and regressive pricing in order to sustain their operations. Alternatively, these facilities may choose to shut down and relocate further from customers in Overburdened Communities, many of whom rely on personal vehicles and face long commutes between the communities in which they live and work. Accordingly, the District should explicitly consider these economic equity issues before finalizing the Proposed Amendments, including providing consumers with an estimate of potential pricing impacts associated with its rulemaking to ensure that they are fully informed.

CCEEB

Response: The Socioeconomic Impact Analysis complies with the requirements set forth in the Health and Safety Code Section 40728.5. The Socioeconomic Impact Analysis considers the impacts of the rule or regulation on employment and the economy of the region affected by the adoption of the rule or regulation. Additionally, the Socioeconomic Impact Analysis provides probable costs, including costs to industry or business.

The Air District analyzed the costs and economic impacts, which are the probable cost of installing new equipment that is not already in place or modifying existing equipment. This information was obtained based on staff estimates of control costs based on previously permitted projects, information from vendors, or information from permitted facilities. The IMPLAN input-output model, which assesses direct impacts of the rule on employment, indirect impacts, and induced impacts from compliance costs associated with the proposed rules was also utilized.

While additional factors beyond the scope of the Socioeconomic Impact Analysis may impact the analysis of gasoline dispensing facilities, these factors remain hypothetical and not quantifiable. For instance, a gasoline dispensing facility may adjust their operations or configurations to meet the cancer risk limit. Additionally, gasoline dispensing facilities are permitted at their maximum eligible throughput and may not dispense the full annual allowable throughput. As a result, while these factors are important, they are not included in the Socioeconomic Impact Analysis due to the speculative nature.

The Air District remains concerned regarding equity considerations, and welcomes continued feedback to strengthen equity considerations in the permitting program.