



Board of Directors
MEETING
November 4, 2026

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

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

THE FOLLOWING STREAMING OPTIONS WILL ALSO BE PROVIDED

These streaming options are provided for the public's convenience. In the event that streaming connections malfunction for any reason, the Board of Directors may continue with the meeting without remote webcast and/or Zoom access in accordance with the [Air District's Broadcast Technology Disruption Policy](#).

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

Members of the public may participate remotely via Zoom at <https://bayareametro.zoom.us/j/81994534335> or may join Zoom by phone by dialing (669) 900-6833 or (408) 638-0968. The Webinar ID for this meeting is:
819 9453 4335

PUBLIC COMMENT ON AGENDA ITEMS

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

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

BOARD OF DIRECTORS MEETING AGENDA

WEDNESDAY, NOVEMBER 4, 2026

9:00 AM

Chairperson, Lynda Hopkins

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

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

2. **Pledge of Allegiance**

3. **Special Orders of the Day**

CONSENT CALENDAR (Items 4 - 13)

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

4. **Approval of the Draft Minutes of the Board of Directors Meeting of October 7, 2026**

The Board of Directors will consider approving the draft minutes of the Board of Directors Meeting of October 7, 2026.

5. **Notices of Violations Issued and Settlements in Excess of \$10,000 in the Month of September 2026**

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

6. **Personnel Out-of-State Business Travel Report for September 2026**

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

7. Authorization to Purchase Ultrafine Particle Monitors for Refinery Community Air Monitoring Stations

The Board of Directors will consider authorizing the Executive Officer/APCO to procure five (5) ultrafine particle monitors for the five refinery community air monitoring stations in an amount not to exceed \$432,500.00.

8. Authorization to Amend Contract with Adaptalytics, LLC Providing Configuration and Customization of the Ceridian Dayforce System

The Board of Directors will consider authorizing the Executive Officer/APCO to amend the Air District's services agreement with Adaptalytics, LLC to increase the total not-to-exceed amount of the agreement by \$70,000, from \$199,000 to \$269,000, to provide human resources and payroll configuration and customization of the Ceridian Dayforce system.

9. Amendments to the Transportation Fund for Clean Air Policies Commencing Fiscal Year 2026-2027

The Board of Directors will consider adopting amendments to the Transportation Fund for Clean Air Policies Commencing Fiscal Year 2026-2027.

10. Community Advisory Council Charter Amendments

The Board of Directors will consider adopting proposed amendments to the Community Advisory Council Charter. The Community Equity, Health, and Justice Committee recommended this item at its meeting on October 14, 2026.

11. Report of the Advisory Council Meeting of October 5, 2026

The Board of Directors will receive a report of the Advisory Council Meeting of October 5, 2026.

For the full Council agenda packet and materials, click on the link below:

<https://www.baaqmd.gov/en/About-the-Air-District/Advisory-Council/AgendasReports>

12. Report of the Stationary Source Committee Meeting of October 14, 2026

The Board of Directors will receive a report of the Stationary Source Committee Meeting of October 14, 2026.

For the full Committee agenda packet and materials, click on the link below:

www.baaqmd.gov/bodagendas

13. Report of the Community Equity, Health, and Justice Committee Meeting of October 14, 2026

The Board of Directors will receive a report of the Community Equity, Health, and Justice Committee Meeting of October 14, 2026.

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

PUBLIC HEARING(S)

14. Adoption of Proposed Amendments to Regulation 9: Inorganic Gaseous Pollutants, Rule 6: Nitrogen Oxide Emissions from Natural Gas-Fired Boilers and Water Heaters

The Board of Directors will consider adopting a resolution to amend Regulation 9: Inorganic Gaseous Pollutants, Rule 6: Nitrogen Oxide Emissions from Natural Gas-Fired Boilers and Water Heaters (Rule 9-6). The proposed amendments will delay the implementation date of the zero-NOx requirements of Rule 9-6 from January 1, 2027, to January 1, 2028, and provide exemptions to address affordability and practical implementation challenges. This item will be presented by Gregory Nudd, Deputy Executive Officer for Policy.

Summary materials related to this item will be available in traditional Chinese, Spanish, Tagalog, and Vietnamese at <https://www.baaqmd.gov/building-appliances>.

OTHER BUSINESS

15. **Public Comment on Non-Agenda Matters**

Pursuant to Government Code Section 54954.3, members of the public who wish to speak on matters not on the agenda will be given an opportunity to address the Board of Directors. Members of the public will have two minutes each to address the Board, unless a different time limit is established by the Chair. If public comment lasts more than 30 minutes, this item may be continued to later in the meeting. Any person who has not had an opportunity to speak on matters not on the agenda may provide their comment at that time.

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

16. Board Member Comments

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

17. Report of the Executive Officer/APCO

18. Chairperson's Report

19. Time and Place of Next Meeting

Wednesday, December 2, 2026, at 10:00 a.m. The meeting will be held in-person at the Bay Area Metro Center and at satellite locations as may be specified on the meeting agenda using a remote teleconferencing link. Members of the Board of Directors and the public may attend at any of those in-person locations, and members of the public may also attend virtually via webcast.

20. Adjournment

The Board meeting shall be adjourned by the Board Chair.

CONTACT:

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

(415) 749-4941
FAX: (415) 928-8560
Air District homepage:
www.baaqmd.gov

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

Accessibility and Non-Discrimination Policy

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

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

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

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

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

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

EXECUTIVE OFFICE:
MONTHLY CALENDAR OF AIR DISTRICT MEETINGS

OCTOBER 2026

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Special Meeting	Friday	30	10:00 a.m.	1 st Floor Board Room

NOVEMBER 2026

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Meeting	Wednesday	4	9:00 a.m.	1 st Floor Board Room
Advisory Council Meeting	Monday	9	9:00 a.m.	1 st Floor Board Room

Board of Directors Stationary Source Committee - CANCELLED	Wednesday	11	10:00 a.m.	1 st Floor, Yerba Buena Room
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Board of Directors Community Equity, Health, and Justice Committee - CANCELLED	Wednesday	11	1:00 p.m.	1 st Floor, Yerba Buena Room
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Board of Directors Policy, Grants and Technology Committee	Wednesday	18	10:00 a.m.	1 st Floor Board Room
Board of Directors Finance and Administration Committee	Wednesday	18	1:00 p.m.	1 st Floor Board Room
Community Advisory Council	Thursday	19	6:00 pm.	1 st Floor, Yerba Buena Room

DECEMBER 2026

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Meeting	Wednesday	2	10:00 a.m.	1 st Floor Board Room
Board of Directors Stationary Source Committee	Wednesday	9	10:00 a.m.	1 st Floor, Yerba Buena Room
Board of Directors Community Equity, Health, and Justice Committee	Wednesday	9	1:00 p.m.	1 st Floor, Yerba Buena Room
Board of Directors Policy, Grants and Technology Committee	Wednesday	16	10:00 a.m.	1 st Floor Board Room
Board of Directors Finance and Administration Committee	Wednesday	16	1:00 p.m.	1 st Floor Board Room
10/29/26 – 11:15 a.m. RP				G/Board/Executive Office/Moncal

BAY AREA AIR DISTRICT
Memorandum

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

From: Philip M. Fine
Executive Officer/APCO

Date: November 4, 2026

Re: Approval of the Draft Minutes of the Board of Directors Meeting of October 7,
2026

RECOMMENDED ACTION

Approve the attached draft minutes of the Board of Directors Meeting of October 7,
2026.

BACKGROUND

None.

DISCUSSION

Attached for your review and approval are the draft minutes of the Board of Directors
Meeting of October 7, 2026.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Justine Buenaflor
Reviewed by: Vanessa Johnson

ATTACHMENT(S):

1. Draft Minutes of the Board of Directors Meeting of October 7, 2026 v2

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

Board of Directors Meeting
Wednesday, October 7, 2026

DRAFT MINUTES

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

CALL TO ORDER

1. **Opening Comments:** Board of Directors (Board) Chairperson, Lynda Hopkins, called the meeting to order at 10:04 a.m.

Roll Call:

Present, In-Person (Bay Area Metro Center, 375 Beale Street, 1st Floor Board Room, San Francisco, CA, 94105): Chairperson Lynda Hopkins; Vice Chair Vicki Veenker; and Directors Dionne Adams, Monica Brown, Brian Colbert, Noelia Corzo, Juan González III, Tyrone Jue, Gabe Quinto, Linda Sell, Lena Tam, Shamann Walton, and Steve Young.

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

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

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

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

Present, In-Person Satellite Location: (Office of Alameda County Supervisor David Haubert, Scott Haggerty House, 4501 Pleasanton Ave., Pleasanton, CA 94566): Directors David Haubert and Mark Salinas.

Present, In-Person Satellite Location: (Mountain View City Hall, City Council Conference Room, 3rd Floor, 500 Castro Street, Mountain View, CA 94040): Director Chris Clark.

Absent: Directors Ken Carlson, Bilal Mahmood, and Ray Mueller.

2. **PLEDGE OF ALLEGIANCE**

OPENING ITEMS

Chair Hopkins called Agenda Items 25 and 26 out of order to accommodate the lengthy agenda.

25. **BOARD MEMBER COMMENTS (OUT OF ORDER ITEM)**

Director Gioia raised concerns of the impacts from two recent prescribed burn days on Angel Island, in which smoke affected parts of the East Bay and Contra Costa communities. He requested Air District staff to review permitting and burn-day procedures and follow up with recommendations to address impacts.

26. **REPORT OF THE EXECUTIVE OFFICER / APCO (OUT OF ORDER ITEM)**

Dr. Philip M. Fine, Executive Officer/APCO, reported the following:

- On September 8 and September 23, Angel Island prescribed burns occurred as Director Gioia raised. The prescribed burn days were approved based on weather forecasts and operational information available at that time. Staff are reviewing the Air District's procedures and communications to improve future burn day assessments. Additionally, Cal Fire has ended the Angel Island burn project for the year.
- The Air District plans to launch a new prescribed burn public website landing page that explains process, burn information, and education.
- On October 6, Northern Sonoma Air District permitted a separate prescribed burn in Sonoma County that affected Bay Area residents. The Air District remains committed to coordinating with neighboring air districts to minimize cross-boundary impacts and protect public health. Updates on these collaborative efforts will be returned to committee in the coming months or early next year.

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

NOTED PRESENT: Director Mahmood was noted present at 10:30 a.m.

Public comments were given by Peter Reitz, Small Property Owners of San Francisco Institute; Rochele Henderson; Sandy Sicsko, Santa Clara County Association of REALTORS; Fernando Gaytan, Earthjustice; Yan Yan Yang; Unidentified speaker; Laurie Pirini; Unidentified speaker; Clara Weinstein, West Oakland Environmental Indicators Project; Unidentified speaker; Nina Omomo, West Oakland resident; John Popescu, San Francisco resident; Brian Wallace, Small Property Owners of San Francisco Institute; Jane, small property owner; Unidentified speaker; Unidentified speaker; Casper Leong, San Francisco

property owner; Unidentified speaker; Noni Richen, San Francisco resident; Robert Ho, San Francisco property owner; Jim Hirsch, Small Property Owners of San Francisco Institute member; Tyler Yarbrough, San Leandro resident; Russell, San Francisco property owner; Enrique Navarro, Santa Clara County Association of REALTORS; Donna; Jeff Dunlap, Napa resident; Alan Horn, San Francisco property owner; Tina Wong, BetterHousingPolicies.org; Bert Hill, San Francisco resident; Larry Bothen; Brendan Burke, Mill Valley resident; Gina Tse-Louie, San Francisco Taxpayers Association; Jonathan Lath.

At 10:50 a.m., per the agenda, Chair Hopkins concluded public comments on non-agenda matters after 30 minutes of opening the item. The item will be reopened following Item 24.

4. SPECIAL ORDERS OF THE DAY

Chair Hopkins welcomed the following new Air District employees: Celina Chan, Senior Environmental Planner in the Planning and Climate Protection Division; Reese Ellestad, Analyst II in the Legal Office; Lisa Hu, Senior Grants and Community Program Specialist in the Community Investments Office; Anu Segu, Systems Analyst in the Enterprise Technology Solutions Division; Moni Taichute, Systems Analyst in the Information Services Division; Gabriela Zayas del Rio, Senior Environmental Planner in the Planning and Climate Protection Division.

CONSENT CALENDAR (ITEMS 5 – 19)

5. Approval of the Draft Minutes of the Board of Directors Meeting of September 2, 2026
6. Notices of Violations Issued and Settlements in Excess of \$10,000 in the Month of August 2026
7. Personnel Out-of-State Business Travel Report for August 2026
8. Authorization to Accept Clean Cars for All Program Funds from the California Air Resources Board
[Click here to view Board Resolution 2026-08](#)
9. Authorization to Accept Carl Moyer Program and Community Air Protection Incentives Program Funds from the California Air Resources Board
[Click here to view Board Resolution 2026-09](#)
[Click here to view Board Resolution 2026-10](#)
10. Authorization to Accept Grant Program Revenues from the United States Environmental Protection Agency for Clean Air Act Section 103 Fine Particulate Matter Activities
11. Authorization to Accept Grant Program Revenues from the United States Environmental Protection Agency for Clean Air Act Section 105 Activities
12. Authorization to Amend Existing Architectural and Engineering Services Contracts with Brereton Architects and Interactive Resources
13. Authorization to Execute a Sponsorship Contract with the American Lung Association
14. Authorization to Purchase Equipment from Multiple Vendors to Support Ambient Air Monitoring Programs
15. Authorization to Attend the United Nations Framework Convention on Climate Change Conference of the Parties 31 and Related Events
16. Report of the Stationary Source Committee Meeting of September 9, 2026

17. Report of the Community Equity, Health, and Justice Committee Meeting of September 9, 2026
18. Report of the Policy, Grants, and Technology Committee Meeting of September 16, 2026
19. Report of the Community Advisory Council Meeting of September 17, 2026

Public Comments

No requests received.

Board Comments

The Board and staff discussed clarification on the July 2026 violations issued for Valero, and the process timing of notices of violations; the economic optics, costs, participation options, and benefits of the Air District's attendance at the United Nations Framework Convention on Climate Change Conference of the Parties 31 (COP 31).

Board Action

Director Brown requested to pull Item 15 from the Consent Calendar for further discussion.

Director Tam made a motion, seconded by Director Adams, to **approve** Consent Calendar Items 5 through 19, excluding 15; and the motion **carried** by the following vote of the Board:

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

Director Walton made a motion, seconded by Director Adams to **approve** Consent Calendar Item 15; and the motion **carried** by the following vote of the Board:

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

ACTION ITEMS

20. HEARING BOARD MEMBER APPOINTMENTS

Hyacinth Hinojosa, Deputy Executive Officer of Finance and Administration, gave the presentation *Hearing Board Member Appointments*, including: background; vacancies;

recruitment; current Hearing Board members and terms; current Hearing Board members attendance; and suggestions for recommending candidates.

Mr. Hinojosa explained the Finance and Administration Committee formed an Ad Hoc Committee (Ad Hoc Committee) for this recruitment process and the Ad Hoc Committee recommended the Board conduct one interview of the recommended candidate for the Alternate Medical Member vacancy and re-appoint the four incumbent Hearing Board members whose terms are set to expire. Mr. Hinojosa indicated those incumbents have applied to continue serving for another term, with their current terms expiring as follows:

- Rajiv Dabir, Principal Member in the Professional Engineer category, current term expires October 4, 2026.
- Jeffery Maddox, Alternate Member in the Professional Engineer category, current term expires October 4, 2026.
- Barbara Toole O'Neil, Principal Member B in the Public category, current term expires November 1, 2026.
- Danny Cullenward, Alternate Member B in the Public category, current term expires November 1, 2026.

Air District staff conducted a robust recruitment process including extensive outreach and advertisement, with a focus on diversity, volunteering, and medical professions.

Public Comments

Public comments were given by Teresa Martin.

Board Comments

The Board expressed consensus to accept the Ad Hoc Committee's recommendations to proceed with conducting one interview of the recommended candidate, Kioni Williams, for the Alternate Medical Member vacancy. The Board asked the candidate the following questions: Can you please summarize your educational background and work experience, particularly emphasizing any knowledge or exposure to air quality matters, and how you would leverage this expertise to contribute to Hearing Board's case reviews and decision; Please describe any prior experiences you've had serving on boards, commissions, or in similar capacities, where you may have engaged with regulated entities or the public during formal proceedings; What interests you the most about the opportunity to serve in the medical profession position on the Air District's Hearing Board; Do you have any personal or professional affiliations or relationships, such as with facilities overseen by the Air District or air quality advocacy groups, that might present a conflict of interest or perceived bias in your role on the Hearing Board; do you believe you have sufficient time to devote to the Hearing Board activities, with the Hearing Board meetings are as often as two or three times a month on Tuesdays for several hours or more plus additional time reviewing materials; and what would you consider to be your greatest strength that you bring to this position?

The Board and staff discussed whether the Alternate Medical Member position requirement for medical or public health profession, not necessarily a licensed physician; and the valuable interdisciplinary perspectives that ethnic-studies backgrounds can provide.

Board Action

Director Salinas made a motion, seconded by Director Quinto, to **approve** the appointment and re-appointment of the following Hearing Board positions:

- Appoint Kioni Williams, Alternate Member in the Medical Professional Category
- Re-appoint incumbent Rajiv Dabir as the Principal Member in the Professional Engineer category
- Re-appoint incumbent Jeffery Maddox as the Alternate Member in the Professional Engineer category
- Re-appoint incumbent Barbara Toole O'Neil, Principal Member B in the Public category
- Re-appoint incumbent Danny Cullenward, Alternate Member B in the Public category

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

AYES: Adams, Brown, Clark, Colbert, Corzo, Gallagher, Gioia, González, Haubert, Hopkins, Jue, Lee, Mahmood, Medina, Quinto, Salinas, Sell, Tam, Veenker, Walton, Young.

ABSTAIN: None.

NOES: None.

ABSENT: Carlson, Mueller.

21. **RECOMMENDATIONS TO STRENGTHEN COLLABORATION BETWEEN THE COMMUNITY ADVISORY COUNCIL AND THE BOARD OF DIRECTORS**

Anyania I. Muse, Acting Community Advisory Council (CAC) Officer, Environmental Justice Division, gave the presentation *Recommendations to Strengthen Board & Community Advisory Council Collaboration*, including: background; recommended action; recommendation #1: Council member liaisons participate in Board and/or Standing Committee meetings as non-voting guests in the discussions; recommendation #1 implementation; recommendation #2: Board member liaisons participate in CAC meetings as a non-voting guest in the discussions; recommendation #2 implementation; recommendation #3: annual joint retreats are held between the Council and the Board; recommendation #3 implementation; recommendation #4: Opportunities are provided for Council members to present informational items at Board and Committee meetings; recommendation #4 implementation; recommendation #5: Informal meetings occur every 6 months between Council, Board leadership, Air District staff and leadership; recommendation #5 implementation; recommendation #6: New Council members have a meet-and-greet with the Board member(s) representing their geographical area; recommendation #6 implementation; recommendation #7: Board members go on a toxic tour of the jurisdiction they represent, along with Council members from that area, whenever possible; recommendation #7 implementation; recommended action; and questions and discussions.

Public Comments

Public comments were given by Sakura Saunders; Patrick Messac; and LaDonna Williams.

Board Comments

The Board discussed the recommendations as a positive step toward more meaningful public participation and engagement with the Board with these recommendations; the support for meet-and-greets, community-led toxic tours, and cross-community collaboration; the importance of CAC liaisons representing the collective interests of the CAC body rather than advocating personally; whether the recommendations should be piloted prior to implementation of including a CAC liaison; the consideration of potential impacts on meeting durations; whether the addition of a non-voting liaison would affect quorum requirements; the support for recommendations as presented to provide an opportunity to engage with the CAC; whether the CAC will consider a liaison rotation schedule amongst the Co-Chairs; the suggestion to assign each of the three CAC Co-Chairs to the Board and/or standing committee to promote continuity of engagement; and whether the CAC liaisons would receive compensation.

CAC Co-Chair William Goodwin was invited to speak, and indicated that while the CAC would have preferred a voting seat on the Board, the recommendations represent a significant opportunity and valuable initial step toward increasing engagement with the Board and CAC.

Board Action

Director Gioia made a motion, seconded by Director Corzo, to **approve** the proposed implementation of the Community Advisory Council's 7 recommendations to strengthen collaboration between the Board of Directors and the Council:

1. Council member liaisons participate in Board and/or Standing Committee meetings as non-voting guests in discussions;
2. Board member liaisons participate in CAC meetings as non-voting guests in the discussions;
3. Annual joint retreats are held between the Council and Board of Directors;
4. Opportunities are provided for Council members to present informational items at Board and Standing Committee meetings;
5. Informal meetings occur every 6 months between Council Co-Chairs, Board Leadership, and Air District staff leadership;
6. New Council members have a meet and greet with the Board member (s) representing their geographical area; and
7. Board members go on a toxic tour of the jurisdiction they represent along with Council members from that area, whenever possible.

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

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

22. PEOPLE'S AIR GRANT PROGRAM: AWARD RECOMMENDATIONS

Elinor Mattern, Senior Grants and Community Program Specialist, Environmental Justice Division, and Community Advisory Council Co-Chair William Goodwin, gave the presentation *People's Air Grant Program: Award Recommendations*, including: recommended action; key program information; application review and recommendations; overview of recommended projects; recommended action; and questions and discussion.

Public Comments

No requests received.

Board Comments

The Board and staff discussed the sources of the grant funding; the distinguishing factors of the selected projects; whether the Air District would evaluate project outcomes; alternative funding opportunities for the grant projects not selected; how the grant application process helped identify and establish connections with additional community organizations; whether the Air District will provide a summary of grant results; whether the grant process findings could inform future funding efforts and opportunities; appreciation for staff and the Board's efforts in supporting projects expected to have significant local impact; and suggestion to Air District Communications team to share grant projects media updates with photos or videos, to highlight the positive impacts in communities.

Board Action

Director González made a motion, seconded by Director Quinto, to:

1. Authorize the transfer of \$3,000,000 from Community Benefit Designated Reserves to support and fund the People's Air Grant Program
2. Award \$3,000,000 in People's Air Grant funds for recommended projects in impacted communities:
 - o Tier 1 (\$150,000): 4 projects
 - o Tier 2 (\$200,000): 4 projects
 - o Tier 3 (\$400,000): 4 projects
3. Authorize the Executive Office/Air Pollution Control Officer (APCO) to execute grant agreements for the recommended projects

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

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

23. **BAY REPAIR LOCAL COMMUNITY BENEFITS FUND – AWARD OF ROUND 1 GRANTS**

Emi Wang, Community Investments Officer, Letitia Carpenter, Senior Grants and Community Program Specialist, and Lisa Hu, Senior Grants and Community Program Specialist, Community Investments Office, gave the presentation *Bay REPAIR (Reinvesting Penalties for Air Improvement and Resilience) Local Community Benefits Fund: Round 1 Funding Awards*, including: recommended action; feedback received from CEHJ Committee; outline; core strategies; grant awards – Round 1; Benicia Catalyst grants; all other grant types; applications received – Round 1; activity type – Round 1 eligible applications; project type – Round 1 eligible applications; application review process; eligibility review; community and technical reviewers; application scoring; scoring panels; how recommendations were made; examples of portfolio balance factors considered by staff; due diligence; partial awards; Benicia and surrounding communities; grant awards – Benicia and surrounding communities; applications received – Benicia and surrounding communities; oversubscription – Benicia and surrounding communities; anticipated community benefits of the recommended investments; Benicia Opportunity grant recommendations; Benicia Seed grant recommendations; Benicia portfolio – project types; Benicia portfolio – funded entity types; Richmond and surrounding communities; grant awards – Richmond and surrounding communities; applications received – Richmond and surrounding communities; oversubscription – Richmond and surrounding communities; anticipated community benefits of the recommended investments; Richmond Catalyst grant recommendations; Richmond Opportunity grant recommendations; Richmond Seed grant recommendations; Richmond portfolio – project types; Richmond portfolio – funded entity types; anticipated next steps; program evaluation; anticipated future funding in Richmond and surrounding communities; recommended action; and questions and discussion.

Public Comments

Public comments were given by Ashley Labar, Stax Engineering; Unidentified speaker; Dr. Y'Anad Burrell, San Pablo resident.

Board Comments

The Board and staff discussed the previously approved Catalyst grant funding for Benicia public agencies; the differences in nonprofit partnership requirements between Benicia and Richmond grant recipients; the consideration of allocating potentially available Chevron settlement funding in 2027 to support previously unfunded Round 1 applications before initiating a new grant applications process; clarification of the procurement process for an external grants projects evaluator; the recommendation to establish a firm timeline for reviewing Round 1 grant guidelines prior to initiating the Round 2 application process to ensure that the scoring criteria and funding recommendation process undergoes a formal review by the Board; clarification on the grant evaluation scoring process, including differences in scoring among evaluators, scorer alignment, and how individual scores were

combined; the importance of transparency in how scoring results and other funding considerations determined project selection; the consideration of projects that directly reduce source emissions, rather than solely mitigating the pollution impacts; whether the diversity of the project portfolio blend was considered for Richmond and Benicia; whether the final distribution reflected the project types of applications received and community needs, or whether stronger applications in certain categories were limited; clarification on the safeguards for projects that fall behind schedule or fail to meet deliverables; clarification on measures to ensure long-term survival and maintenance of urban greening projects; the request for a concise written narrative of the Benicia grant recommendations for that region's constituents; and the concern on oversight and safeguards when awarding funding to nonprofit organizations.

Board Action

ORIGINAL MOTION:

Director Young made a motion, seconded by Director Gioia to accept the recommended action with inclusion of direction to staff to conduct an after-action review of the Round 1 grant guidelines and scoring criteria, present to the Community Equity, Health, and Justice Committee, and ultimately present those findings to the Board for review and approval before the next grant application round begins, but no later than six months.

1. Award \$26,540,000 in Bay REPAIR Local Community Benefits Fund grants for Benicia and Surrounding Communities and \$38,752,145 in grants for Richmond and Surrounding Communities;
2. Authorize the Executive Office/Air Pollution Control Officer (APCO) to execute grant agreements for the recommended projects; and

AMENDMENT:

Director Gioia requested to include in the motion direction for staff to revisit unfunded Round 1 applications if additional funding becomes available next year, and to bring those grant award recommendations to the Board for review. The Board conveyed general agreement for this inclusion.

AMENDED MOTION:

Director Young made a motion, seconded by Director Gioia to:

1. Award \$26,540,000 in Bay REPAIR Local Community Benefits Fund grants for Benicia and Surrounding Communities and \$38,752,145 in grants for Richmond and Surrounding Communities;
2. Authorize the Executive Office/Air Pollution Control Officer (APCO) to execute grant agreements for the recommended projects;
3. Direct staff to conduct an after-action review of the existing grant guidelines and scoring criteria, present the findings to the Community Equity, Health, and Justice Committee,

and return to the Board for review and approval before the next grant application round begins, but no later than six months; and

4. Direct staff to revisit unfunded Round 1 applications if additional funding becomes available next year, and to bring those grant award recommendations to the Board for review.

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

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

DISCUSSION ITEMS

24. REGULATORY DEVELOPMENT OVERVIEW: POTENTIAL WAREHOUSE RULE

Greg Nudd, Deputy Executive Officer of Policy and Dr. Rohan Radhakrishna, Health Officer, provided context for the potential warehouse rule and introduced Christopher Easter, Senior Air Quality Specialist, Regulatory Development, who gave the presentation *Regulatory Development Overview: Potential Warehouse Rule*, including: outline; rule development and public engagement; what is an indirect or magnet source; why focus on warehouses; warehouses across the Bay Area; community impacts related to indirect sources; indirect source in AB 617 community plans; Stationary Source Committee presentations; shifting landscape and local gaps; warehouse rule concept paper; warehouse rule concepts; estimated emission reductions; South Coast Air District warehouse rule; Warehouse Actions and Investments to Reduce Emissions (WAIRE) program performance; review of other agency programs; industry study and our response; learnings for Bay Area warehouse rule design; complementary local land use and policy precedents; currently planned rulemaking roadmap; summary; and questions and discussion.

Public Comments

Public comments were given by Poppy Henderson; Enyi Emuka, Greenlining Institute; Cory VanGelder, Greenstitch Climate Action Internship Program; Sarah Chen Small, Communities for a Better Environment; Pooja Agarwal; Fernando Gaytan, Earthjustice; Karina Lopez, Frontline Catalysts; Rosemary Jarrett, San Francisco resident; Chris Shimoda, Supply Chain Federation; Mike Jacob, Pacific Merchant Shipping Association; Peter Okurowski, California Council for Environmental and Economic Balance (CCEEB); Andrea Vidaurre, People's Collective for Environmental Justice; Unidentified speaker; Clara Weinstein, West Oakland Environmental Indicators Project; Imari "Mars" Keith, Sierra Club San Francisco Bay; Tony Fisher, Coalition for Clean Air; Matt Regan, Bay Area Council; Ginny Madison, San Leandro resident; Nick Chiappe, California Trucking Association; Ryan Allain, California Retailers Association; Madeline Stacey, West Oakland resident; Stephen Scheye, Martinez resident; Jon Kendrick, California Chamber of Commerce; Bob Brown, Western States Petroleum

Association (WSPA); Kai Clausen, Catalyst Mobility; Benjamin Lu, American Lung Association; Tom Kunhardt, Oakland resident; Joel Ervice, Regional Asthma Management and Prevention (RAMP); Patrick Messac; Jan Warren, Interfaith Climate Action Network of Contra Costa County; Harrison Beck, Center of Biological Diversity; Nick Pilch, Sierra Club; Colleen Fitzgerald, Earthjustice; Ana Maria Russo; Jeann McDougald, Black Women Organized for Political Action (BWOPA); Sakura Saunders, Oakland resident; Andrea Pereira, San Francisco resident; Jessica Alvarenga Raddi, SSA Marine.

Board Comments

The Board and staff discussed clarification on the requested direction to staff to gather input from industry, community groups, and AB 617 communities through outreach; clarification on whether outreach could occur simultaneously with the Stationary Source Committee (Committee) and Board; support for staff's continued communication with local businesses and communities to develop options before costs options due to the seriousness of warehouse pollution impacts on communities; support moving forward with public workshop outreach instead of returning back to the Committee for further discussion; consideration of lower threshold (ex. 50,000 square feet warehouses) and include smaller warehouse affecting communities in AB 617 communities and non-AB 617 communities; whether incentives have been considered, especially for zero-emission technologies; consideration to weigh the rule's environmental goals against its potential economic and employment impacts and concern of businesses moving to other states with less stringent environmental laws; support to continue conducting socioeconomic analysis and collecting data on how the rule could deliver emissions reductions beyond existing state and federal programs; consideration of including health-related costs such as hospital visits within the socioeconomic analysis; whether cost of living, consumer prices, and small businesses are included in the socioeconomic analysis; whether emissions reductions from a warehouse receives State Implementation Plan (SIP) credits; whether the rule would account for the combined impact of several neighboring small warehouses that would be considered under the threshold size; consideration of future economic vitality, outlooks, job market, and transitions that can affect residents; distinction between regulating indirect sources of emissions associated with warehouses and establishing vehicle emission standards; reviewing South Coast's lessons learned and seeking input from Southern California industry to inform the economic analysis; concern regarding potential unintended consequences of impacting warehouse businesses and job reductions, while balancing environmental benefits; and, encouragement to industry representatives to continue engaging in the rule development process.

OTHER BUSINESS

3. PUBLIC COMMENT ON NON-AGENDA MATTERS (REOPENED ITEM)

Jeff Faller; Joseph Vitelli; Steven Scheye; and LaDonna Williams, All Positives Possible.

At 3:17 p.m., a quorum of Board members (in any location) was lost, and the meeting was forced to adjourn. Item 27 did not occur.

27. **CHAIRPERSON'S REPORT**

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

The date of the next Board meeting was originally Wednesday, November 4, 2026, but after the meeting adjourned, a Special Board meeting was scheduled for Wednesday, October 30, 2026, at 9:00 a.m. The meeting will be held in-person at the Bay Area Metro Center. Members of the Board of Directors must attend in person at the Bay Area Metro Center; members of the public will be able to attend in person or virtually via webcast.

29. **ADJOURNMENT**

The meeting was adjourned at 3:17 p.m.

Justine Buenaflor
Acting Clerk of the Boards

BAY AREA AIR DISTRICT
Memorandum

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

From: Philip M. Fine
Executive Officer/APCO

Date: November 4, 2026

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

RECOMMENDED ACTION

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

BACKGROUND

None.

DISCUSSION

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

BUDGET CONSIDERATION/FINANCIAL IMPACT

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

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Stacey Pon
Reviewed by: Alexander G. Crockett

ATTACHMENT(S):

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

NOTICES OF VIOLATIONS ISSUED

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

Alameda						
Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comments
Bay Fair Unocal 76	C8617	San Leandro	A65742A	9/29/26	8-7-408	Gasoline Dispensing Facility Violation
Consolidated Printers, Inc.	S814156	Hayward	A65082A	9/28/26	2-1-301	No Authority to Construct and No Permit to Operate
Consolidated Printers, Inc.	S814156	Hayward	A65082B	9/28/26	2-1-302	No Authority to Construct and No Permit to Operate
Grand Petroleum Inc.	C9440	Hayward	A65740A	9/16/26	8-7-301.13	Gasoline Dispensing Facility Violation
Grand Petroleum Inc.	C9440	Hayward	A65740B	9/16/26	8-7-301.6	Gasoline Dispensing Facility Violation
Mettler-Toledo Rainin, LLC	B3651	Oakland	A65394A	9/16/26	2-1-302	No Permit to Operate
Salvador Murcia	S813020	Oakland	A65739A	9/3/26	11-2-303.8	Asbestos Violation
Salvador Murcia	S813020	Oakland	A65739B	9/3/26	11-2-401.3	Asbestos Violation
M & G Hauling, Inc.	S814221	Fremont	A65741A	9/28/26	11-2-303.3	Asbestos Violation
M & G Hauling Inc.	S814221	Fremont	A65741B	9/28/26	11-2-304	Asbestos Violation
M & G Hauling Inc.	S814221	Fremont	A65741C	9/28/26	11-2-401.3	Asbestos Violation
Tesla, Inc.	A1438	Fremont	A66276A	9/10/26	2-6-307	Title V Requirement/Permit Condition Violation
Tesla, Inc.	A1438	Fremont	A66277A	9/10/26	2-6-307	Title V Requirement/Permit Condition Violation
Tesla, Inc.	A1438	Fremont	A66303A	9/10/26	2-6-307	Title V Requirement/Permit Condition Violation
Tesla, Inc.	A1438	Fremont	A66304A	9/10/26	2-6-307	Title V Requirement/Permit Condition Violation
Tesla, Inc.	A1438	Fremont	A66305A	9/10/26	2-6-307	Title V Requirement/Permit Condition Violation

Tesla, Inc.	A1438	Fremont	A66306A	9/10/26	2-6-307	Title V Requirement/Permit Condition Violation
Tesla, Inc.	A1438	Fremont	A66307A	9/10/26	2-6-307	Title V Requirement/Permit Condition Violation
Tesla, Inc.	A1438	Fremont	A66308A	9/10/26	2-6-307	Title V Requirement/Permit Condition Violation
Tesla, Inc.	A1438	Fremont	A66309A	9/10/26	2-6-307	Title V Requirement/Permit Condition Violation
Tesla, Inc.	A1438	Fremont	A66310A	9/10/26	2-6-307	Title V Requirement/Permit Condition Violation
Triple A Roasters	E3837	Oakland	A65395A	9/22/26	2-1-302	No Permit to Operate

Contra Costa						
Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comments
Best Gas and Car Wash	D0310	El Cerrito	A64440A	9/17/26	2-1-302	No Permit to Operate
C & H Sugar Company, Inc.	B1911	Crockett	A66237A	9/2/26	2-6-307	Title V Requirement/Permit Condition Violation
CCS Auto Body	B9098	San Pablo	A66238A	9/11/26	2-1-302	No Permit to Operate
Central Contra Costa Sanitary District	A0907	Martinez	A66156A	9/30/26	10	Code of Federal Regulation Violation
Central Contra Costa Sanitary District	A0907	Martinez	A66156B	9/30/26	10	Code of Federal Regulation Violation
EcoTerra	S750233	Richmond	A66239A	9/16/26	2-1-301	No Authority to Construct and No Permit to Operate
EcoTerra	S750233	Richmond	A66239B	9/16/26	2-1-302	No Authority to Construct and No Permit to Operate
Hilltop Foodmart	C9701	Richmond	A64439A	9/11/26	8-7-301.5	Gasoline Dispensing Facility Violation
Hilltop Foodmart	C9701	Richmond	A64439B	9/11/26	8-7-301.6	Gasoline Dispensing Facility Violation

Hilltop Foodmart	C9701	Richmond	A66439A	9/11/26	8-7-301.5	Gasoline Dispensing Facility Violation
Hilltop Foodmart	C9701	Richmond	A66439B	9/11/26	8-7-301.6	Gasoline Dispensing Facility Violation
Martinez Refining Company LLC	A0011	Martinez	A65110A	9/30/26	10	Code of Federal Regulation Violation
Martinez Refining Company LLC	A0011	Martinez	A65118A	9/30/26	10	Code of Federal Regulation Violation
Phillips 66 Company - San Francisco Refinery	A0016	Rodeo	A65688A	9/24/26	2-1-307	Permit Requirement/Condition Violation
Phillips 66 Company - San Francisco Refinery	A0016	Rodeo	A65689A	9/24/26	2-1-307	Permit Requirement/Condition Violation
Phillips 66 Company - San Francisco Refinery	A0016	Rodeo	A65690A	9/24/26	8-8-315	Wastewater Collection and Separation Systems Violation
San Pablo Police Dept.	D0889	San Pablo	A64441A	9/24/26	2-1-307	Permit Requirement/Condition Violation
San Pablo Police Dept.	D0889	San Pablo	A64441B	9/24/26	2-1-307	Permit Requirement/Condition Violation
3524 Trust	S813649	San Pablo	A53644A	9/2/26	6-3-308	Fireplace Wood Smoke Violation
Tesoro Refining & Marketing Company, LLC	B2758	Martinez	A64782A	9/3/26	2-6-307	Title V Requirement/Permit Condition Violation
WinCo Foods Inc.	B5447	Brentwood	A65930A	9/9/26	2-1-307	Permit Requirement/Condition Violation

San Francisco						
Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comments
Honorway Investment Corporation	E0827	San Francisco	A59202A	9/16/26	2-1-301	No Authority to Construct and No Permit to Operate

Honorway Investment Corporation	E0827	San Francisco	A59202B	9/16/26	2-1-302	No Authority to Construct and No Permit to Operate
Laurel Realty & Investment - DRE #01336153	S813634	San Francisco	A65007A	9/15/26	11-2-303.8	Asbestos Violation
Sunset Remodeling and Design Inc.	S814062	San Francisco	A65008A	9/24/26	11-2-303.8	Asbestos Violation

San Mateo						
Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comments
PCI Construction Inc.	S792563	Redwood City	A65472A	9/21/26	11-2-303.8	Asbestos Violation
PCI Construction Inc.	S792563	Redwood City	A65472B	9/21/26	11-2-401.5	Asbestos Violation
Pet's Rest Cemetery	A4860	Colma	A65146A	9/8/26	2-1-307	Permit Requirement/Condition Violation
Redwood 76	C9772	Redwood City	A64066A	9/29/26	2-1-302	No Permit to Operate
Redwood 76	C9772	Redwood City	A64066B	9/29/26	8-7-301.5	Gasoline Dispensing Facility Violation
San Bruno Valero	D0502	San Bruno	A64064A	9/14/26	8-7-408	Gasoline Dispensing Facility Violation
Skyline Colleges	B5348	San Bruno	A64061A	9/8/26	8-7-408	Gasoline Dispensing Facility Violation
Valley Market & Gas	S200065	Redwood City	A64067A	9/25/26	8-7-302.1	Gasoline Dispensing Facility Violation

Santa Clara						
Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comments
Bubble Machine	D0203	San Jose	A65467A	9/2/26	8-7-301.6	Gasoline Dispensing Facility Violation
CEMEX Construction Materials Pacific, LLC	A3259	Santa Clara	A65566A	9/21/26	2-1-307	Permit Requirement/Condition Violation

CEMEX Construction Materials Pacific, LLC	A3259	Santa Clara	A65567A	9/21/26	2-1-307	Permit Requirement/Condition Violation
City of Sunnyvale Water Pollution Control	A0733	Sunnyvale	A66136A	9/9/26	1-431	Breakdown Report Violation
Cupertino Beacon	C6681	Cupertino	A65469A	9/15/26	2-1-302	No Permit to Operate
Cupertino Beacon	C6681	Cupertino	A65469B	9/15/26	2-1-307	Permit Requirement/Condition Violation
Cupertino Beacon	C6681	Cupertino	A65469C	9/15/26	8-7-302.3	Gasoline Dispensing Facility Violation
Image Design Studio	S813851	San Jose	A65471A	9/22/26	11-2-401.3	Asbestos Violation
Mission Trail Waste Systems	A8313	Santa Clara	A65565A	9/14/26	2-1-301	No Authority to Construct and No Permit to Operate
Mission Trail Waste Systems	A8313	Santa Clara	A65565B	9/14/26	2-1-302	No Authority to Construct and No Permit to Operate
Moe's Stop	C7052	San Jose	A65470A	9/9/26	2-1-307	Permit Requirement/Condition Violation
Nagpal Properties No. 1 LLC	S814106	Los Altos Hills	A66191A	9/1/26	11-2-303.8	Asbestos Violation

Solano						
Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comments
Bay Central Construction Group	S813529	Benicia	A63640A	9/15/26	11-2-401.5	Asbestos Violation
Vallejo Royal Gas	C9361	Vallejo	A64443A	9/28/26	8-7-301.6	Gasoline Dispensing Facility Violation

SETTLEMENTS FOR \$10,000 OR MORE REACHED

There was 1 settlement for \$10,000 or more completed in August 2026.

- 1) On August 27, 2026, the Air District reached a settlement with Intel Corporation for \$11,000, regarding the allegations contained in the following 1 Notice of Violation:

NOV #	Issuance Date	Occurrence Date	Regulation	Comments from Enforcement
A63957A	9/26/24	7/17/24	11-2-401.3	Asbestos Violation
A63957B	9/26/24	7/17/24	11-2-303	Asbestos Violation

There were 4 settlements for \$10,000 or more completed in September 2026.

- 1) On September 2, 2026, the Air District reached a settlement with Cal Heating & Air Inc. for \$12,000, regarding the allegations contained in the following 1 Notice of Violation:

NOV #	Issuance Date	Occurrence Date	Regulation	Comments from Enforcement
A60619A	8/5/26	9/18/25	11-2-303	Asbestos Violation
A60619B	8/5/26	9/18/25	11-2-304	Asbestos Violation

- 2) On September 3, 2026, the Air District reached a settlement with All Star Services, Inc. for \$42,000 (\$27,000 suspended provided All Star Services, Inc. complies with conditions and deadlines set forth in the agreement), regarding the allegations contained in the following 12 Notices of Violations:

NOV #	Issuance Date	Occurrence Date	Regulation	Comments from Enforcement
A57874A	4/19/18	4/1/18	8-7-302.2	Gasoline Dispensing Facility Violation
A58231A	4/25/18	4/18/18	2-1-301	No Authority to Construct
A59382A	10/16/19	1/1/18	8-7-503.3	Gasoline Dispensing Facility Violation
A59628A	3/18/21	5/13/20	2-1-307	Permit Requirement/Condition Violation
A59628B	3/18/21	2/17/21	8-7-301.5	Gasoline Dispensing Facility Violation
A59628C	3/18/21	1/1/18	8-7-503.1	Gasoline Dispensing Facility Violation
A60673A	8/19/25	5/14/25	8-7-301.13	Gasoline Dispensing Facility Violation
A60673B	8/19/25	5/14/25	8-7-301.6	Gasoline Dispensing Facility Violation
A60674A	8/19/25	5/14/25	8-7-302.3	Gasoline Dispensing Facility Violation
A62242A	9/29/22	9/29/22	8-7-302.3	Gasoline Dispensing Facility Violation
A62932A	12/3/24	12/3/24	8-7-503.1	Gasoline Dispensing Facility Violation
A62936A	1/16/25	1/16/25	8-7-503.3	Gasoline Dispensing Facility Violation
A64731A	3/13/25	3/13/25	2-1-307	Permit Requirement/Condition Violation

A64732A	3/13/25	3/13/25	8-7-314	Gasoline Dispensing Facility Violation
A64736A	6/24/25	3/28/25	8-7-503.3	Gasoline Dispensing Facility Violation

- 3) On September 3, 2026, the Air District reached a settlement with Central Contra Costa Sanitary District for \$92,550, regarding the allegations contained in the following 12 Notices of Violations:

NOV #	Issuance Date	Occurrence Date	Regulation	Comments from Enforcement
A57323A	10/29/18	7/12/18	2-6-307	Title V Requirement/Permit Condition Violation
A57680A	1/10/19	11/13/18	2-6-307	Title V Requirement/Permit Condition Violation
A57680B	1/10/19		10	Code of Federal Regulation Violation
A58893A	11/25/19	9/14/19	2-6-307	Title V Requirement/Permit Condition Violation
A58893B	11/25/19	9/14/19	10	Code of Federal Regulation Violation
A58894A	11/25/19	10/3/19	2-6-307	Title V Requirement/Permit Condition Violation
A58894B	11/25/19	10/3/19	10	Code of Federal Regulation Violation
A58895A	11/25/19	10/9/19	2-6-307	Title V Requirement/Permit Condition Violation
A58895B	11/25/19	10/9/19	10	Code of Federal Regulation Violation
A58896A	11/25/19	10/17/19	2-6-307	Title V Requirement/Permit Condition Violation
A58896B	11/25/19	10/17/19	10	Code of Federal Regulation Violation
A58897A	11/25/19	10/10/19	2-6-307	Title V Requirement/Permit Condition Violation
A58897B	11/25/19	10/10/19	10	Code of Federal Regulation Violation
A60411A	6/29/21	5/19/21	10	Code of Federal Regulation Violation
A60763A	10/23/23		10	Code of Federal Regulation Violation
A61010A	3/28/22	3/17/22	10	Code of Federal Regulation Violation
A65282A	4/16/25	4/16/25	8-34-301.2	Landfill Violation
A66156A	9/30/26	3/14/19	10	Code of Federal Regulation Violation
A66156B	9/30/26	3/14/19	10	Code of Federal Regulation Violation

- 4) On September 9, 2026, the Air District reached a settlement with Washington Hospital. for \$14,000, regarding the allegations contained in the following 5 Notices of Violations:

NOV #	Issuance Date	Occurrence Date	Regulation	Comments from Enforcement
A64769A	3/20/25	1/14/25	9-7-307.5	Boiler Emissions Violation
A64770A	3/20/25	1/14/25	9-7-307.5	Boiler Emissions Violation
A64771A	3/26/25	9/18/24	9-7-307.2	Boiler Emissions Violation
A64772A	3/28/25	3/1/23	2-1-307	Permit Requirement/Condition Violation
A64773A	3/28/25	3/1/23	2-1-307	Permit Requirement/Condition Violation

BAY AREA AIR DISTRICT
Memorandum

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

From: Philip M. Fine
Executive Officer/APCO

Date: November 4, 2026

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

RECOMMENDED ACTION

No action is requested at this time.

BACKGROUND

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

DISCUSSION

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

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

2026 Forth Roadmap Conference, Seattle, Washington, September 13-15, 2026 attendee:

- Caylee Mercado, Grants and Community Program Specialist II, Technology Implementation Office

Environmental Justice and Health Disparities Symposium, Bowie, Maryland, September 17-21, 2026 attendee:

- Ayah Hassan, Principal Air Quality Engineer, Engineering Division

BUDGET CONSIDERATION/FINANCIAL IMPACT

All associated business travel-related costs are covered by the respective division's Fiscal Year Ending 2027 Budget.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Michelle Hutson
Reviewed by: Stephanie Osaze

ATTACHMENT(S):

None

BAY AREA AIR DISTRICT
Memorandum

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

From: Philip M. Fine
Executive Officer/APCO

Date: November 4, 2026

Re: Authorization to Purchase Ultrafine Particle Monitors for Refinery Community
Air Monitoring Stations

RECOMMENDED ACTION

Authorize the Executive Officer/APCO to procure up to five (5) ultrafine particle monitors as part of the refinery community air monitoring network for an amount not to exceed \$432,500.00.

BACKGROUND

As part of the Air District's Strategic plan, the Meteorology and Measurement Division is working to strengthen air monitoring near refineries by securing and building out multi-pollutant air monitoring stations in communities. Monitoring goals for these refinery community air monitoring stations include collection of local scale data to track ambient air pollutant concentrations near refineries over time and providing community members access to near-real time air pollution data at these locations. Continuous measurements of air pollutants relevant to refinery emissions will be included, such as nitrogen oxides, sulfur dioxide, hydrogen sulfide, particulate matter concentrations, black carbon, and volatile organic compounds, many of which are also Toxic Air Contaminants.

Particulate Matter (PM) is a key pollutant of interest in these communities due to the high potential emission rates from refinery operations and its known link to adverse health effects. Ultrafine particulate matter (UFP), generally defined as particles with an aerodynamic diameter less than 1 micrometer, is an important component of PM due to its ability to deposit deep within the lungs and even enter the bloodstream.

DISCUSSION

The Air District identified a need for ultrafine particle measurements to augment other particle measurements at Refinery Community Monitoring stations, which include concentrations of PM with aerodynamic diameters of 2.5 and 10 micrometers (PM_{2.5} and PM₁₀) as well as black and brown carbon. Real-time measurements of UFP are typically conducted with a water-based Condensation Particle Counter (CPC).

The Air District compared the available UFP monitor options produced by TSI and other vendors, and identified the TSI CPC Model 3789 as the ideal unit given its high measurement accuracy, proven reliability in other Air District applications, and its ability to integrate into existing data logging and calibration systems. Air District staff are experienced in operating and maintaining a TSI CPC Model 3789 in current community air monitoring platforms and are familiar with the instrument's long-term performance, user software, hardware, and data acquisition protocols. Given this experience, the TSI CPC Model 3789 will seamlessly integrate into the refinery community monitoring station network.

BUDGET CONSIDERATION/FINANCIAL IMPACT

The total cost for these purchases, not to exceed \$432,500.00, is included in the budget for Program 812 for Fiscal Year Ending 2027.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Jon Bower & Eileen Lek
Reviewed by: Kate Hoag

ATTACHMENT(S):

1. Quote for five (5) UFP monitors (TSI CPC Model 3789)



TSI Incorporated
500 Cardigan Road
Shoreview, MN 55126
USA
EIN 41-0843524

Tel: (800)680-1220
Fax: (651)490-3824
Web: www.TSI.com
Email: orders@TSI.com

Page 1 of 2

Quotation

Quote Contact

Brian LaFranchi
Tel: 415-610-1684
Email: blafranchi@baaqmd.gov

Bill-To-Party

Bay Area Air Quality Mgmt Dist
3033 Richmond Pkwy Ste 300
Richmond CA 94806

Ship-To-Party

Bay Area Air Quality Mgmt Dist
3033 Richmond Pkwy Ste 300
RICHMOND CA 94806

Make PO Out To: TSI Incorporated

Quotation Number 20348838
Quotation Date 09/17/2026
Customer No 5382931
Cust. Ref.
Incoterms 2020 CPT: Prepay & Add
Consignee's Premises
Payment Term Net 30 days
Valid To 12/31/2026
Currency USD
Method of Payment PO, Visa, Amex, Mastercard

Please reference Quote number when submitting PO

Item	Material/Description	Quantity	Unit Price	Amount
1	3789 Versatile Water-CPC SMPS-compatible water-based CPC with adjustable counting efficiency including accessory kit and software for CPC with data export, multiple instrument control, and network access.	5.00 EA	51,430.00	257,150.00
2	3789-WKIT Replacement Wicks for 3789 (pack of 2)	5.00 EA	380.00	1,900.00
3	3789-MKIT Maintenance Kit for WCPC 3789	5.00 EA	1,005.00	5,025.00
4	EX1-3789 One Year Warranty Extension 3789	5.00 EA	1,690.00	8,450.00
Sub Total				272,525.00
Freight				TBD
Tax				27,067.69
Total Amount				299,592.69

1. Delivery: Estimated 12-16 weeks ARO. Prices quoted do not include shipping charges. Shipping estimates upon request.

2. Please provide complete shipping instructions for your order. Shipping cost can either be added to final invoice, or we can utilize your carrier account number.

3. Please email orders to orders@tsi.com and patrick.roth@tsi.com. If you prefer to place your order by phone, please call 800-680-1220. Anyone who answers the phone can help you.

4. If your organization is tax exempt, please send a copy of your certificate along with your order.



TSI Incorporated
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Page 2 of 2

Quotation

Bill-To-Party

Bay Area Air Quality Mgmt Dist

Quotation Number

20348838

Quotation Date

09/17/2026

Item	Material/Description	Quantity	Unit Price	Amount
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5. Please provide end user's name, address and phone number when placing order. This will assure the end user receives appropriate information regarding service, warranties, future modifications and software updates as needed.

6. Contact Information: Patrick Roth, Ph.D. | Regional Manager | Mobile: 1-651-724-8252 | patrick.roth@tsi.com

Sales Tax and Freight charges determined by tax status of customer and shipping method selected.

These items are controlled by the U.S. Government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. Government or as otherwise authorized by U.S. law and regulations.

This quotation constitutes a commercial offer and reflects only the terms applicable to the quoted products and pricing. Unless otherwise stated, the quotation is valid for thirty (30) days from the date of issue. Pricing is based on standard commercial off-the-shelf (COTS) product configurations and excludes applicable taxes, duties, and shipping charges unless expressly included.

Products are supplied subject to the manufacturer's standard product warranty applicable to the quoted items.

Seller provides commercial off-the-shelf (COTS) products developed for the general marketplace and conducts transactions in accordance with standard commercial practices consistent with FAR Part 12 (Acquisition of Commercial Products and Commercial Services). Requirements or provisions specific to non-commercial, service-based, or government-unique contracting frameworks may not apply to this transaction.

Seller will review any terms and conditions submitted with a customer purchase order for consistency with standard commercial contracting practices applicable to COTS products. No order shall be binding upon Seller unless and until accepted in writing, which will be confirmed through the Seller's order confirmation or other written acceptance.

Link to TSI Corporate Capabilities Statement at <https://tsi.com/Capabilities-Statement>

Patrick Roth

TSI Incorporated

Date 09/17/2026

For payment terms, complete credit application at <http://www.tsi.com/credit-app/>

BAY AREA AIR DISTRICT
Memorandum

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

From: Philip M. Fine
Executive Officer/APCO

Date: November 4, 2026

Re: Authorization to Amend Contract with Adaptalytics, LLC Providing
Configuration and Customization of the Ceridian Dayforce System

RECOMMENDED ACTION

Authorize the Executive Officer/APCO to amend the Air District's services agreement with Adaptalytics, LLC to increase the total not-to-exceed amount of the agreement by \$70,000, from \$199,000 to \$269,000, to provide human resources and payroll configuration and customization of the Ceridian Dayforce system.

BACKGROUND

The Air District conducted a Request for Proposal (RFP #2023-031) to pre-qualify consultants with expertise in providing configuration and customization for Ceridian Dayforce system, the human resources and payroll system. In the Request for Proposal (RFP) process, Adaptalytics, LLC was selected.

Adaptalytics, LLC is a qualified consultant to partner with the Air District to configure the Ceridian Dayforce system to meet the operational needs of the Air District and identify, troubleshoot, and test the Ceridian Dayforce system issues.

Adaptalytics, LLC coordinates and streamlines the key performance of the Ceridian Dayforce system to maximize efficiency. The contractor also provides a systematic approach to streamline the general ledger and the information that feeds through the Ceridian Dayforce time keeping system.

DISCUSSION

On May 6, 2024, the Air District entered into a professional services agreement with Adaptalytics, LLC for \$100,000. On March 10, 2025, the Executive Officer/APCO executed Amendment 1 to increase the amount by \$99,000, for a total of \$199,000. Under the procurement policy, the Board of Directors' authorization is required for Amendment 2 to increase the amount by another \$70,000, for a total of \$269,000.

Amendment 2 continues consulting services to reconfigure and optimize the Ceridian Dayforce system. This additional support ensures full compliance and accuracy across key operational workflows specifically comp time management, payroll reporting, new earning codes, and California Public Employees' Retirement System (CalPERS) deductions while aligning system parameters with the Air District's updated administrative and legal requirements.

Partnering with a reliable consulting firm like Adaptalytics, LLC is essential for supporting the Air District's ongoing needs. Adaptalytics, LLC helps ensure continuous configuration and troubleshooting support for our human resources and payroll system, a critical process that requires frequent updates to comply with evolving Internal Revenue Service (IRS) tax codes and labor laws.

BUDGET CONSIDERATION/FINANCIAL IMPACT

Funding is included in the Fiscal Year Ending 2027 budget, Program 106, to cover the costs that may be incurred under this contract amendment.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Joseph Huynh
Reviewed by: Judy Yu and Danica Winston

ATTACHMENT(S):

1. Adaptalytics 2024.049_exe
2. Adaptalytics 2024.049_Amendment1
3. Draft_Adaptalytics 2024.049_Amendment 2

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

PROFESSIONAL SERVICES CONTRACT

CONTRACT NO. 2024.049

1. **PARTIES** – The parties to this Contract (“Contract”) are the Bay Area Air Quality Management District (“DISTRICT”) whose address is 375 Beale Street, Suite 600, San Francisco, CA 94105, and **Adaptalytics, LLC** (“CONTRACTOR”) whose address is 5 Edinburg Reservoir Rd, Edinburg, VA, 22824.
2. **RECITALS**
 - A. DISTRICT is the local agency with primary responsibility for regulating stationary source air pollution in the Bay Area Air Quality Management District in the State of California. DISTRICT is authorized to enter into this Contract under California Health and Safety Code Section 40701. DISTRICT desires to contract with CONTRACTOR for services described in the Scope of Work, attached hereto as Attachment A and made a part hereof by this reference. DISTRICT is entering into this Contract based on CONTRACTOR’s stated qualifications to perform the services.
 - B. All parties to this Contract have had the opportunity to have this contract reviewed by their attorney.
3. **PERFORMANCE REQUIREMENTS**
 - A. CONTRACTOR is authorized to do business in the State of California. CONTRACTOR attests that it is in good tax standing with federal and state tax authorities.
 - B. CONTRACTOR agrees to obtain any and all required licenses, permits, and all other appropriate legal authorizations from all applicable federal, state and local jurisdictions and to pay all applicable fees.
 - C. CONTRACTOR shall comply with all laws and regulations that apply to its performance under this Contract, including any requirements to disclose potential conflicts of interest under DISTRICT’s Conflict of Interest Code.
 - D. CONTRACTOR shall not engage in any performance of work during the term of this contract that is in direct or indirect conflict with duties and responsibilities set forth in the Scope of Work.
 - E. CONTRACTOR shall exercise the degree of skill and care customarily required by accepted professional practices and procedures.
 - F. CONTRACTOR shall ensure that any subcontractors, employees and agents performing under this Contract comply with the performance standards set forth in paragraphs A-E above.
4. **TERM** – The term of this Contract is from May 1, 2024 to April 30, 2025, unless further extended by amendment of this Contract in writing and signed by both parties, or terminated earlier. CONTRACTOR shall not submit any invoice for services performed under this Contract until the Contract is fully executed.

5. TERMINATION

- A. The DISTRICT may terminate this Contract at any time, at will, and without specifying any reason, by notifying CONTRACTOR in writing. The notice of termination shall specify the effective date of termination, which shall be no less than thirty (30) calendar days from the date of delivery of the notice of termination, as set forth in section 10, below, and shall be delivered in accordance with the provisions of section 10 below. Immediately upon receipt of the notice of termination, CONTRACTOR shall cease all work under this Contract, except such work as is specified in the notice of termination. CONTRACTOR shall deliver a final invoice for all remaining work performed but not billed, including any work specified in the termination notice, on or before ten (10) business days following the effective date of termination.
- B. Either party may terminate this Contract for breach by the other party.
- i) Failure to perform any agreement or obligation contained in this Contract or failure to perform the services in a satisfactory manner shall constitute a breach of the Contract.
 - ii) The non-breaching party may terminate the Contract by delivery of a written notice of breach. The notice of breach shall specify the date of termination, which shall be no earlier than ten (10) business days from delivery of the notice of breach. In the alternative, at its sole discretion, the non-breaching party may require the breaching party to cure the breach. The notice of breach shall specify the nature of the breach and the date by which such breach must be cured.
 - iii) If CONTRACTOR fails to perform any obligation under this Contract, DISTRICT, at its sole discretion, may perform, or cause the performance of, the obligation itself. In that event, DISTRICT shall deduct the costs to perform such obligation and any other costs to cure the breach from the payment otherwise due to CONTRACTOR for work performed under this Contract. DISTRICT's performance hereunder shall not be deemed a waiver or release of any obligation of, or default by, CONTRACTOR under this Contract.
 - iv) The notice of breach shall be provided in accordance with the notice requirements set forth in section 10.
 - v) The non-breaching party reserves all rights under law and equity to enforce this Contract and recover any damages.

6. INSURANCE

- A. CONTRACTOR shall maintain the following insurance:
- i) Workers' compensation and employers' liability insurance as required by California law or other applicable statutory requirements.
 - ii) Occurrence-based commercial general liability insurance or equivalent form with a limit of not less than one million dollars (\$1,000,000) each occurrence. Such insurance shall include DISTRICT and its officers, agents, and employees as additional insureds and shall be primary with respect to any insurance maintained by DISTRICT.
 - iii) Business automobile liability insurance or equivalent form with a limit of not less than one million dollars (\$1,000,000) each accident. Such insurance shall include coverage for owned, hired, and non-owned vehicles. If CONTRACTOR is a sole proprietor, CONTRACTOR may meet this insurance requirement with personal automobile liability insurance carrying a business use endorsement or by demonstrating to the satisfaction of DISTRICT that business use is covered under the CONTRACTOR's personal automobile liability insurance. A CONTRACTOR using only rental vehicles in performing

work under this Contract may meet this insurance requirement by purchasing automobile liability insurance in the required coverage amount from the rental agency.

- iv) Professional liability insurance with limits not less than one million dollars (\$1,000,000) each claim.
- B. All insurance shall be placed with insurers acceptable to DISTRICT.
- C. Prior to commencement of work under this Contract, CONTRACTOR shall furnish properly-executed certificates of insurance for all required insurance. Upon request by DISTRICT, CONTRACTOR shall provide a complete copy of any required insurance policy. CONTRACTOR shall notify DISTRICT in writing thirty (30) days prior to cancellation or modification of any required insurance policy. Any such modifications are subject to pre-approval by DISTRICT.
- D. If CONTRACTOR fails to maintain the required insurance coverage set forth above, DISTRICT reserves the right either to purchase such additional insurance and deduct the cost thereof from any payments owed to CONTRACTOR or to terminate this Contract for breach.

7. INDEMNIFICATION

- A. CONTRACTOR shall indemnify and hold DISTRICT, its officers, employees and agents harmless from and against any and all liability, loss, expense, including reasonable attorneys' fees, or claims for injury or damages arising out of the performance of this Contract, but only in proportion to and to the extent such liability, loss, expense, attorneys' fees, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of CONTRACTOR, its officers, agents, or employees.
- B. DISTRICT shall indemnify and hold CONTRACTOR, its officers, employees and agents harmless from and against any and all liability, loss, expense, including reasonable attorneys' fee, or claims for injury or damages arising out of the performance of this Contract, but only in proportion to and to the extent such liability, loss, expense, attorneys' fees, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of DISTRICT, its officers, agents, or employees.

8. PAYMENT

- A. DISTRICT shall pay CONTRACTOR for services in accordance with the terms set forth in the Cost Schedule, which is attached hereto as Attachment B and incorporated herein by this reference.
- B. CONTRACTOR shall submit invoice(s) to DISTRICT for services performed. Each invoice shall specify the total cost of the services for which the invoice is submitted, shall reference tasks shown in the Scope of Work, the hours associated with same, or percentage completion thereof, and the amount of charge claimed, and, as appropriate, shall list any charges for equipment, material, supplies, travel, and subcontractors' services.
- C. DISTRICT's payment of invoices shall be subject to the following limitations and requirements:
 - i) Each invoice, including supporting documentation, shall be prepared in duplicate on CONTRACTOR's letterhead; shall list DISTRICT's contract number, the period covered by the invoice, and the CONTRACTOR's Social Security Number or Federal Employer Identification Number; and shall be submitted to: Bay Area Air Quality Management District, 375 Beale Street, Suite 600, San Francisco, CA 94105, Attn: Contracts

- Manager.
- ii) DISTRICT shall not pay interest, fees, handling charges, or the cost of money on the Contract.
 - iii) DISTRICT shall pay CONTRACTOR within thirty (30) calendar days after approval by DISTRICT of an itemized invoice.
- D. The total amount for which DISTRICT may be held liable for the performance of services specified in this Contract shall not exceed \$100,000.
9. DISPUTE RESOLUTION – A party that disputes a notice of breach must first seek mediation to resolve the dispute in accordance with the provisions set forth below.
- A. Upon receipt of a notice of breach of contract, the party may submit a demand for mediation to resolve whether or not a breach occurred. The party must state the basis of the dispute and deliver the demand within ten (10) business days of the date of receipt of the notice of breach.
 - B. The mediation shall take place at DISTRICT’s office at 375 Beale Street, Suite 600, San Francisco, or at such other place as may be mutually agreed upon by the parties and the mediator.
 - C. The parties shall make good faith efforts to hold the mediation within thirty (30) days after receipt of the demand for mediation.
 - D. Each party shall bear its own mediation costs.
 - E. In the event the parties are unable to resolve the dispute, either party may file an action in a court of competent jurisdiction to enforce the Contract.
 - F. Maximum recovery under this section shall be limited to \$100,000. The mediation costs shall not reduce the maximum amount recoverable under this section.
10. NOTICES – All notices that are required under this Contract shall be provided in the manner set forth herein, unless specified otherwise. Notice to a party shall be delivered to the attention of the person listed below, or to such other person or persons as may hereafter be designated by that party in writing. Notice shall be in writing sent by e-mail, facsimile, or regular first class mail. In the case of e-mail and facsimile communications, valid notice shall be deemed to have been delivered upon sending, provided the sender obtained an electronic confirmation of delivery. E-mail and facsimile communications shall be deemed to have been received on the date of such transmission, provided such date was a business day and delivered prior to 4:00 p.m. pacific time. Otherwise, receipt of e-mail and facsimile communications shall be deemed to have occurred on the following business day. In the case of regular mail notice, notice shall be deemed to have been delivered on the mailing date and received five (5) business days after the date of mailing.

DISTRICT: Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105
Attn: Judy Yu

CONTRACTOR: Adaptalytics, LLC
5 Edinburg Reservoir Rd
Edinburg, VA 22824
Attn: Richard Grant

11. ADDITIONAL PROVISIONS – All attachment(s) to this Contract are expressly incorporated herein by this reference and made a part hereof as though fully set forth.
12. EMPLOYEES OF CONTRACTOR
- A. CONTRACTOR shall be responsible for the cost of regular pay to its employees, as well as cost of vacation leave, vacation replacements, sick leave, severance pay, and pay for legal holidays.
 - B. CONTRACTOR, its officers, employees, agents, or representatives shall not be considered employees or agents of DISTRICT, nor shall CONTRACTOR, its officers, employees, agents, or representatives be entitled to or eligible to participate in any benefits, privileges, or plans given or extended by DISTRICT to its employees.
 - C. DISTRICT reserves the right to review the credentials to perform the work of any of CONTRACTOR's employees assigned herein and to disapprove CONTRACTOR's assignments. CONTRACTOR warrants that it will not employ any subcontractor(s) without prior written approval from DISTRICT.
13. CONFIDENTIALITY – In order to carry out the purposes of this Contract, CONTRACTOR may require access to certain of DISTRICT's confidential information (including trade secrets, inventions, confidential know-how, confidential business information, and other information that DISTRICT considers confidential) (collectively, "Confidential Information"). It is expressly understood and agreed that DISTRICT may designate in a conspicuous manner Confidential Information that CONTRACTOR obtains from DISTRICT, and CONTRACTOR agrees to:
- A. Observe complete confidentiality with respect to such information, including, without limitation, agreeing not to disclose or otherwise permit access to such information by any other person or entity in any manner whatsoever, except that such disclosure or access shall be permitted to employees of CONTRACTOR requiring access in fulfillment of the services provided under this Contract.
 - B. Ensure that CONTRACTOR's officers, employees, agents, representatives, and independent contractors are informed of the confidential nature of such information, and to assure by agreement or otherwise, that they are prohibited from copying or revealing, for any purpose whatsoever, the contents of such information or any part thereof, or from taking any action otherwise prohibited under this section.
 - C. Not use such information or any part thereof in the performance of services to others or for the benefit of others in any form whatsoever, whether gratuitously or for valuable consideration, except as permitted under this Contract.
 - D. Notify DISTRICT promptly and in writing of the circumstances surrounding any possession, use, or knowledge of such information, or any part thereof, by any person or entity other than those authorized by this section. Take, at CONTRACTOR's expense but at DISTRICT's option, and in any event under DISTRICT's control, any legal action necessary to prevent unauthorized use of such information by any third party or entity which has gained access to such information at least in part due to the fault of CONTRACTOR.
 - E. Take any and all other actions necessary or desirable to assure such continued confidentiality and protection of such information during the term of this Contract and following expiration or termination of the Contract.
 - F. Prevent access to such materials by a person or entity not authorized under this Contract.
 - G. Establish specific procedures in order to fulfill the obligations of this section.

14. INTELLECTUAL PROPERTY RIGHTS – Title and full ownership rights to all intellectual property developed under this Contract shall at all times remain with DISTRICT, unless otherwise agreed to in writing.

15. PUBLICATION

- A. DISTRICT shall approve in writing any report or other document prepared by CONTRACTOR in connection with performance under this Contract prior to dissemination or publication of such report or document to a third party. DISTRICT may waive in writing its requirement for prior approval.
- B. Until approved by DISTRICT, any report or other document prepared by CONTRACTOR shall include on each page a conspicuous header, footer, or watermark stating “DRAFT – Not Reviewed or Approved by BAAQMD,” unless DISTRICT has waived its requirement for prior approval pursuant to paragraph A of this section.
- C. Information, data, documents, or reports developed by CONTRACTOR for DISTRICT pursuant to this Contract shall be part of DISTRICT’s public record, unless otherwise indicated. CONTRACTOR may use or publish, at its own expense, such information, provided DISTRICT approves use of such information in advance. The following acknowledgment of support and disclaimer must appear in each publication of materials, whether copyrighted or not, based upon or developed under this Contract:

“This report was prepared as a result of work sponsored, paid for, in whole or in part, by the Bay Area Air Quality Management District (District). The opinions, findings, conclusions, and recommendations are those of the author and do not necessarily represent the views of the District. The District, its officers, employees, contractors, and subcontractors make no warranty, expressed or implied, and assume no legal liability for the information in this report.”

- D. CONTRACTOR shall inform its officers, employees, and subcontractors involved in the performance of this Contract of the restrictions contained herein and shall require compliance with this section.

16. AUDIT / INSPECTION OF RECORDS – If this Contract exceeds \$10,000, pursuant to California Government Code Section 8546.7, all records, documents, conditions and activities of CONTRACTOR, and its subcontractors, related to the services provided hereunder, shall be subject to the examination and audit of the California State Auditor and other duly authorized agents of the State of California for a period of three (3) years after final payment under this Contract. CONTRACTOR hereby agrees to make such records available during normal business hours for inspection, audit, and reproduction by any duly authorized agents of the State of California or DISTRICT. CONTRACTOR further agrees to allow interviews of any of its employees who might reasonably have information related to such records by any duly authorized agents of the State of California or DISTRICT. All examinations and audits conducted under this section shall be strictly confined to those matters connected with the performance of this Contract, including, but not limited to, the costs of administering this Contract.

17. NON-DISCRIMINATION – In the performance of this Contract, CONTRACTOR shall not discriminate in its recruitment, hiring, promotion, demotion, and termination practices on the

basis of race, religious creed, color, national origin, ancestry, sex, age, marital status, sexual orientation, medical condition, or physical or mental disability, and shall comply with the provisions of the California Fair Employment & Housing Act (Gov. Code, §§12900 et seq.), the Federal Civil Rights Act of 1964 (P.L. 88-352) and all amendments thereto, and all administrative rules and regulations issued pursuant to said Acts. CONTRACTOR shall also require each subcontractor performing work in connection with this Contract to comply with this section, and shall include in each contract with such subcontractor provisions to accomplish the requirements of this section.

18. PROPERTY AND SECURITY – Without limiting CONTRACTOR’S obligations with regard to security, CONTRACTOR shall comply with all the rules and regulations established by DISTRICT for access to and activity in and around DISTRICT’S premises.
19. ASSIGNMENT – No party shall assign, sell, license, or otherwise transfer any rights or obligations under this Contract to a third party without the prior written consent of the other party, and any attempt to do so shall be void upon inception.
20. WAIVER – No waiver of a breach, of failure of any condition, or of any right or remedy contained in or granted by the provisions of this Contract shall be effective unless it is in writing and signed by the party waiving the breach, failure, right, or remedy. No waiver of any breach, failure, right, or remedy shall be deemed a waiver of any other breach, whether or not similar, nor shall any waiver constitute a continuing waiver unless the writing so specifies. Further, the failure of a party to enforce performance by the other party of any term, covenant, or condition of this Contract, and the failure of a party to exercise any rights or remedies hereunder, shall not be deemed a waiver or relinquishment by that party to enforce future performance of any such terms, covenants, or conditions, or to exercise any future rights or remedies.
21. ATTORNEYS’ FEES – In the event any action is filed in connection with the enforcement or interpretation of this Contract, each party shall bear its own attorneys’ fees and costs.
22. FORCE MAJEURE – Neither DISTRICT nor CONTRACTOR shall be liable for or deemed to be in default for any delay or failure in performance under this Contract or interruption of services resulting, directly or indirectly, from acts of God, enemy or hostile governmental action, civil commotion, strikes, lockouts, labor disputes, fire or other casualty, judicial orders, governmental controls, regulations or restrictions, inability to obtain labor or materials or reasonable substitutes for labor or materials necessary for performance of the services, or other causes, except financial, that are beyond the reasonable control of DISTRICT or CONTRACTOR, for a period of time equal to the period of such force majeure event, provided that the party failing to perform notifies the other party within fifteen calendar days of discovery of the force majeure event, and provided further that that party takes all reasonable action to mitigate the damages resulting from the failure to perform. Notwithstanding the above, if the cause of the force majeure event is due to a party’s own action or inaction, then such cause shall not excuse that party from performance under this Contract.
23. SEVERABILITY – If a court of competent jurisdiction holds any provision of this Contract to be illegal, unenforceable or invalid, in whole or in part, for any reason, the validity and enforceability of the remaining provisions, or portions of them, will not be affected.

24. HEADINGS – Headings on the sections and paragraphs of this Contract are for convenience and reference only, and the words contained therein, shall in no way be held to explain, modify, amplify, or aid in the interpretation, construction, or meaning of the provisions of this Contract.
25. COUNTERPARTS/FACSIMILES/SCANS – This Contract may be executed and delivered in any number of counterparts, each of which, when executed and delivered, shall be deemed an original, and all of which together shall constitute the same contract. The parties may rely upon a facsimile copy or scanned copy of any party's signature as an original for all purposes.
26. GOVERNING LAW – Any dispute that arises under or relates to this Contract shall be governed by California law, excluding any laws that direct the application of another jurisdiction's laws. Venue for resolution of any dispute that arises under or relates to this Contract, including mediation, shall be San Francisco, California.
27. ENTIRE CONTRACT AND MODIFICATION – This Contract represents the final, complete, and exclusive statement of the agreement between the parties related to CONTRACTOR providing services to DISTRICT, and supersedes all prior and contemporaneous understandings and agreements of the parties. No party has been induced to enter into this Contract by, nor is any party relying upon, any representation or warranty outside those expressly set forth herein. This Contract may only be amended by mutual agreement of the parties in writing and signed by both parties.
28. SURVIVAL OF TERMS – The provisions of sections 7 (Indemnification), 13 (Confidentiality), 14 (Intellectual Property Rights), and 15 (Publication) shall survive the expiration or termination of this Contract.

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

BAY AREA AIR QUALITY
MANAGEMENT DISTRICT

ADAPTALYTICS LLC

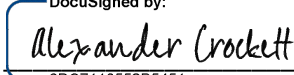
By: 
Philip M. Fine
Executive Officer/APCO


By: _____
Richard Grant
Principal

Date: 5/6/2024

Date: 17 April, 2024

Approved as to form:

By: 
Alexander G. Crockett
General Counsel

ATTACHMENT A

SCOPE OF WORK

Overview

DISTRICT seeks consulting and technical support services related to its Ceridian Dayforce (DF), the Human Capital Management software. DISTRICT DF modules include, but are not limited to, human resources, payroll, benefits, learning, document management, and onboarding. CONTRACTOR is a certified Ceridian Dayforce consultant and shall provide Ceridian Dayforce assistance upon DISTRICT request.

Dayforce Consultation and Technical Support

Upon DISTRICT request, CONTRACTOR shall assist DISTRICT in one or more of the following:

1. Identifying, troubleshooting, and testing DF system issues.
2. Creating and/or maintaining customized reports, including but not limited to, human resources and financial reports.
3. Providing best practices related to DF organization structure.
4. Identifying gap areas and improvements in the utilization of DF.
5. Providing consulting to improve DF and DF efficiency.
6. Communicating and coordinating with Ceridian on issues requiring escalation.
7. Providing training and creating user guides based on DISTRICT's process and procedures.

Additional Tasks and Services

A. Planning, Implementation, and Project Management

- i) CONTRACTOR shall provide project management services and subject matter experts to assist with DISTRICT's requests.
- ii) CONTRACTOR shall provide best practices guidance to DISTRICT for all DF system configurations.
- iii) For each DISTRICT request, CONTRACTOR shall detail the timeline and milestones for implementing optimizations and support services.
- iv) CONTRACTOR shall assign responsibilities to CONTRACTOR's project team, including consultants, developers, and support staff.
- v) With DISTRICT input, CONTRACTOR shall define communication protocols and escalation procedures for addressing issues during implementation.
- vi) CONTRACTOR shall provide an estimated quote for each DISTRICT request.

B. DF System Assessment

- i) Upon DISTRICT request, CONTRACTOR shall evaluate DISTRICT's existing DF configuration, including, but not limited to, current organization structure, module configuration, workflows, and integrations. CONTRACTOR shall identify pain points, bottlenecks and areas for improvement throughout the system. CONTRACTOR shall review user feedback and support tickets to understand common issues.

C. Optimization Plan

- i) Upon DISTRICT request, CONTRACTOR shall develop an optimization strategy tailored to DISTRICT's needs. CONTRACTOR shall work with DISTRICT to develop a strategy and shall define specific optimization goals. Goals may include streamlining processes, improving data accuracy or enhancing DISTRICT user experience.
- ii) CONTRACTOR shall outline steps to meet DISTRICT goals, including DF system

configurations, workflow redesign, and user training.

- iii) Upon DISTRICT request, CONTRACTOR shall provide assistance with process mapping and redesign.

D. Support Services

- i) CONTRACTOR shall provide ongoing support services to DISTRICT to ensure operation of DF.
- ii) Upon DISTRICT request, CONTRACTOR shall provide post go live DF support.

E. Training and Knowledge Transfer

- i) Upon DISTRICT request, CONTRACTOR shall provide comprehensive training sessions for end-users and administrators on optimized workflows and system usage.
- ii) Upon DISTRICT request, CONTRACTOR shall create documentation and knowledge base resources for reference and self-help.
- iii) Upon DISTRICT request, CONTRACTOR shall conduct knowledge transfer sessions to DISTRICT stakeholders to handle routine maintenance and support tasks.

F. Reporting and Analytics

- i) Upon DISTRICT request, CONTRACTOR shall gather requirements for reporting and dashboard needs, including developing, testing and implementing reports and analytic dashboards.

Scope of Work Assumptions

- CONTRACTOR shall implement and adhere to rigorous testing procedures to ensure accuracy and reliability of DF system optimizations.
- CONTRACTOR shall conduct user acceptance testing to validate that the implemented changes meets DISTRICT requirements and expectations.
- CONTRACTOR shall perform regular audits to monitor DISTRICT's DF system performance and identify opportunities for further optimization.

ATTACHMENT B

COST SCHEDULE

DISTRICT shall pay CONTRACTOR in accordance to the hourly rates in Table 1 below. CONTRACTOR shall invoice DISTRICT quarterly and provide a detailed invoice of the labor and services provided. Payment shall be made in accordance with Section 8, Payment, of this Contract.

Table 1

Title	Labor Rate per hour
Program Manager	\$162
Project Manager	\$162
DF Benefits Subject Matter Expert	\$144
DF Integration Subject Matter Expert	\$135
DF Workforce Management Subject Matter Expert	\$117
DF Payroll Subject Matter Expert	\$108
DF Reports Analyst	\$90
DF Configuration Analyst	\$90

Total Cost of Contract not to exceed \$100,000.

AMENDMENT NO. 1 TO
BAY AREA AIR QUALITY MANAGEMENT DISTRICT
CONTRACT NO. 2024.049

This amendment to the above-entitled contract ("Contract Amendment") is dated, for reference purposes only, February 26, 2025, and consists of three (3) pages.

RECITALS:

1. The Bay Area Air Quality Management District ("DISTRICT") and **Adaptalytics, LLC**. ("CONTRACTOR") (hereinafter referred to as the "PARTIES") entered into the above-entitled contract for consultation and support services related to Ceridian Dayforce software system for Human Resources management (the "Contract"), which Contract was executed on behalf of CONTRACTOR on April 17, 2024, and on behalf of DISTRICT on May 6, 2024.
2. The PARTIES seek to amend the term and total cost of the Contract because the DISTRICT seeks to continue receiving services from CONTRACTOR prescribed in the Contract and CONTRACTOR desires to provide those services up to the new term date.
3. In accordance with Section 27 of the Contract, DISTRICT and CONTRACTOR desire to amend the above-entitled Contract as follows:

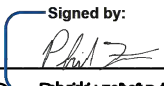
TERMS AND CONDITIONS OF CONTRACT AMENDMENT:

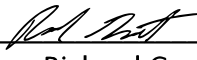
1. By this Contract Amendment, DISTRICT and CONTRACTOR amend Section 4, "Term." The term of the Contract shall be extended so that the termination date of the Contract is now December 31, 2026.
2. By this Contract Amendment, DISTRICT and CONTRACTOR amend Paragraph D of Section 8, "Payment," of the Contract to replace "\$100,000" with "\$199,000."
3. By this Contract Amendment, DISTRICT and CONTRACTOR amend Paragraph F of Section 9, "Dispute Resolution," of the Contract to replace "\$100,000" with "\$199,000."
4. By this Contract Amendment, DISTRICT and CONTRACTOR replace Attachment B, Cost Schedule, with the attached "Attachment B-1, Cost Schedule" and agree that all references in the Contract to Attachment B shall be deemed refer to Attachment B-1, Cost Schedule.
5. DISTRICT and CONTRACTOR agree that all other terms and conditions of the Contract shall remain in full force and effect.

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

BAY AREA AIR QUALITY
MANAGEMENT DISTRICT

ADAPTALYTICS, LLC

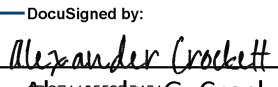
Signed by:
By: 
Dr. Philip M. Fine
Executive Officer/APCO

By: 
Richard Grant
Principal

Date: 3/10/2025

Date: 03/07/2025

Approved as to form:
General Counsel

DocuSigned by:
By:  3/10/2025
Alexander G. Crockett
General Counsel

ATTACHMENT B-1

COST SCHEDULE

DISTRICT shall pay CONTRACTOR in accordance to the hourly rates in Table 1 below. CONTRACTOR shall invoice DISTRICT quarterly and provide a detailed invoice of the labor and services provided. Payment shall be made in accordance with Section 8, Payment, of this Contract.

Table 1

Title	Labor Rate Per Hour
Program Manager	\$162
Project Manager	\$162
DF Benefits Subject Matter Expert	\$144
DF Integration Subject Matter Expert	\$135
DF Workforce Management Subject Matter Expert	\$117
DF Payroll Subject Matter Expert	\$108
DF Reports Analyst	\$90
DF Configuration Analyst	\$90

Total cost of Contract not to exceed \$199,000.

AMENDMENT NO. 2 TO
BAY AREA AIR QUALITY MANAGEMENT DISTRICT
CONTRACT NO. 2024.049

This amendment to the above-entitled contract ("Contract Amendment") is dated, for reference purposes only, October 9, 2026.

RECITALS:

1. The Bay Area Air Quality Management District ("DISTRICT") and **Adaptalytics, LLC** ("CONTRACTOR") (hereinafter referred to as the "PARTIES") entered into the above-entitled contract for consultation and support services related to Ceridian Dayforce software system for Human Resources management (the "Contract"), which Contract was executed on behalf of CONTRACTOR on April 17, 2024, and on behalf of DISTRICT on May 6, 2024.
2. The PARTIES entered into Amendment No. 1 to the Contract, dated February 26, 2025, for reference purposes only, to amend the term and total cost of the Contract.
3. The PARTIES seek to amend the term and add funds to the Contract because the DISTRICT seeks to continue receiving services from CONTRACTOR prescribed in the Contract and CONTRACTOR desires to provide those services.
4. In accordance with Section 27 of the Contract, DISTRICT and CONTRACTOR desire to amend the above-entitled Contract as follows:

TERMS AND CONDITIONS OF CONTRACT AMENDMENT:

1. By this Contract Amendment, DISTRICT and CONTRACTOR amend Section 4, "Term." The term of the Contract shall be extended so that the termination date of the Contract is now June 30, 2027.
2. By this Contract Amendment, DISTRICT and CONTRACTOR amend Paragraph D of Section 8, "Payment," of the Contract to replace "\$199,000" with "\$269,000."
3. By this Contract Amendment, DISTRICT and CONTRACTOR amend Paragraph F of Section 9, "Dispute Resolution," of the Contract to replace "\$199,000" with "\$269,000."
4. By this Contract Amendment, DISTRICT and CONTRACTOR replace Attachment B-1, Cost Schedule, with the attached "Attachment B-2, Cost Schedule" and agree that all references in the Contract to Attachment B and Attachment B-1 shall be deemed to refer to Attachment B-2, Cost Schedule.

5. DISTRICT and CONTRACTOR agree that all other terms and conditions of the Contract shall remain in full force and effect.

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

BAY AREA AIR QUALITY
MANAGEMENT DISTRICT

ADAPTALYTICS, LLC

By: _____
Dr. Philip M. Fine
Executive Officer/APCO

By: _____
Richard Grant
Principal

Date: _____

Date: _____

Approved as to form:
General Counsel

By: _____
Alexander G. Crockett
General Counsel

ATTACHMENT B-2

COST SCHEDULE

DISTRICT shall pay CONTRACTOR in accordance to the hourly rates in Table 1 below. CONTRACTOR shall invoice DISTRICT quarterly and provide a detailed invoice of the labor and services provided. Payment shall be made in accordance with Section 8, Payment, of this Contract.

Table 1

Title	Labor Rate Per Hour
Program Manager	\$162
Project Manager	\$162
DF Benefits Subject Matter Expert	\$144
DF Integration Subject Matter Expert	\$135
DF Workforce Management Subject Matter Expert	\$117
DF Payroll Subject Matter Expert	\$108
DF Reports Analyst	\$90
DF Configuration Analyst	\$90

Total cost of Contract not to exceed \$269,000.

BAY AREA AIR DISTRICT
Memorandum

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

From: Philip M. Fine
Executive Officer/APCO

Date: November 4, 2026

Re: Amendments to the Transportation Fund for Clean Air Policies Commencing
Fiscal Year 2026-2027

RECOMMENDED ACTION

Adopt amendments to the Transportation Fund for Clean Air Policies Commencing Fiscal Year 2026-2027.

BACKGROUND

In 1991, the California State Legislature authorized a \$4 surcharge on motor vehicles registered within the Air District's jurisdiction to fund projects that reduce on-road motor vehicle emissions. This surcharge generates approximately \$24 million annually for the Air District's Transportation Fund for Clean Air (TFCA) program. The TFCA's statutory authority and program requirements are established in California Health and Safety Code Sections 44241, 44241.5, and 44242.

Sixty percent (60%) of TFCA funds are allocated annually by the Board to eligible projects and programs implemented directly by the Air District (e.g., Spare the Air) and to a program referred to as the Regional Fund. The remaining forty percent (40%) of TFCA revenue is passed through to the nine counties within the Air District's jurisdiction, based on each county's proportionate share of vehicle registration fees. The county's designated agency (i.e., administering agency) then awards the funds to eligible projects in their county.

To ensure the program remains effective and responsive to program needs, the Air District Board of Directors periodically adopts updates to the TFCA Policies to support projects that maximize emission reductions and public health benefits.

DISCUSSION

The TFCA Policies were comprehensively updated in 2025 to consolidate the 60% Fund and 40% Fund policies, streamline program requirements, reduce applicant barriers, and provide greater flexibility for administering agencies.

The updated policies took effect on July 1, 2026. As staff prepared and began implementing the updated policies, several additional areas for refinement were identified.

The proposed amendments address these areas by clarifying existing requirements, correcting minor typographical errors, and further aligning the TFCA Policies with the state's Carl Moyer Program. They also make it easier for applicants to combine TFCA funding with other Air District incentive funding by reducing administrative burden and facilitating opportunities for co-funding.

Air District staff shared the proposed amendments with the administering agencies to ensure they accurately reflected feedback received throughout the year. No additional edits were made through this review. Because the proposed changes are primarily administrative and intended to provide greater clarity, staff did not conduct a broader public outreach process. Staff anticipate evaluating the TFCA Policies more comprehensively in the coming years, and any substantive policy updates would be developed through a formal public stakeholder process.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None. The recommended policy amendments have no impact on the Air District's budget.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared By: Jason Newman
Reviewed By: Alona Davis, Minda Berbeco, and Linda Hui

ATTACHMENT(S):

1. Attachment 1 TFCA Policies Commencing FY 2026-27, Proposed Amendments (Clean)
2. Attachment 2 TFCA Policies Commencing FY 2026-27, Proposed Amendments (Redline)

THE TRANSPORTATION FUND FOR CLEAN AIR (TFCA) POLICIES

Commencing Fiscal Year 2026-2027

Amended November 4, 2026

These Policies were established to guide the use of the Bay Area Air District's (Air District) Transportation Fund for Clean Air (TFCA). The Air District's TFCA is comprised of the TFCA 60% Fund, which is administered by the Air District, and the TFCA 40% Fund, which is passed through and administered by the designated public agency in each of the nine Bay Area counties (collectively referred to as the "administering agencies"). Unless otherwise noted, these Policies are intended to oversee all TFCA administrators, recipients, projects, and programs.

ELIGIBLE RECIPIENTS:

1. **Eligible Applicants:** Pursuant to [California Health and Safety Code \(HSC\) section 44241\(c\)\(1\)](#), public agencies are eligible to apply for all project categories. Non-public entities are eligible to apply for only on-road zero-emissions vehicles and alternative fuel infrastructure projects that are permitted pursuant to [HSC section 44241\(b\)\(7\)](#).

2. **Authority and Capacity:** Grant recipients must be responsible for the implementation of the project and have the authority and capability, including funding, necessary to complete the project.

Additionally, applicants of the TFCA 60% Fund must demonstrate that they have the authority to submit the application, to enter into a grant agreement, to carry out the project, and to bind the entity to perform all required tasks by including either: 1) a signed letter of commitment from the applicant's representative with authority (e.g., Chief Executive or Financial Officer, Executive Director, or City Manager); or 2) a signed resolution from the governing body (e.g., City Council, Board of Supervisors, or Board of Directors).

3. **Good Standing:** Grant recipients must be in good standing with the Air District. Grantees who have failed either the financial statement audit or the compliance audit for a prior TFCA-funded project awarded are excluded from receiving an award of any TFCA funds for three (3) years from the date of the Air District's final audit determination or for a duration determined by the Air District Air Pollution Control Officer (APCO). Existing TFCA funds already awarded to a grant recipient will not be released until all audit recommendations and remedies have been implemented satisfactorily, at the discretion of the Air District. A failed financial statement audit means a final audit report that includes an uncorrected audit finding that confirms an ineligible expenditure of TFCA funds. A failed compliance audit means an uncorrected audit finding that confirms a program or project was not implemented in accordance with the applicable grant agreement.

A failed financial statement or compliance audit of the administering agency or its grantee may subject the administering agency to a reduction of future revenue in an amount equal to the amount which was inappropriately expended pursuant to the provisions of [HSC section 44242\(c\)\(3\)](#).

4. **Viable project and matching funds:** Applicants must demonstrate that they have adequate funds to cover all stages of their proposed project(s) from commencement through completion. With the exception of public school districts, applicants of the TFCA

Attachment 1

TFCA Policies Commencing Fiscal Year 2026-2027, Proposed Amendments (Clean)

60% Fund must provide evidence that they have at least 10% of the total eligible project costs (matching funds) from a non-Air District source available and ready to commit to the proposed projects.

ELIGIBLE PROJECTS:

5. **Basic Requirements:** Projects must conform to the provisions of [HSC sections 44220 et seq.](#) and these Policies. On a case-by-case basis, agencies that administer the 40% Fund may receive approval by the Air District for projects that are authorized by [HSC section 44241](#) and achieve Board-adopted TFCA cost-effectiveness but do not fully meet other Board-adopted Policies.
6. **Reduction of Air Pollution and Limitations on Pre-Award Activities:** Only projects that reduce surplus on-road motor vehicle emissions within the Air District's jurisdiction are eligible. Surplus emission reductions are air pollution emission reductions that exceed those required by federal, State or local air quality law; are not required by air pollution penalty settlement or air pollution mitigation agreements; and are not used to generate credits towards the State Implementation Plan or other federal, State or local air pollution emissions averaging, banking or credit programs. Any credits generated by a funded Project must be retired in accordance with [HSC section 44229](#). Whether a project will generate surplus emission reductions is determined by the Air District prior to execution of a grant agreement, and Projects must continue to achieve surplus emission reductions if a grant agreement amendment modifies the project scope or extends the project completion deadline.

Grant recipients may not receive vehicles, engines, equipment, or infrastructure, or begin project implementation activities, before a grant agreement is executed, unless the Air District or Administering Agency provides written notification to the grant recipient that funding is not guaranteed until execution of the grant agreement.

Select fees (i.e., permits, inspections, design, engineering, site preparation) may be incurred before grant agreement execution.

7. **TFCA Cost-Effectiveness (C-E) by Eligible Project Category:** Projects must not exceed the maximum C-E limit specified in Tables 1 and 2. C-E (\$/weighted ton) is calculated by dividing TFCA funds awarded by the total surplus emissions reductions achieved during a project's operational period, including reactive organic gases (ROG), nitrogen oxides (NOx), and weighted PM10 (particulate matter 10 microns in diameter and smaller). All TFCA funds associated with a project, including reprogrammed TFCA funds, must be included in the C-E calculation. For projects that include more than one independent component (e.g., multiple vehicles or shuttle routes), each component must meet the applicable C-E requirement.

Administrative costs permitted pursuant to [HSC section 44233](#) are excluded from the calculation of a project's TFCA C-E.

Table 1: Maximum C-E for TFCA Projects

Eligible Project Category pursuant to HSC section 44241(b)(1)-44241(b)(11)	Maximum C-E (\$/weighted ton)	
	Does NOT provide emission reductions in Priority Areas ¹	Provides emission reductions in Priority Areas ¹
Clean Air Vehicle: The following project categories encourage the introduction of zero-emission vehicle technologies and/or the retirement of older, more polluting vehicles.		
Purchase or lease of on-road zero-emissions vehicles (i.e., hydrogen fuel cell, battery electric)	\$522,000*	\$783,000*
Installation of alternative fuel infrastructure that supports zero emission vehicles.	\$500,000**	\$750,000**
Trip Reduction: The following project categories encourage the reduction of vehicle trips, vehicle use, and vehicle miles traveled.		
Implementation of existing ridesharing² programs and existing first- and last-mile connections⁴	\$300,000	\$450,000
Provision of pilots³: ridesharing² programs; first- and last-mile connections⁴ ; congestion pricing of highways, bridges, and public transit	\$500,000	\$750,000
Implementation of bicycle parking (e-bike charging may be eligible as part of the creation of new bicycle parking)	\$500,000	\$750,000
Implementation of bicycle facility improvement projects (e.g., Class I-IV bikeways, bike loop detectors, bike share)	\$1,000,000	\$1,500,000
Implementation of infrastructure improvements for trip reduction (including transit signal preemption and bus stop relocation)	\$500,000	\$750,000
Implementation of demonstration projects in telecommuting	\$300,000	\$450,000
Implementation of rail-bus integration and regional transit information systems	\$150,000	\$225,000
Case-by-case approval	\$250,000	\$375,000

¹ Priority Areas include communities identified through the Assembly Bill (AB) 617 process and Priority Populations defined by SB 535 (disadvantaged communities) and AB 1550 (low-income communities).

² Ridesharing is defined as two or more persons traveling by any mode, including, but not limited to, carpooling, vanpooling, buspooling, taxipooling, jitney, and public transit.

Attachment 1

TFCA Policies Commencing Fiscal Year 2026-2027, Proposed Amendments (Clean)

³ Pilot projects are projects that serve an area where no similar service has been available within the previous three years or that significantly expand service in an existing service area.

⁴ Local feeder bus or shuttle service must provide direct connections between stations (e.g., rail stations, ferry stations, Bus Rapid Transit (BRT) stations, or airports) and a distinct commercial or employment location.

* For on-road zero-emission vehicle projects, the non-Priority Area C-E limit may be adjusted annually to align with updates to the Carl Moyer Program Guidelines adopted by the California Air Resources Board (CARB). The Priority Area C-E limit will be equal to 1.5 times the non-Priority Area limit.

**For alternative fuel infrastructure projects funded through the TFCA 60% Fund, the C-E limit shall follow the Carl Moyer Program Guidelines.

Table 2: Maximum C-E for TFCA Air District-Sponsored Programs

Project Category	Maximum C-E (\$/weighted ton)
Spare the Air; Commuter Benefits	\$500,000
Enhanced Mobile Source Inspections	\$500,000
Vehicle Buy-Back	\$60,000*
Clean Cars for All	See on-road zero-emissions vehicles in Table 1
Charge!	N/A ¹
Co-Funded Projects or Programs	N/A ²

¹ These projects provide electric vehicle charging and/or hydrogen refueling infrastructure to support emission reductions from electric and fuel cell electric vehicles. To maximize emissions reductions and public health benefits, projects are competitively evaluated using objective criteria. C-E factors include total project cost, the amount of funding eligible under program rules, and projected emissions reductions based on anticipated equipment usage. Other evaluation factors may include benefits to environmental justice communities and communities disproportionately impacted by air pollution. No maximum C-E threshold applies.

² For projects or programs that receive funding from another state-funded Air District-administered program (e.g., Carl Moyer Program, Community Air Protection Program), no maximum C-E threshold for TFCA funds applies. Rather, funding will be determined using C-E factors such as total project cost and projected emissions reductions based on anticipated equipment usage, as well as benefits to environmental justice communities and communities disproportionately impacted by air pollution. Emissions reductions associated with co-funded projects or programs shall be claimed under the other Air District-administered funding program.

*These values may be adjusted annually to align with updates to the Carl Moyer Program Guidelines adopted by CARB.

8. Consistent with existing plans and programs: All projects must be consistent with the Transportation Control and Mobile Source Control Measures identified in the Air District's most recently approved strategies for attaining and maintaining State and national ozone standards ([Clean Air Plan](#)), those plans and programs established pursuant to [HSC sections 40233, 40717, and 40919](#); and, when specified, other adopted federal, State, regional, and local plans and programs.

For projects that will install **bikeways and bike parking**, pursuant to [HSC section 44241\(b\)\(10\)](#), the description of the projects must be included in an adopted countywide bicycle plan, congestion management program (CMP), countywide transportation plan (CTP), city plan, or the Metropolitan Transportation Commission's (MTC) Regional Bicycle Plan and/or Regional Active Transportation Plan. Projects that are included in an adopted city general plan, area-specific plan, community-based transportation plan, or similar plan must specify that the purpose of the bicycle facility is to reduce motor vehicle emissions or traffic congestion.

Attachment 1

TFCA Policies Commencing Fiscal Year 2026-2027, Proposed Amendments (Clean)

For projects that involve the installation of **infrastructure for trip reduction projects**, pursuant to [HSC section 44241\(b\)\(11\)](#), a description of that project must be identified in an approved area-specific plan, redevelopment plan, general plan, bicycle plan, pedestrian plan, traffic-calming plan, or other similar plan.

9. **Accessible and available to the public.** Projects that provide a service (i.e., ridesharing, first- and last-mile connections, bike share) must be made accessible and available to the general public.

ADMINISTRATION:

10. **Expend Funds within Two Years:** TFCA Funds must be expended within two (2) years of receipt of either (1) the first transfer of funds from the Air District to the administering agency in the applicable fiscal year for TFCA 40% Fund or (2) the effective date of the project sponsor's grant agreement for the TFCA 60% Fund, unless the administering agency or Air District has made the determination based on an application for funding that the eligible project will take longer than two years to implement. Additionally, for the TFCA 40% Fund, an administering agency may, if it finds that significant progress has been made on a project, approve no more than three one-year schedule extensions for a project. Any subsequent schedule extensions for projects can only be given on a case-by-case basis, if the Air District finds that significant progress has been made on a project. For the TFCA 60% Fund, the Air District may approve a longer period, if it finds that significant progress has been made on a project.
11. **Maintain Appropriate Insurance:** Both the administering agency and each grantee must obtain and maintain general liability insurance, workers compensation insurance, and additional insurance as appropriate for specific projects, with required coverage amounts provided in Air District guidance and final amounts specified in the respective grant agreements.

INELIGIBLE USES OF TFCA FUNDS:

12. **Planning activities:** Pursuant to [HSC section 44241\(c\)\(1\)](#), planning activities are not eligible unless they are directly related to the implementation of a specific project or program.
13. **Cost of developing proposals and grant applications:** The costs to prepare proposals and/or grant applications are not eligible.
14. **Employee subsidies:** Projects that provide a direct or indirect financial transit or rideshare subsidy exclusively to employees of the grantee are not eligible.
15. **Personal computers purchase:** Pursuant to [HSC section 44241\(b\)\(6\)](#), TFCA may not be used to purchase personal computing equipment.
16. **Profit:** The sum of TFCA funds awarded plus all other grants and applicable manufacturer and local/state/federal rebates and discounts plus any applicable applicant cost share may not exceed total project costs.
17. **Remanufactured or refurbished vehicles, equipment, and parts:** Vehicles, equipment, and parts must be new.

THE TRANSPORTATION FUND FOR CLEAN AIR (TFCA) POLICIES

Commencing Fiscal Year 2026-2027

Amended November 4, 2026

These Policies were established to guide the use of the Bay Area Air District's (Air District) Transportation Fund for Clean Air (TFCA). ~~for The Air District's TFCA is comprised of both~~ the TFCA 60% Fund, ~~that which~~ is administered by the Air District, and the TFCA 40% Fund, which is passed through and administered by the designated public agency in each of the nine Bay Area counties (collectively referred to as the "administering agencies"). Unless otherwise noted, these Policies are intended to oversee all TFCA administrators, recipients, projects, and programs.

ELIGIBLE RECIPIENTS:

1. **Eligible Applicants:** Pursuant to California Health and Safety Code (HSC) section 44241(c)(1), public agencies are eligible to apply for all project categories. Non-public entities are eligible to apply for only on-road zero-emissions vehicles and alternative fuel infrastructure projects that are permitted pursuant to HSC section 44241(b)(7).
2. **Authority and Capacity:** Grant recipients must be responsible for the implementation of the project and have the authority and capability, including funding, necessary to complete the project.

Additionally, applicants of the TFCA 60% Fund must demonstrate that they have the authority to submit the application, to enter into a grantfunding agreement, to carry out the project, and to bind the entity to perform all required tasks by including either: 1) a signed letter of commitment from the applicant's representative with authority (e.g., Chief Executive or Financial Officer, Executive Director, or City Manager); or 2) a signed resolution from the governing body (e.g., City Council, Board of Supervisors, or Board of Directors).

3. **Good Standing:** Grant recipients must be in good standing with the Air District. Grantees who have failed either the financial statement audit or the compliance audit for a prior TFCA-funded project awarded are excluded from receiving an award of any TFCA funds for three (3) years from the date of the Air District's final audit determination in accordance with HSC section 44242 or for a duration determined by the Air District Air Pollution Control Officer (APCO). Existing TFCA funds already awarded to ~~the project sponsor a grant recipient~~ will not be released until all audit recommendations and remedies have been ~~satisfactorily~~ satisfactorily, at the discretion of the Air District. A failed financial statement audit means a final audit report that includes an uncorrected audit finding that confirms an ineligible expenditure of TFCA funds. A failed compliance audit means an uncorrected audit finding that confirms a program or project was not implemented in accordance with the applicable ~~Funding Agreement or~~ grant agreement.

A failed financial statement or compliance audit of the administering agency or its grantee may subject the administering agency to a reduction of future revenue in an amount equal to the amount which was inappropriately expended pursuant to the provisions of HSC section 44242(c)(3).

4. **Viable project and matching funds:** Applicants must demonstrate that they have adequate funds to cover all stages of their proposed project(s) from commencement

through completion. With the exception of public school districts, applicants of the TFCA 60% Fund must provide evidence that they have at least 10% of the total eligible project costs (matching funds) from a non-Air District source available and ready to commit to the proposed projects.

ELIGIBLE PROJECTS:

5. **Basic Requirements:** Projects must conform to the provisions of [HSC sections 44220 et seq.](#) and these Policies. On a case-by-case basis, agencies that administer the 40% Fund may receive approval by the Air District for projects that are authorized by [HSC section 44241](#) and achieve Board-adopted TFCA cost-effectiveness but do not fully meet other Board-adopted Policies.
6. **Reduction of Air Pollution and Limitations on Pre-Award Activities:** Only projects that ~~result in the reduction of~~ surplus on-road motor vehicle emissions within the Air District's jurisdiction are eligible. ~~Surplus emission reductions are air pollution emission reductions that exceed those required by federal, State or local air quality law; are not required by air pollution penalty settlement or air pollution mitigation agreements; and are not used to generate credits towards the State Implementation Plan or other federal, State or local air pollution emissions averaging, banking or credit programs. Any credits generated by a funded Project must be retired in accordance with HSC section 44229. Whether a project will generate surplus emission reductions is determined by the Air District prior to execution of a grant agreement, and Projects must also continue to achieve surplus emission reductions at the time of an amendment to if a grant agreement if the amendment modifies the project scope or extends the project completion deadline.~~
~~Surplus emission reductions are reductions that are beyond what is required through regulations, ordinances, contracts, and other legally binding obligations at the time of the execution of a grant agreement. TFCA funds may not be granted to a project that has already commenced or would have commenced otherwise. Grant recipients may not receive vehicles, engines, equipment, or infrastructure, or begin project implementation activities, before a grant agreement is executed, unless the Air District or Administering Agency provides written notification to the grant recipient that funding is not guaranteed until execution of the grant agreement.~~
~~Select fees (i.e., permits, inspections, design, engineering, site preparation) may be incurred before grant agreement execution.~~
7. **TFCA Cost-Effectiveness (C-E) by Eligible Project Category:** Projects must not exceed the maximum C-E limit specified in Tables 1 and 2. ~~C-E Cost-effectiveness~~ (\$/weighted ton) is ~~calculated by dividing the ratio of~~ TFCA funds awarded ~~by the total to the sum of~~ surplus emissions reductions ~~achieved~~, during a project's operational period, ~~including~~ of reactive organic gases (ROG), nitrogen oxides (NOx), and weighted PM10 (particulate matter 10 microns in diameter and smaller). All TFCA-generated funds ~~associated with a project, including (e.g., reprogrammed TFCA funds,) that are awarded or applied to a project~~ must be included in the ~~C-E calculation evaluation~~. For projects that ~~include involve~~ more than one independent component (e.g., ~~multiple more than one~~ vehicles ~~purchased or~~, ~~more than one~~ shuttle routes), each component must ~~meet the applicable achieve this C-E cost-effectiveness~~ requirement.

Attachment 2

TFCA Policies Commencing Fiscal Year 2026-2027, Proposed Amendments (Redlined)

Administrative costs ~~that are~~ permitted pursuant to [HSC section 44233](#) are excluded from the calculation of a project's TFCA ~~C-E cost-effectiveness~~.

~~This section does not apply to projects that are co-funded by other Air District administered programs (e.g., Carl Moyer Program) and the TFCA 60% Fund. Emissions benefits for these projects may be reported under other Air District-administered program.~~

Table 1: Maximum ~~C-E Cost-Effectiveness~~ for TFCA Projects

Eligible Project Category pursuant to HSC section 44241(b)(1)-44241(b)(11)	Maximum C-E (\$/weighted ton)	
	Does NOT provide emission reductions in Priority Areas ¹	Provides emission reductions in Priority Areas ¹
Clean Air Vehicle: The following project categories encourage the introduction of zero-emission vehicle technologies and/or the retirement of older, more polluting vehicles.		
Purchase or lease of on-road zero-emissions vehicles (i.e., hydrogen fuel cell, battery electric)	\$522,000*	\$783,000*
Installation of alternative fuel infrastructure that supports zero emission vehicles.	\$500,000**	\$750,000**
Trip Reduction: The following project categories encourage the reduction of vehicle trips, vehicle use, and vehicle miles traveled.		
Implementation of existing ridesharing² programs and existing first- and last-mile connections⁴	\$300,000	\$450,000
Provision of pilots³: ridesharing² programs; first- and last-mile connections⁴ ; congestion pricing of highways, bridges, and public transit	\$500,000	\$750,000
Implementation of bicycle parking (e-bike charging may be eligible as part of the creation of new bicycle parking)	\$500,000	\$750,000
Implementation of bicycle facility improvement projects (e.g., Class I-IV bikeways, bike loop detectors, bike share)	\$1,000,000	\$1,500,000
Implementation of infrastructure improvements for trip reduction (including transit signal preemption and bus stop relocation)	\$500,000	\$750,000
Implementation of demonstration projects in telecommuting	\$300,000	\$450,000

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Implementation of rail-bus integration and regional transit information systems	\$150,000	\$225,000
Case-by-case approval	\$250,000	\$375,000

¹ Priority Areas ~~include~~^{are} communities identified through the Assembly Bill (AB) 617 process; and Priority Populations ~~as~~ defined by SB 535 (disadvantaged communities) and AB 1550 (low-income communities).

² Ridesharing is defined as two or more persons traveling by any mode, including, but not limited to, carpooling, vanpooling, buspooling, taxipooling, jitney, and public transit.

³ Pilot projects are ~~defined as~~ projects that serve an area where no similar service ~~has been~~^{was} available within the ~~previous~~^{ast} three years or that ~~will result in~~ significantly expanded ~~ed~~ service ~~in~~^{into an} existing ~~service~~ area.

⁴ ~~The~~ local feeder bus or shuttle service must provide direct connections between stations (e.g., rail stations, ferry stations, Bus Rapid Transit (BRT) stations, or airports) and a distinct commercial or employment location.

* ~~For on-road zero-emission vehicle projects, the~~ ~~value for~~ non-Priority Area ~~C-E limit projects may be adjusted~~^{increase} annually to align with ~~updates~~^{adjustments} ~~made~~ to the Carl Moyer Program Guidelines adopted by the California Air Resources Board (CARB). The ~~value for~~ Priority Area ~~C-E limit projects will be~~ ~~equal to~~^{increased by} 1.5 times ~~the non-Priority Area limit~~.

** ~~For alternative fuel infrastructure projects funded through the TFCA 60% Fund, the C-E limit shall follow the Carl Moyer Program Guidelines.~~

Table 2: Maximum ~~C-E~~^{Cost-Effectiveness} for TFCA Air District-Sponsored Programs

Project Category	Maximum C-E (\$/weighted ton)
Spare the Air ¹ & Commuter Benefits	\$500,000
Enhanced Mobile Source Inspections	\$500,000
Vehicle Buy-Back	\$60,000 ^{1*}
Clean Cars for All	See on-road zero-emissions vehicles in Table 1 ^{\$522,000*}
Charge!	N/A ¹²
Co-Funded Projects or Programs	N/A ²

¹ Maximum C-E for vehicle scrapping if entirely funded by TFCA. If TFCA is used as a match for state funds, all emissions reductions will be claimed by the state program.

¹² These projects provide electric vehicle charging and/or hydrogen refueling infrastructure to support emission reductions from electric and fuel cell electric vehicles. To maximize emissions reductions and public health benefits, projects ~~are~~^{will be} competitively evaluated using objective criteria. ~~C-E~~^{Cost-effectiveness} factors ~~will~~ include total project cost, the amount of funding eligible under program rules, and projected emissions reductions based on anticipated equipment usage. Other evaluation factors may include benefits to environmental justice communities and communities disproportionately impacted by air pollution. No maximum ~~C-E~~^{Cost-effectiveness} threshold ~~will~~ apply^{ies}.

² ~~For projects or programs that receive funding from another state-funded Air District-administered program (e.g., Carl Moyer Program, Community Air Protection Program), no maximum C-E threshold for TFCA funds applies. Rather, funding will be determined using C-E factors such as total project cost and projected emissions reductions based on anticipated equipment usage, as well as benefits to environmental justice communities and communities disproportionately impacted by air pollution. Emissions reductions associated with co-funded projects or programs shall be claimed under the other Air District-administered funding program.~~

*These values may ~~be adjusted~~^{increase} annually to align ~~with updates~~^{the limit with adjustments made} to the Carl Moyer Program Guidelines adopted by CARB.

- 8. Consistent with existing plans and programs:** All projects must ~~comply~~^{be consistent} with the Transportation Control and Mobile Source Control Measures ~~identified~~^{included} in the Air District's most recently approved strategies for ~~attaining~~^{achieving} and maintaining State and national ozone standards (Clean Air Plan), those plans and programs established

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TFCA Policies Commencing Fiscal Year 2026-2027, Proposed Amendments (Redlined)

pursuant to [HSC sections 40233, 40717, and 40919](#); and, when specified, other adopted federal, State, regional, and local plans and programs.

For projects that will install **bikeways and bike parking**, pursuant to [HSC section 44241\(b\)\(10\)](#), the description of the projects must be included in an adopted countywide bicycle plan, congestion management program (CMP), countywide transportation plan (CTP), city plan, or the Metropolitan Transportation Commission's (MTC) Regional Bicycle Plan and/or Regional Active Transportation Plan. Projects that are included in an adopted city general plan, area-specific plan, community-based transportation plan, or similar plan must specify that the purpose of the bicycle facility is to reduce motor vehicle emissions or traffic congestion.

For projects that involve the installation of **infrastructure for trip reduction projects**, pursuant to [HSC section 44241\(b\)\(11\)](#), a description of that project must be identified in an approved area-specific plan, redevelopment plan, general plan, bicycle plan, pedestrian plan, traffic-calming plan, or other similar plan.

9. **Accessible and available to the public.** Projects that provide a service (i.e., ridesharing, first- and last-mile connections, bike share) must be made accessible and available to the general public.

ADMINISTRATION:

10. **Expend Funds within Two Years:** TFCA Funds must be expended within two (2) years of receipt of either (1) the first transfer of funds from the Air District to the administering agency in the applicable fiscal year for TFCA 40% Fund or (2) the effective date of the project sponsor's grant agreement for the TFCA 60% Fund, unless the administering agency or Air District has made the determination based on an application for funding that the eligible project will take longer than two years to implement. Additionally, for the TFCA 40% Fund, an administering agency may, if it finds that significant progress has been made on a project, approve no more than three one-year schedule extensions for a project. Any subsequent schedule extensions for projects can only be given on a case-by-case basis, if the Air District finds that significant progress has been made on a project. For the TFCA 60% Fund, the Air District may approve a longer period, if it finds that significant progress has been made on a project.
11. **Maintain Appropriate Insurance:** Both the administering agency and each grantee must obtain and maintain general liability insurance, workers compensation insurance, and additional insurance as appropriate for specific projects, with required coverage amounts provided in Air District guidance and final amounts specified in the respective grant agreements.

INELIGIBLE USES OF TFCA FUNDS:

12. **Planning activities:** Pursuant to [HSC section 44241\(c\)\(1\)](#), planning activities are not eligible unless they are directly related to the implementation of a specific project or program.
13. **Cost of developing proposals and grant applications:** The costs to prepare proposals and/or grant applications are not eligible.
14. **Employee subsidies:** Projects that provide a direct or indirect financial transit or rideshare subsidy exclusively to employees of the grantee are not eligible.

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15. **Personal computers purchase:** Pursuant to [HSC section 44241\(b\)\(6\)](#), TFCA may not be used to purchase personal computing ~~equipmenters~~.
16. **Profit:** The sum of TFCA funds awarded plus all other grants and applicable manufacturer and local/state/federal rebates and discounts plus any applicable applicant cost share may not exceed total project costs.
17. **Remanufactured or refurbished vehicles, equipment, and parts:** Vehicles, equipment, and parts must be new.

DRAFT

BAY AREA AIR DISTRICT
Memorandum

To: Chairperson Lynda Hopkins and Directors of the Board

From: Philip M. Fine
Executive Officer/APCO

Date: November 4, 2026

Re: Community Advisory Council Charter Amendments

RECOMMENDED ACTION

Adopt the proposed Community Advisory Council Charter amendments.

BACKGROUND

The Community Advisory Council (CAC) assigned Council members Cynthia Prieto-Diaz, Saidy Reyes Mazariegos, Kevin Ruano Hernandez, and Jeff Sanchez to form a Governance Ad Hoc Committee at its March 19, 2026, meeting, and charged the Ad Hoc Committee with drafting proposed amendments to the [original Charter](#) for consideration by the Council. The Governance Ad Hoc Committee put forward, based on weekly discussions, recommended Charter amendments to address CAC changes over the last four years. The Ad Hoc Committee proposed amendments that included changes to the Charter language, membership selection and terms, the geographic representation of membership seats, and other aspects. The Ad Hoc Committee incorporated the proposed amendments and the original charter into a single draft updated Charter for CAC members to review at the July 16, 2026, CAC meeting.

The Council provided feedback at the July CAC meeting that was integrated into the Charter amendments. This feedback includes a clarification in Section 5 on the equitable and transparent selection process for committees and a reference to the stipend cap in the compensation policy, as well as a new appendix on the Air District's Accessibility and Non-Discrimination Policy. The proposed Charter amendments entered a 30-day public comment period in August. Air District staff received no public comments during the comment period.

The CAC voted to approve the proposed 2026 Charter amendments on consent at the September 17, 2026, CAC meeting.

After a presentation by CAC Members Jeff Sanchez and Kevin Ruano Hernandez at the October 14, 2026, Community Equity, Health, and Justice (CEHJ) Committee meeting, the Committee discussed the item and voted to recommend the proposed 2026 Charter amendments to the Board of Directors. The CEHJ Committee asked for some clarification on the 2- and 4-year terms, which is provided below:

Under the updated Charter, CAC members serve an initial 4-year term and then may be eligible to reapply to be reappointed for one additional two-year term, for a maximum cumulative service of six years. The 4-year initial term gives members time to complete onboarding, develop recommendations, and carry their work through to Board consideration. The staggered 4- and 2-year structure also helps maintain continuity and institutional knowledge as new members join the Council. For example, new members beginning 4-year terms in December 2027 would overlap with and extend beyond the service of existing members serving their last two years of a 4-year term through December 2029. A new recruitment cycle would then begin again in 2029 and occur every two years.

DISCUSSION

The CAC and the CEHJ Committee both recommend that the Board of Directors adopt these proposed Charter amendments.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Amy Smith
Reviewed by: Anyania Muse

ATTACHMENT(S):

1. Community Advisory Council Charter Amendments Summary Table
2. FINAL Community Advisory Council Charter - EDITED_102626
3. FINAL Community Advisory Council Charter - CLEAN_102626

Proposed Community Advisory Council (CAC) Charter Amendments Summary Table 9/10/2026

Section	Type of Change	Change Description	Justification
1. Purpose	Content-Related	Added wording indicating that CAC shall function as an independent advisory body to the Board of the Directors with the authority to identify community priorities, develop recommendations, request information.	Revision of added language aims to strengthen the CAC by better defining its role as an independent advisory body to the Body of Directors at the Air District, to help fulfill its mission with autonomy, developing evidence-based recommendations, and requesting necessary information to provide informed advice, improving transparency and accountability in its governance.
2.2 Guiding Principles	Content-Related	Added last two bullet points.	Uplifting the need to follow any existing, foundational CAC Environmental Justice Priorities, action plans, and Charter.
2.2 Guiding Principles	Content-Related	Added wording indicating at the end of section that the CAC may request timely access to information that will better prepare it to fulfill its advisory role to evaluate ongoing Air District efforts.	Revision of added language aims to emphasize the CAC's advisory role and how it can better support the Air District efforts. It ensures that the CAC is not a passive body but an active participant in evaluating and guiding ongoing initiatives.
3. CAC Co-Chairs	Content-Related	Updated to reflect a minimum of two (2) Co-Chairs and no more than three (3) Co-Chairs. Removal of dates when the inaugural CAC approved the leadership model.	Updates to the Co-Chair leadership model maintains a maximum of three (3) Co-Chairs while allowing a minimum of two (2) for the CAC to adapt to changing memberships and workloads without adversely impacting the overarching governance of the advisory body. Continuing to allow multiple Co-Chairs allows for balance of leadership styles and responsiveness to improve continuity of CAC efforts and goals.

3.1 Duties of Co-Chairs	Administrative	Clarification of actual subcommittees to include Ad Hoc and staff-led workgroups, and other CAC activities.	Updated to reflect current CAC operations by clarifying actual subcommittees and CAC initiatives and removing outdated standing committees to better align with current participation and priorities without adversely impacting the function of the CAC.
3.1 Duties of Co-Chairs	Administrative	Adoption of Rosenberg's Rules of Order	Create alignment between the CAC and Air District's Board of Directors
3.2 Terms of Leadership (Co-Chairs)	Content-Related	Updated leadership position to be appointed for one (1) or two (2) year terms and limiting Co-Chair term limit to no more than four (4) years.	Revision of leadership term limits to allow advisory group to adapt to community needs while providing opportunities for more members to serve as part of leadership without long-term commitments and encouraging more participation from advisory group to develop leadership skills. Allowance of different term lengths allows Council to maintain institutional knowledge through staggered terms.
3.3 Election of Leadership (Co-Chairs)	Content-Related	Removal of "inaugural leadership 3 Co-Chair model".	Removal to reduce redundancy and align with changes made in 3.2; removal will not adversely impact fit and/or function of CAC activities.

4.1 Composition of the CAC	Content-Related	<p>Removal of "initial" wording.</p> <p>Changed membership of two (2) at-large positions to one (1) at large and outlined one (1) specifically for Marin, Napa, or Sonoma County.</p> <p>Removal of wording related to "individuals living or working in Marin, Napa, or Sonoma counties."</p> <p>Added Air District cannot apply to be a member of the CAC.</p> <p>Added that "diversity, equity, and inclusion on the CAC are highly valued."</p>	<p>Charter is a living document; removal of initial wording allows for future amendments and revisions over time.</p> <p>Designating one (1) at-large seat for North Bay counties ensures these areas that may be underrepresented due to smaller populations or geographical distance are represented, to advance equity. More rural areas also face challenges, like wildfire risks, and should be considered.</p> <p>Removal of wording referencing that priority will be given to individuals living or working in Marin, Napa, or Sonoma as one (1) seat will now be specific for those North Bay counties.</p> <p>Air District cannot serve on the CAC to prevent conflict of interests.</p> <p>Including diversity, equity, and inclusion on the CAC are highly valued, as they align with the mission, goals, and guiding principles of the Council's foundation.</p>
4.2 Duties of Members	Content-Related	<p>Summary updated to reflect that CAC members can join a minimum of one (1) initiative, committee, or workgroup annually.</p> <p>Added general reference to number of hours dedicated to efforts to align with the compensation policy.</p>	<p>Revisions allow members to join various initiatives based on their schedules and/or workloads, ensuring flexibility while maintaining alignment with the Meeting Compensation and Expense Reimbursement Policy and the CAC's changing priorities.</p>
4.2.1 Mandatory Trainings	Content-Related	<p>Removed specific reference to four (4) trainings.</p> <p>Added the following required trainings: Ethics and Harassment Prevention.</p>	<p>Removal of total number of trainings, as subject to change if there are evolving needs.</p> <p>Removal of required team building and conflict resolution.</p> <p>Addition to the reference of Ethics and Harassment Prevention Training is to align with California state requirements (AB1234, SB 1343, AB1825) to ensure compliance and maintain professionalism, integrity, and accountability of all CAC members.</p>
4.2.2 Virtual, Hybrid, and In-Person Meetings	Administrative	<p>Removal of historical references to virtual meetings.</p>	<p>Removal of historical meeting formats, removal will not adversely impact fit and/or function of CAC activities.</p>

4.2.2 Virtual, Hybrid, and In-Person Meetings	Administrative	Added reference to specific compensation policy and procedures for virtual, hybrid, and in-person meetings.	Updated to reflect guiding document outlining CAC's Meeting Compensation and Expense Reimbursement Policy; addition will not adversely impact fit and/or function of CAC activities. Added for clarity.
4.3 Members Terms of Office	Content-Related	Updated to have CAC members serve a 4-year term first. Then members may apply and be reappointed to serve a second, 2-year term. The total number of years of service was changed from 8 to a cap of 6 years.	Revision of membership term limits to allow new members to adapt to functions and get involved in work of the Council in the first 4 years, while providing opportunities for more members to serve and encouraging more participation with a 6 year cap. Allowance of different term lengths allows Council to maintain institutional knowledge through staggered terms.
4.3.1 Appointment of Members	Content-Related	Updated to remove a set process of creating a CAC Selection Ad Hoc Committee and requiring Community Equity, Health, and Justice (CEHJ) Committee approval prior to CAC member appointments by the Board of Directors.	Revision of the CAC membership appointment process allows for more flexibility in the make-up of selection committee members to allow for avoidance of conflict of interest and to allow for filling seat vacancies in a shorter timeframe. It also clarifies the Board of Directors' authority to approve member appointments without first going through committee.
5 Standing Committees, Ad Hoc Committees, and Workgroups	Content-Related	Updated section to include workgroups, and made references to Ad Hoc or standing committees in summary. Wording shortened to reference total time across all committees and/or workgroups to number of hours dedicated to efforts to align with the compensation policy. Also referenced that these opportunities will be assigned through an equitable and transparent process.	Added reference to workgroups to reflect current initiatives that align with the mission, goals, and guiding principles of the Council's foundation. Updated to reflect guiding document outlining CAC's Meeting Compensation and Expense Reimbursement Policy; addition will not adversely impact fit and/or function of CAC activities. Added for clarity.

5.1 Standing Committees	Content-Related	Updated section to include that standing committees are public meetings and they should only be created when the CAC identifies a continuing need and the Air Districts confirms supporting staff.	Added reference to standing committees being subject to Brown Act requirements, as it is a public meeting, and requires notice period, agenda preparation, public access, and administrative support for compliance. Added that any standing committee must be established when there is a continuing need as identified by the CAC and the Air District confirms there is staffing support with budget allocations to meet Brown Act requirements.
5.2 Ad Hoc Committees	Content-Related	Removed specific reference to completion of tasks within six (6) months. Provided clarity that all CAC initiatives shall follow similar guidelines on commitment, accountability, priority, and exceptions.	Removing specific six (6) month timeline for Ad Hoc committees allows for flexibility, while providing clarification that Ad Hoc committees are to serve for a limited term and/or single purpose. Removal of timeline will not adversely impact fit and/or function of CAC activities. Updated section to reflect available opportunities for CAC members to get involved beyond the general meetings through standing committees, Ad Hoc committees, and workgroups. Added for clarity.
5.2 Ad Hoc Committees	Administrative	Removed specific reference to previous Ad Hoc committees.	Removing specific reference to previous Ad Hoc committees ensures the Charter reflects current state and provides flexible governance, allowing for the formation of new Ad Hoc committees as needed without requiring the CAC to amend the Charter each time.
5.3 Workgroups	Content-Related	Added section defining workgroups.	Added reference to staff-led workgroups in which CAC members are engaged to reflect current initiatives that align with the mission, goals, and guiding principles of the Council's foundation.

6 Community Engagement	Content-Related	Removed specific reference to bi-annual newsletter. Added wording to reflect that CAC will aim to engage the community by following-up on items that have been addressed, sharing future meeting dates, agendas and success stories, as well as ways to engage with the CAC.	Removing specific reference to bi-annual newsletter reflects current state and provides flexibility to CAC on how it will aim to engage the community. Addition of outreach to community networks to provide examples but is not limited to any of the following for the CAC or individual CAC members to participate in when it comes to community engagement.
7.1 Facilitation of Meetings	Administrative	Removed specific reference to dates of implementation.	Removed reference to specific implementation dates to ensure clarity and alignment with evolving CAC needs. Removal will not adversely impact the fit and/or function of the CAC.
7.3 Special Meetings	Content-Related	Added reference to CAC annual retreat as a special meeting.	Clarification that a full-day, annual retreat is considered a special meeting.
7.6 Meetings of CAC Members with the Air District	Content-Related	Removed reference to the Community Equity, Health, and Justice Committee. Added that CAC shall have at least two (2) structured opportunities annually to engage with the Board of Directors or Board leadership. Added that the CAC may designate one (1) non-voting participant or Co-Chair to attend regular Board meetings, as feasible, and provide relevant updates to CAC leadership or the full CAC.	Removed redundant mention of actions items from the CEHJ Committee, and left action items from Board of Directors, which include CEHJ members. Addition of two (2) formal opportunities for CAC and Board engagement aims to ensure consistent interactions and alignment on initiatives. Addition of allowing non-voting CAC representative to attend Board meetings will enhance the CAC's ability to stay informed about Board decisions, priorities, provide timely input, and improve communication between entities and community. These changes align with the mission, goals, and guiding principles of the Council's foundation.
7.7 Meetings of the Ad Hocs	Administrative	Replaced monthly with bimonthly.	Updated to reflect current CAC operations with Ad Hoc Updates at bimonthly CAC meetings.
7.8 Quorum Requirements	Administrative	Removed specific reference to dates of implementation.	Removed reference to specific implementation dates to ensure clarity and alignment with evolving CAC needs. Removal will not adversely impact the fit and/or function of the CAC.

7.8.1 Action at a Meeting: Quorum and Required Vote	Content-Related	Removed "Agenda items that require no action may still be presented and discussed without a quorum." Added clarification that no discussions may proceed without a quorum.	Removed allowance for "agenda items that require no action" to be presented and discussed without a quorum, as this does not align with the Brown Act. Added clarification that no discussions or presentations can occur without quorum, per the Brown Act.
8.2 Agenda Preparation and Setting Process	Content-Related	Removed reference to the previous CAC Work Plan. Changed format of section from a numbered list to paragraphs that provide more detail to the agenda-setting and materials production process.	Updated to provide clarity with additional details on the current agenda-setting and presentation materials development process.
14 Attendance	Administrative	Replaced specific reference to dates of implementation and referenced AB 2302 instead of AB 2449.	Removed reference to specific implementation dates to ensure clarity and alignment with evolving CAC needs. Removal will not adversely impact the fit and/or function of the CAC. AB 2302 supersedes AB 2449, establishing teleconferencing requirements for public meetings. Changes ensure compliance with regulations and align with best practices for governance documentation.
14.1 Absenteeism: CAC Meetings	Administrative	Clarified attendance and absenteeism policy by explicitly stating allowance of missing two (2) meetings in a calendar year, while missing three (3) meetings will constitute voluntary abandonment. Added reference to AB 2302 that governs remote participation and excused absences in public meetings.	Revisions clarify the CAC's attendance and absenteeism policy while aligning with AB 2302, improving transparency. Changes ensure compliance with regulations, streamline notification processes, define voluntary abandonment, while providing flexibility for excused absences not outlined under AB 2302.

14.2 Absenteeism: Co-Chair Meetings	Administrative	Clarified attendance and absenteeism policy by explicitly stating allowance of missing two (2) Co-Chair meetings every two (2) consecutive months, while missing three (3) meetings constitutes voluntary abandonment of the leadership seat.	Revisions clarify the CAC's attendance and absenteeism policy, improving transparency. Changes ensure compliance with regulations, streamline notification processes, and define voluntary abandonment.
14.3 Absenteeism: Ad Hoc Meetings	Administrative	Clarified attendance and absenteeism policy by explicitly stating allowance of missing two (2) Ad Hoc meetings every two (2) consecutive months, while missing three (3) meetings constitutes voluntary abandonment of a seat on the committee.	Revisions clarify the CAC's attendance and absenteeism policy, improving transparency. Changes ensure compliance with regulations, streamline notification processes, and define voluntary abandonment.
15 Amendment of CAC Charter	Content-Related	Removed reference to limitations of charter being reviewed and updated only every odd-numbered year.	Revisions of review charter to be as needed, to ensure relevance and effectiveness in guiding the CAC's priorities.
15 Amendment of CAC Charter	Content-Related	Removed reference to the Community Equity, Health, and Justice Committee approving recommendations for changes to the charter before going to the Board of Directors before changes can take effect.	Removing the step of requiring approval from both the CEHJ Committee (composed of Board of Directors members) and the Board of Directors. Change ensures that there is alignment with standard governance practices, clarification of language makes it clear that the Board of Directors is the sole approving body for CAC led charter changes. This change does not limit the CAC from still taking Charter amendment proposals to the CEHJ prior to the Board.
16 Compensation	Content-Related	Added mention of the annual CAC \$1,000 projects application opportunity for CAC members, which is outlined in the Meeting Compensation and Expense Reimbursement Policy.	Updated to reflect current CAC operations and the annual funding opportunity to support mission-aligned activities for CAC members, without including specific rules, referring to the separate compensation policy for flexibility and independent updates. Maintaining adaptability while providing clarity.

Community Advisory Council Charter

1. Purpose

The Bay Area Air Quality Management District (Air District) Board of Directors approved the formation of the Community Advisory Council (CAC) on Nov. 17, 2021. The Community Equity, Health, and Justice Committee (CEHJ) of the Air District selected the slate of candidates and recommended establishing the CAC on Nov. 4, 2021, **to the Board of Directors**. The purpose of the CAC is to use environmental justice principles to provide guidance to the Board of Directors on programs and policies that impact overburdened communities within the Air District's jurisdiction to ensure the fair treatment of all **people** living in those communities. The CAC will use environmental justice principles to identify and inform planning and decision making with the goal of mitigating and remedying projected disproportionate impacts of air pollution exposures and reducing health risks and inequities associated with poor air quality for people who live, work, and play in already vulnerable and historically marginalized, **overburdened communities**. The CAC will aim to meaningfully engage impacted communities to represent and address stakeholders' interests. The CAC advises Air District leadership on community-related matters to advance an equity-forward policy agenda. **The CAC shall function as an independent advisory body to the Board of Directors, with authority to identify community priorities, develop recommendations, request information necessary to inform its advice, and communicate recommendations, concerns, and community-identified needs to the Board of Directors consistent with the Brown Act and this Charter.**

Definitions:

- Environmental justice: The State of California defines environmental justice as “the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.” (California Government Code §65040.12(e).) According to the U.S. Environmental Protection Agency “fair treatment” means “no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental and commercial operations or policies.” (Guidance on Considering Environmental Justice During the Development of a Regulatory Action).
- Overburdened community: an area located 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 within 1,000 feet of any such census tract.¹
- Meaningfully engage: Meaningfully involving impacted communities is essential to addressing environmental justice. According to the U.S. Environmental Protection Agency, *meaningful involvement* means “(1) people have an

¹ Bay Area Air Quality Management District Regulation 2, Rule 1 Section 2-1-243
https://www.baaqmd.gov/~media/dotgov/files/rules/reg-2-permits/2021-amendments/documents/20211215_rg0201-pdf.pdf?rev=103cc60e706947d3ad1e4f5a090483c1&sc_lang=en

opportunity to participate in decisions about activities that may affect their environment and/or health; (2) the public's contribution can influence the regulatory agency's decision; (3) community concerns will be considered in the decision-making process; and (4) decision makers will seek out and facilitate the involvement of those potentially affected.” (Guidance on Considering Environmental Justice During the Development of a Regulatory Action).

The CAC will utilize the [17 Principles of Environmental Justice](#) and [Jemez Principles for Democratic Organizing](#), which are both available on the Air District website and hereinafter incorporated by reference in Appendix A.

2. Mission Statement

The CAC believes in protecting the fundamental right to clean air for all communities. We aim to provide access to meaningful community engagement and bring community priorities into focus at the Air District. We are committed to democratic decision making and achieving equitable solutions to the impacts of air pollution and the polluting economy. We prioritize solutions that can be applied to more than one community. We are dedicated to eliminating pollution threats both upstream and downstream, standing in solidarity, sharing power and resources, and listening to and amplifying voices from communities that are the most impacted and overburdened.

2.1 Goals

The goals of the CAC are as follows:

- To provide representation on behalf of all communities, including overburdened communities, to the Air District Board of Directors.
- To serve as a liaison between the community and the Air District Board of Directors and staff to influence decisions, policies, procedures, and processes to ensure equity, inclusion, civil rights, and environmental justice.
-

2.2 Guiding Principles

CAC members will provide independent and objective advice and be committed to the following principles:

- Laying a solid foundation for successful, future CAC members and ensuring long- term sustainability of the CAC's commitment to environmental justice.
- Elevating voices and advocating for communities who are not currently being represented or heard.
- Building a deep, authentic, and mutually accountable relationship among CAC members.
- Helping CAC members value, actualize, and institutionalize environmental justice principles throughout all CAC practices.
- Being recognized as partners in the fight to define how we mitigate the impacts of climate change and air pollution exposure to reduce health risks and inequities associated with poor air quality.
- Using influence, expertise, and privilege to protect our communities.

- Identifying gaps in underrepresented, community-led² decision making, and avenues for well-compensated opportunities for people in the Black, Indigenous, and People of Color (BIPOC) communities.
- Striving to include cultural competence.
- Acknowledging that one methodology does not apply to all communities and seeking to address the conditions in each community as needed. Utilizing and applying resources and tools based on those differences.
- Maintaining impartiality, fairness, and respect for all CAC members and the communities we represent.
- Following the CAC Charter and providing suggestions for updates, as needed.
- Following the [CAC Environmental Justice priorities](#) and any existing CAC action plans.

To fulfill its advisory role, the CAC may request timely access to non-confidential data, reports, presentations, staff updates, and other information reasonably necessary to evaluate Air District programs, policies, enforcement, permitting, community engagement, and equity impacts.

2.3 Civility

The members of the CAC promote authentic respect for others and strive to see common ground in order to produce our best work for the CAC and the communities that we represent. We are committed to a conscious demonstration of mutual respect — for people, their roles, and their knowledge and expertise. We seek to create a safe environment where diverse viewpoints will be heard and considered. To that end, members of the CAC will act with respect and civility when interacting with each other, the Air District Board of Directors, staff, and members of the public.

Behavior which violates the CAC's commitment to respect and civility includes, but is not limited to, yelling, cursing, interrupting, humiliating, threatening, and all forms of harassment.

Any violations of this provision will be handled as stated in the Conflict Resolution section [below of the CAC Procedural Guide](#).

2.4 Conflict Resolution

In the event that a conflict or behavior arises that violates the CAC's commitment to respect and civility between CAC members and/or between CAC members and Air District staff, regarding CAC matters:

Step 1: CAC members agree to work in a collaborative fashion and strive for consensus on the issues before they are brought to the CAC.

² Underrepresented community-led: *Underrepresented community* is used to describe those who have been historically and are still systematically excluded from political and policy-making processes, which includes many disadvantaged and vulnerable communities.

Step 2: In the event of an impasse or conflict that continues or becomes an official complaint (sent via email to the Co-Chairs and CAC team staff serving as the in-house mediators), the Co-Chairs and CAC Team Staff shall work with the members in conflict first as in-house mediators.

Step 3: If there continues to be an impasse between CAC Members and/or between CAC Members and Air District staff, those concerned will work with the APCO to reach an agreement.

Step 4: If agreement or resolution cannot be reached with staff or the APCO, a mutually agreed upon third-party mediator will be utilized to resolve the conflict and provide a recommended action to the Board.

In the event of a conflict on agenda items, CAC members can agree to postpone the action or agenda item for discussion until the next meeting, from the date the issue arises, to allow for the Co-Chairs and CAC team staff to help resolve the issue. If during the meeting the facilitator cannot help the CAC reach an agreement, then the action or agenda item in question will not proceed.

Individual members cannot be compelled to participate in any action to which they do not agree. Individual members may abstain from participation in a decision when they believe it would be inappropriate for them to participate in that action or decision.

3 Leadership CAC Co-Chairs

~~In 2022, the CAC approved a three Co-Chair model. The leadership model may be amended based on needs expressed by the CAC and approved by the Board, but shall be no more than three Co-Chairs at a time. The CAC shall elect at least two but no more than three of its members to serve as Co-Chairs.~~

3.1 Duties of Co-Chairs

- The Co-Chairs shall preside over bi-monthly meetings of the CAC in rotation.
 - o Presiding over a meeting requires a Co-Chair to open, manage, and adjourn meetings, and to adjust the set order of speakers in collaboration with the facilitator and Air District staff.
 - o In the event the Co-Chair scheduled to preside over the meeting is absent or unable to perform their duties, the Co-Chair scheduled to preside next shall preside over the meeting and perform all chair duties.
- The Co-Chairs shall oversee the preparation and distribution of the agenda and materials for the CAC meetings.
- The Co-Chairs shall work with Air District staff and the CAC meeting facilitator to plan, structure, and coordinate CAC meetings.
- The Co-Chairs shall attend and provide updates to the Air District Board of Directors as needed and/or requested and interact with the Air District Board of Directors in representation of overburdened communities within the nine Bay Area counties, and on behalf of the CAC members.

- The Co-Chairs or another Council Member shall regularly communicate CAC recommendations, proposals, requests, concerns, and community-identified priorities to the Air District Board of Directors or one of its Committees, including updates to the Community Equity, Health, and Justice Committee as needed. These communications shall represent overburdened communities within the nine Bay Area counties and the adopted positions or priorities of the CAC
- The Co-Chairs shall oversee activities of the CAC Ad Hoc Committees, standing committees, staff-led workgroups, and other related efforts.
- The Co-Chairs shall perform all other necessary and incidental duties as prescribed by the CAC Charter.
- The Co-Chairs shall communicate with each other, divide work, and share information and updates in a timely manner.
- The Co-Chairs shall address conflict within the CAC membership and leadership.
- The Co-Chairs shall ensure that CAC decisions are made in a democratic, equitable, and timely manner.
- The Co-Chairs shall represent the CAC at the Budget Committee and provide feedback on the Air District's budget.
- The Co-Chairs shall work with Air District staff to define and oversee the CAC's annual budget.
- The Co-Chairs shall understand and adhere to the Brown Act and ~~Robert's~~ **Rosenberg's** Rules of Order.

3.2 Terms of Leadership (Co-Chairs)

Leadership is appointed for a ~~one (1) or two (2)~~ year term, and no member may serve ~~as Co-Chair~~ for more than ~~four years. two, 2-year terms consecutively.~~

3.3 Election of Leadership (Co-Chairs)

~~The inaugural leadership of three (3) Co-Chairs was elected at the second meeting of the CAC.~~

If a ~~Co-Chair leadership~~ position becomes vacant, ~~the CAC may vote to fill~~ that position ~~must be filled within no later than~~ two CAC meetings after the vacancy occurs. The ~~Co-Chair leadership~~ position shall be filled through a nomination, selection, and voting process. The process will be as follows:

- Members seeking a vacant leadership position shall submit an essay, which provides a summary of their background and outlines the reasons they seek the position. The full CAC shall be presented with the essays 72 hours in advance of the meeting in which the CAC will vote on each prospective candidate. The candidate receiving the ~~most majority of the~~ votes will be selected to fill the vacant leadership position.

4. CAC Members

4.1 Composition of the CAC

The ~~initial~~ membership of the CAC, including Co-Chairs, shall be composed of seventeen (17) members who live or work in overburdened communities in California, as follows:

- Four (4), Alameda County
- Four (4), Contra Costa County
- One (1), San Francisco County
- One (1), San Mateo County
- Two (2), Santa Clara County
- One (1), Solano County
- **One (1), Marin, Napa, or Sonoma County**
- **One ~~Two~~ (1 ~~2~~), at-large**
- Two (2), youth

Youth are ~~considered to be~~ individuals between the ages of 14 and 24 at the beginning of their term.

Regarding at-large member seats, priority should be given ~~to individuals living or working in Marin, Napa, or Sonoma counties or~~ individuals with special expertise, such as wildfire management.

Air District staff cannot serve as members of the CAC.

~~Also~~ Diversity, equity, and inclusion on the CAC are highly valued **and should be reflected in the composition and decision-making process of the CAC.**

4.2 Duties of Members

CAC members shall fully participate in bi-monthly meetings and be fully engaged during discussion. The CAC members shall also review materials prior to meetings and come prepared for engaged discussion, active listening, and respectful dialogue. Meeting preparation includes attending required trainings defined below and other trainings as planned by the Co-Chairs, ~~or~~ suggested by the CAC, **or required by law**. Further, CAC members shall perform all other duties as prescribed by this Charter.

All Members, except CAC leadership, are expected to join at least one **initiative, ad-hoc Committee, or workgroup annually, every year** to ensure a balance of work for what the CAC has to accomplish, if their schedule allows. **The number of hours dedicated to these efforts will align with the compensation allotted for CAC membership.**

~~Council Members will vote during the first meeting on~~ **The CAC will establish** a time and day for a **regularly scheduled CAC** meeting that works best for the majority. Staff will provide an orientation of the expectations related to the CAC membership requirements.

4.2.1 Mandatory Trainings

CAC members and leadership shall attend and participate in ~~four (4)~~ the following mandatory trainings:

- Brown Act Training: The Brown Act is a California law that guarantees the public's right to attend and participate in meetings of local legislative bodies.
- ~~Rosenberg's Robert's~~ Rules of Order Training: ~~Rosenberg's Robert's~~ Rules, widely known as parliamentary procedure, was developed to ensure that meetings are fair, efficient, democratic, and orderly.
- Civility Training: Civility is an essential aspect of every work environment to create and maintain a fair and professional culture. This civility training is designed to teach CAC members the norms of acceptable conduct and how to identify, prevent, and respond professionally to situations of incivility.
- Team building and conflict resolution training.
- **Ethics (AB1234) and Harassment Prevention (SB1343/AB1825) Training:** This training reinforces the council's commitment to integrity, accountability, and unethical behavior while ensuring compliance with state requirements to foster a respectful and inclusive environment for all.

~~Additionally, CAC members shall complete an ethics training course within the first year of their term and are required to take follow-up training.~~

4.2.2 Virtual, Hybrid, and In-Person Meetings

~~In 2022, the CAC attended meetings virtually. As of March 2023,~~ The CAC will meet in person at a location within the nine-county Bay Area ~~with a required quorum of 9 out of 17 members.~~ CAC members may attend remotely under specific circumstances outlined in the Brown Act ~~and AB 2449~~ and in the Attendance section of this document.

CAC members, and members of the public with disabilities, who need accommodations consistent with Section 504 of the Rehabilitation Act to have equal opportunities to participate in CAC meetings should contact Air District staff.

Reimbursements for travel are outlined in the CAC's ~~Compensation Policy and Procedures~~ Meeting Compensation and Expense Reimbursement Policy.

4.3 Members Terms of Office

~~CAC Members apply or reapply for either a two-year term or a four-year term. CAC Members are limited to serving a total of eight (8) years. This will ensure that others have the opportunity to participate in the CAC and that there is continuity of County or institutional knowledge. The inaugural CAC will serve for four (4) years with the ability to reapply.~~

CAC members shall serve one four-year term and may be reappointed for a subsequent two-year term. Terms should be staggered to support continuity, institutional knowledge, and meaningful community representation. An initial four-year term recognizes that recruitment, selection, appointment, onboarding, and training can take several months, and that shorter terms can limit members' ability to develop recommendations and carry them through to Board consideration.

Members are limited to serving a cumulative total of six (6) years.

If a CAC member leaves their seat before completing their term, their replacement will be appointed to serve the remainder of their term; they will not start a new 2- or 4-year term limit.

These provisions for the number and length of members' terms will ensure that others have the opportunity to participate in the CAC and that there is continuity of County or institutional knowledge.

4.3.1 Appointment of Members

~~The CAC members are appointed by the Board of Directors. Vacancies are to be filled by the Board of Directors as described in the following process. The CEHJ shall provide guidance on selection criteria and on prospective CAC members. The CAC shall create a CAC Selection Ad Hoc Committee, which may include at least one CEHJ member or other Board member chosen by the Board Chair, to recommend a candidate or slate of candidates to the Community Equity, Health, and Justice Committee, according to the guidance provided by the CEHJ. The candidates approved by the CEHJ Committee will be recommended to the Board of Directors for final approval.~~

The CAC members are appointed by the Board of Directors. When a vacancy arises, or when a member's term is coming to an end such that a vacancy will soon arise, the CAC shall recommend a candidate or candidates to the Board of Directors to fill any such vacancies. The CAC shall select candidates to recommend for appointment based on guidance and selection criteria provided by the Community Equity, Health, and Justice (CEHJ) Committee, as augmented by any additional criteria and considerations the CAC determines is appropriate. The CAC may create an Ad Hoc or standing committee to assist with the process of identifying candidates to consider for recommendation to the Board of Directors. Additional details for the recruitment and selection process are in the CAC Procedural Guide.

~~The CAC Selection Ad Hoc will be tasked with developing criteria for the selection of candidates, according to the guidance developed by CEHJ.~~ Priority should be given to individuals from Bay Area communities overburdened by air pollution, environmental justice communities, and/or those with a history of partnering with environmental justice communities.

5. Standing Committees, ~~and~~ Ad Hoc Committees, ~~and~~ Workgroups

Upon approval by a majority of its members, the CAC may form **Ad Hoc or standing** committees to advise the CAC on its ongoing functions. The committees shall be composed of members of the CAC. Committee members shall vote on committee leadership during the first meeting.

The CAC should seek to distribute committee and workgroup opportunities equitably

among members and ensure that compensated opportunities are accessible to a broad range of members. These opportunities will be assigned through a transparent process. A member's compensated time shall be governed by the Meeting Compensation and Expense Reimbursement Policy. Nothing in this section is intended to limit voluntary participation where participation is otherwise consistent with the Brown Act, this Charter, and the needs of the CAC.

A CAC member's total time commitment across all committees or workgroups must not exceed the maximum hours per month for compensation for attending meetings outlined in Section 1.2.2 of the Meeting Compensation and Expense Reimbursement Policy. This ensures that all CAC members have an equal opportunity to make their voices, skills, and expertise heard while maintaining a balanced workload.

5.1 Standing Committees

A standing committee is considered a legislative body and is subject to Brown Act requirements of **holding public meetings with** staffing support, if budget allows. **A standing committee should only be created when the CAC identifies a continuing need, and the Air District confirms the staffing, noticing, agenda preparation, public access, and administrative support needed for Brown Act compliance.** A committee is considered "standing," irrespective of its composition, if it has a continuing subject-matter jurisdiction, or a meeting schedule fixed by charter, ordinance, resolution, or formal action of a legislative body.

5.2 Ad Hoc Committees

An Ad Hoc committee is an advisory committee composed of less than a quorum of members, which will serve for a limited term or single purpose. After the duties of the Ad Hoc Committee are accomplished, and presented to and approved by the CAC, the Ad Hoc Committee will be dissolved. ~~The ad hoc committees will aim to complete their task(s) within six months of assignment.~~ **Ad Hoc Committees can meet under quorum outside of a public meeting. Ad Hoc Committees provide bimonthly, brief, verbal updates to the CAC at the Council's regularly scheduled meetings.**

5.3 Workgroups

A workgroup is a small, temporary group composed of less than a quorum of CAC members along with staff subject-matter experts. Air District staff-led workgroups convene for a specific purpose, serve a limited term, and operate flexibly to support the Air District's internal needs.

Furthermore, Ad Hoc committees, ~~and~~ standing committees, ~~and~~ **workgroups**, shall follow the following guidelines:

~~Limitations: A CAC member cannot simultaneously participate on more than two ad hoc committees, although they can be placed as an alternate on a third committee. This will ensure that all CAC members have an equal opportunity to make their voices heard and exercise their skills and expertise.~~

- Commitment: Once ~~selected~~ **appointed**, CAC members ~~must serve their full~~

~~term on an ad hoc and/or standing committee~~ must serve on an Ad Hoc committee or workgroup until the Ad Hoc Committee or workgroup has accomplished its purpose and/or is disbanded. A CAC member cannot abandon their commitment to an Ad Hoc Committee or standing committee to join another committee.

- Accountability: ~~If there is a vacancy in Ad Hoc, Standing Committees, and/or workgroups, interested~~ Council Members with a track record that matches the attendance requirement set forth above for Ad Hoc, ~~or~~ Standing Committees, ~~and workgroups~~ will be placed as alternates if they wish to participate in another committee.
- Priority: CAC members not participating on an Ad Hoc ~~committee, or~~ standing committee, ~~or workgroup~~ will be given priority to serve on newly formed committees (e.g., ad hoc, ~~workgroup~~ or standing). After which, CAC members currently participating in one (1) committee ~~or workgroup~~ will be given preference. Lastly, CAC members serving on two (2) committees or workgroups will be placed as alternates until one of their current ~~ad hoc~~ committees ~~or workgroups~~ completes its assigned task and is dissolved.
- Exceptions: The CAC may create an Ad Hoc Committee if an emergent topic or situation demands it, which may require exceptions that supersedes the limitations and commitments outlined above. The emergency Ad Hoc Committee will remain active until the mission or task is accomplished.

~~1.5.2.1 Work Plan Ad Hoc Committee~~

~~The CAC will form a CAC Work Plan Ad Hoc Committee annually to set the CAC's work plan and schedule each year. The CAC Work Plan Ad Hoc Committee will identify several priority areas to adhere to and will establish appropriate criteria measures. CAC Members, Community Members, and Air District Staff will have the opportunity to recommend agenda items of potential relevance to the CAC for inclusion in the work plan. The Air District Board can provide agenda items for inclusion in the CAC work plan. Once dissolved, CAC Co-Chairs are responsible for implementing the work plan and reserve the right to amend the work plan in an emergency or emergent situation, as defined in the Setting Agendas section on page 13.~~

~~1.5.2.2 Governance Ad Hoc Committee~~

~~In 2022, the CAC formed a CAC Governance Ad Hoc Committee to develop the CAC's governance agreement. The CAC hereby presents the CAC's Charter, which sets forth the mission, goals, scope, rules, and actions applicable to the CAC and CAC membership. Once the mission is accomplished, presented to and adopted by a quorum of the CAC, and approved by the Board of Directors, the Governance Ad Hoc Committee will be dissolved.~~

~~The CAC Governance Ad Hoc Committee may be reestablished with a new slate of CAC members to review, revise, and/or propose amendments. Any revisions to the existing charter shall be presented and discussed by the CAC and recommended for approval by the Air District Board of Directors.~~

6. Community Engagement

The CAC will aim to engage the community in the following ways:

- ~~Bi-annual newsletter~~ Outreach to community networks, which includes items that have been addressed, future meeting dates and agendas, success stories, and ways to engage with the CAC
- CAC web page
- CAC meetings
- Outreach events or workshops hosted by CAC members or the Air District
- Bi-monthly community meetings led by the Compliance and Enforcement Division of the Air District

7. Meetings

7.1 Facilitation of Meetings

An external professional meeting facilitator will ~~be hired to~~ assist the CAC with bimonthly CAC meetings, if budget allows. ~~For 2022-2023, a facilitator was hired through a competitive process with participation of CAC members.~~ The external facilitator works directly with the CAC leadership to plan and execute the meeting plan in consultation with Air District staff. The facilitator will keep the meetings on track with guidance from the Co-Chairs and will enforce the following meeting expectations and ground rules for CAC members:

- The first expectation is **preparation**: Come prepared for meetings and review all documents that the CAC will discuss.
- Second, is **communication and language**: Communicate with respect and be mindful of individual speaking time so that everyone has the opportunity to speak in meetings. Zoom meetings are publicly accessible, so CAC members are expected to conduct themselves accordingly.
- Third, is **distractions**: Avoid distractions and stay present. Active listening is imperative to ensure that members understand other people's viewpoints.
- Fourth, is **timing**: Respect time agreements and stay on topic.
- Finally, **facilitation**: The facilitator will intervene to keep the conversation on track and on time and will remind members of these ground rules as necessary.

The facilitator will have limited authority to open the meetings, convey the agenda item(s), confirm the meeting has quorum after the clerk takes roll call, facilitate the flow of meetings in accordance with the Brown Act and ~~Rosenberg's~~ ~~Robert's~~ Rules of Order, maintain order, and defer to the Air District legal representative or staff if needed.

~~Air District staff will facilitate ad hoc committee meetings, Co-Chair meetings, and other meetings as needed. CAC members, staff, or the Co-Chairs may identify the need for~~

~~facilitator or contractor support for any CAC meeting, if budget allows.~~

7.2 Regular Meetings

The CAC shall hold at least six regular meetings per calendar year, unless otherwise approved by the CAC and Air District leadership. The meeting schedule, date, time, and location may be adjusted as necessary to support member participation, public access, and CAC priorities.

~~Regular meetings of the CAC are held on the third Thursday of every other month at 6:00 p.m. PT. All meetings will be held in accordance with the Brown Act. Meeting schedule is subject to change, if necessary.~~

7.3 Special Meetings

A majority of Co-Chairs or a majority of the CAC members may call special meetings, following the noticing guidelines set forth in the Brown Act. **An annual retreat will be held and considered as a special meeting.**

7.4 Notice of Meetings

Meeting agendas and notices must be posted at the meeting site and on the Air District website in compliance with all applicable laws, including but not limited to the Ralph M. Brown Act. (Government Code Section 54950 et seq.)

Agendas and notices shall be emailed to each CAC member and any person who submits a written request to the Air District for such notice.

7.5 Adjournment or Cancellation of Meetings

The presiding Co-Chair or Air District staff may adjourn or cancel a meeting if a quorum will not be present or if the meeting date conflicts with a holiday. Notices of adjournment or cancellation shall be emailed to CAC members and posted at the meeting site and on the Air District [website](#).

7.6 Meetings of CAC Members with the Air District

CAC members that meet with Air District staff or Board of Directors, on behalf of the CAC, should inform the CAC Co-Chairs of the discussion within 72 hours of the date the meeting is held.

Action items directed to CAC leadership from the ~~CEHJ Committee or Board leadership, the CEHJ Committee, or the~~ Board of Directors should be communicated to CAC leadership within 72 hours via memo.

The CAC shall have at least two structured opportunities each year to engage directly with the Board of Directors or Board leadership, which may include retreats, study sessions, workshops, or other noticed meetings consistent with applicable law.

In addition, the CAC may designate one CAC member to participate as a non-voting participant in regular monthly Board meetings, when feasible, to monitor Board matters relevant to CAC priorities, identify opportunities for timely CAC input, communicate relevant CAC priorities and community concerns when appropriate, and report relevant updates back to CAC leadership or the full CAC.

7.7 Meetings of the Ad Hoc

Ad Hoc Committee Chairs are expected to provide a ~~monthly~~ bimonthly verbal report-out on the progress of the Ad Hoc Committees to the CAC ~~leadership~~. Report-outs should be a brief summary.

7.8 Quorum Requirements

~~Effective March 1, 2023,~~ 50% plus one of CAC members ~~(or 9 out of 17 members in 2022-2023)~~ must be present in person to constitute a quorum and for voting to be conducted.

7.8.1 Action at a Meeting; Quorum and Required Vote

A quorum is required to take any official action beyond roll call and adjournment. The affirmative vote of a majority of the members of the CAC shall be required for the approval of all substantive matters. ~~Agenda items that require no action may still be presented and discussed without a quorum.~~ The public meeting ends upon losing a quorum of CAC members during the meeting.

7.8.2 Voting and Abstention

CAC meetings will be conducted in compliance with the Brown Act (Government Code Section 54950 et seq.), ~~Rosenberg's~~ Robert's Rules of Order, CAC Charter, and state and local laws. Participation and voting are based on Brown Act requirements and current legislation. Staff will provide an updated summary of any changes as required by law.

7.8.3 Conduct of Meetings

All meetings shall be governed by the Ralph M. Brown Act (Government Code Section 54950 et seq.), the CAC Charter, and ~~Rosenberg's~~ Robert's Rules of Order for decorum and parliamentary procedure.

Cell phones shall be turned off during all CAC meetings.

The Co-Chairs may issue a warning to any member of the public who is disruptive during CAC meetings. In the event of repeated disruption of any kind, the Co-Chairs shall direct the offending member of the public to leave the meeting. If the meeting is disrupted by any member of the public, we hold the right to remove the individual from the meeting with the assistance of security or by muting and turning off the camera of that individual.

The chat feature will be unavailable for the full duration of Zoom meetings due to accessibility limitations.

8. Agenda Items

8.1 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 will have three minutes each to address the CAC **per agenda item**. Members of the public who wish to speak on non-agenda items will have three minutes to address the CAC **under the item "Public Comment on Non-Agenda Items"**. Members of the public who are speaking through an interpreter will have six minutes to address the CAC. All meetings will have a rebuttal period that allows an additional one (1) minute to any member of the public who would like to provide a rebuttal.

~~1.8.2. Setting Agendas~~

~~Air District staff, at the direction of the Co-Chairs, will prepare and distribute the agenda and materials for CAC meetings.~~

~~1.8.2.1 Current Agenda Setting Process:~~

- ~~1. A CAC member and/or member of the public may propose agenda item(s) during a CAC meeting or via email to staff.~~
- ~~2. Staff will track proposed agenda items and bring them to the Work Plan Ad Hoc Committee (when constituted) and the Co-Chairs.~~
- ~~3. The Co-Chairs will work from the work plan developed by the Work Plan Ad Hoc Committee once adopted by the CAC membership for the upcoming agenda.~~
- ~~4. Staff will identify presenters and draft presentation and memo (materials).~~
- ~~5. Staff will work with the CAC member(s) who requested the agenda item(s) to create materials as needed.~~
- ~~6. Staff will finalize materials.~~
- ~~7. Staff will send materials to Co-Chairs and the CAC member(s) who requested the agenda item for final approval.~~
- ~~8. Staff will update materials with final edits.~~
- ~~9. Executive staff will review materials.~~
- ~~10. Executive staff will provide edits, if needed.~~
- ~~11. Executive staff will route the materials for public distribution.~~

~~The Co-Chairs will work from the work plan developed by the Work Plan Ad Hoc once adopted by the CAC membership. The Co-Chairs, Staff, CAC Members or the public can make requests for new topics not included in the work plan. The Public can make requests for agenda items at CAC meetings during the Public Comment on Non-Agenda Items or by emailing staff at communityadvisorycouncil@baaqmd.gov. New additions to the work plan must be approved by majority vote of the CAC.~~

8.2 Agenda Preparation and Setting Process

Air District staff, in coordination with and in support of the Co-Chairs, will prepare, notice, and distribute the agenda and materials for CAC meetings consistent with the Brown Act, applicable Air District procedures, the CAC's adopted priorities and workplan, and priorities identified by CAC members.

Proposed agenda items may be submitted by CAC members, Co-Chairs, committees, Air District staff, or the Board of Directors.

Staff shall maintain a running list of requested agenda items, including the source of each request and whether the item is pending, scheduled, deferred, or completed, and share that list with the Co-Chairs on a regular basis.

The Co-Chairs shall lead the agenda-setting process in consultation with CAC members, Air District staff, and the meeting facilitator, as needed. The Co-Chairs shall structure meeting agendas in a manner that supports timely CAC deliberation, meaningful community input, and progress on CAC priorities.

When a CAC member or committee requests an agenda item, staff shall work with the requesting member or committee to prepare materials, identify presenters, and ensure the item is framed accurately. Final agenda materials shall be shared with the Co-Chairs and the requesting CAC member or committee for review before public distribution, to the extent feasible.

The CAC's agenda-setting and prioritization shall be guided by the [CAC Environmental Justice priorities](#) and any existing CAC action plans, but these guiding documents shall not limit the CAC's ability to respond to timely community concerns, enforcement matters, legislation, Board requests, budget or implementation issues, or other emerging priorities.

The Co-Chairs and the Board of Directors can amend ~~the work plan~~ any existing action plans, as needed when an emergency or emergent issue requires it. An emergency is defined as an event that impacts the health and safety of the community (e.g., flaring). An emergent issue is considered emergent if it is new and immediate action from the CAC is required (i.e. funding opportunity, legislative issue). ~~The current work plan must be included in the materials of every CAC meeting. Changes must be noted when made.~~ Any current action plans are made available on the community-facing, public CAC website.

Also, the ~~CEHJ or~~ Board may require advice or recommendations of the CAC on a particular matter or issue (refer to the process outlined in 1.7.6).

9. Conflict of Interest Policy

~~Conflict of interest laws prohibit~~ CAC members or their immediate family members cannot benefit financially from their relationship with the Air District by way of the CAC. Any CAC member, or immediate family members of CAC members, who would directly benefit financially from a contract, must recuse themselves and not be present during a vote to

avoid influencing other CAC members.

10. Meeting Minutes

Minutes shall be taken at all regular and special CAC meetings and shall comply with all applicable laws, including but not limited to the Ralph M. Brown Act (Government Code Section 54950 et seq.) and the CAC Charter. Minutes shall be approved by the majority vote of CAC members in accordance with applicable statutes.

11. Land Acknowledgement

The CAC recognizes that California Native American and other communities have also faced many environmental injustices and social inequities. These issues are hereby acknowledged as part of the CAC Charter. The following CAC Land Acknowledgement will be included in all CAC meeting agendas and is available on the [CAC web page](#).

We begin by acknowledging that this land is unceded Indigenous land. The territories, or counties we represent, are of the Indigenous people. To acknowledge this history of our country — that this nation was built on genocide, the exclusion and erasure of Indigenous people — grounds our work in truth. We also acknowledge that our modern global economy was founded on the free and forced labor of enslaved Black people. And that exploited labor continuously perpetuates itself in disadvantaged communities of color, as we see in the treatment of farm workers, immigrant workers, prison labor and domestic workers. This practice of land acknowledgment calls on us to recognize our violent history that is the foundation of white supremacy, and to recognize the longstanding and ongoing resistance of People of Color to dehumanization, repression and homicide. And that the brilliance and leadership of People of Color in resistance, vision, wisdom and love be honored and recognized as we work to dismantle ongoing legacies of settler colonialism and anti-blackness.

The [Air District website](#) will be updated in preparation for each CAC meeting with materials for discussion and, after each meeting, with meeting summaries, presentations, background materials, requested information, and meeting recordings.

12. Dissemination of Materials

All documents, materials, and correspondence produced by or submitted to the CAC, CAC staff, or facilitator are considered public information and subject to the California Public Records Act regulations and procedures for disclosure and transparency.

Information related to the operations of the CAC will be made available to the public as requested.

13. Public Meetings

All CAC meetings will be noticed and open to the public in accordance with the Brown Act.

14. Attendance

The CAC requires ~~the~~ active participation and attendance by members of at least 75% of all meetings during every year served. This applies to Co-Chair meetings, committee meetings, and attendance at meetings of the full CAC. CAC members will inform staff and CAC leadership of any potential absences. ~~As of March 1, 2023, per AB 2449 teleconferencing requirements, members remotely joining CAC meetings that require a quorum must have a “just cause” or an emergency excuse approved by a majority of the CAC in order to participate and vote. CAC members joining CAC meetings remotely without a just cause or approved emergency excuse will not be able to vote and therefore will not be counted present in the meeting.~~

14.1 Absenteeism: CAC Meetings

CAC members are allowed to miss ~~two (2)~~ ~~CAC three (3)~~ meetings in one calendar year. Continued absenteeism from CAC Meetings constitutes voluntary abandonment ~~after three (3) meetings are missed~~. After two (2) CAC meetings have been missed, staff will send a courtesy letter reminding the absent member of the attendance requirements of the CAC and warning them that they are at risk of losing their seat. Staff will be responsible for informing the Co-Chairs of absent members. Staff will inform a member that they have lost their seat on the CAC after three meetings are missed. Vacant seats on the CAC will be filled as described in the Appointment section ~~on page 8~~ of this document. ~~The CAC maintains the right to approve excused absences for fellow council members and can waive the counting of an absence due to emergency situations that are not covered under AB 2302 upon request by the absent CAC member.~~

14.2 Absenteeism: Co-Chair Meetings

Co-Chair meetings occur ~~regularly every week~~ up to four hours per month.

Co-Chairs are allowed to miss ~~two (2)~~ ~~three (3)~~ meetings every two (2) consecutive months. Continued absenteeism from Co-Chair meetings constitutes voluntary abandonment. After two (2) Co-Chair meetings have been missed, staff will send a courtesy letter reminding the absent Co-Chair of the attendance requirements of the Co-Chairs and warning them that they are at risk of losing their seat. Staff will be responsible for informing the Co-Chairs and the CAC of absent Co-Chairs. Staff will inform a Co-Chair that they have lost their seat on the CAC after three (3) meetings are missed. The Co-Chairs reserve the right to jointly adjust the schedule. ~~around the holidays.~~

Any vacant Co-Chair appointment shall be filled ~~within two (2) meetings after the vacancy occurs through a nomination, selection, and voting process.~~ ~~following Section 3.3 (Election of Leadership (Co-Chairs)).~~

14.3 Absenteeism: Ad Hoc Meetings

Ad Hoc Committee meetings will generally occur every other week (biweekly).

Ad Hoc Committee members are allowed to miss two (2) ~~three (3)~~ meetings every two (2) consecutive months. Continued absenteeism from Ad Hoc meetings constitutes voluntary abandonment. After two (2) Ad Hoc meetings have been missed, staff will send a courtesy letter reminding the absent Ad Hoc member of the attendance requirements of Ad Hoc members and warning them that they are at risk of losing their seat. Staff will be responsible for informing CAC members of absent members. Staff will inform CAC members that they have lost their seat on the Ad Hoc CAC after three (3) meetings are missed. The Ad Hoc Co-Chairs reserve the right to jointly adjust the schedule ~~around the holidays~~.

Any vacant appointment of an Ad Hoc Committee shall be filled within two (2) meetings after the vacancy occurs through using an alternate, or through a nomination, selection, and voting process.

15. Amendment of CAC Charter

The Board of Directors may amend this Charter to ensure its relevance and effectiveness in guiding the CAC's activities. The CAC shall periodically review the Charter and consider recommending amendments for consideration by the Board of Directors. ~~The CAC and the Board shall revisit the Charter to make requests for amendments in January of every odd-numbered year following the Board approval of the Charter.~~ The CAC shall provide thirty (30) days' notice for public comment before adopting any amendments to the CAC Charter. ~~The Community Equity, Health, and Justice Committee must approve a recommendation for changes to the Charter and the Board of Directors must approve the recommendation from the CEHJ Committee on the Charter before any changes can take effect.~~ Recommended changes to this charter will not take effect until adopted by the Board of Directors.

16. Compensation

Compensation for CAC Members will be subject to attendance and in accordance with the CAC's ~~Compensation Policy and Procedures~~ Meeting Compensation and Expense Reimbursement Policy and the above 1.4 Attendance section of the Charter.

Every fiscal year, CAC members may apply for funding in support of activities that align with the Air District's and CAC's mission. For additional compensation details, refer to the Meeting Compensation and Expense Reimbursement Policy.

The CAC will periodically revisit the Meeting Compensation and Expense Reimbursement Policy, including cost-of-living adjustments, and make recommendations to the Board of Directors and Air District leadership.

~~The CAC and the Board shall revisit the Compensation Policy and Procedures to make requests for amendments during the first month of the year of every other year. Updates to the Policy shall include a revision based on cost-of-living increase.~~

DRAFT

Appendix A

Delegates to the First National People of Color Environmental Leadership Summit held on October 24-27, 1991, in Washington, D.C., drafted and adopted these 17 principles of Environmental Justice. Since then, the principles have served as a defining document for the growing grassroots movement for environmental justice.

Environmental Justice Principles³:

- 1) **Environmental Justice** affirms the sacredness of Mother Earth, ecological unity and the interdependence of all species, and the right to be free from ecological destruction.
- 2) **Environmental Justice** demands that public policy be based on mutual respect and justice for all peoples, free from any form of discrimination or bias.
- 3) **Environmental Justice** mandates the right to ethical, balanced and responsible uses of land and renewable resources in the interest of a sustainable planet for humans and other living things.
- 4) **Environmental Justice** calls for universal protection from nuclear testing, extraction, production and disposal of toxic/hazardous wastes and poisons and nuclear testing that threaten the fundamental right to clean air, land, water, and food.
- 5) **Environmental Justice** affirms the fundamental right to political, economic, cultural and environmental self-determination of all peoples.
- 6) **Environmental Justice** demands the cessation of the production of all toxins, hazardous wastes, and radioactive materials, and that all past and current producers be held strictly accountable to the people for detoxification and the containment at the point of production.
- 7) **Environmental Justice** demands the right to participate as equal partners at every level of decision-making, including needs assessment, planning, implementation, enforcement and evaluation.
- 8) **Environmental Justice** affirms the right of all workers to a safe and healthy work environment without being forced to choose between an unsafe livelihood and unemployment. It also affirms the right of those who work at home to be free from environmental hazards.
- 9) **Environmental Justice** protects the right of victims of environmental injustice to receive full compensation and reparations for damages as well as quality health care.

3. Principles of Environmental Justice, <https://www.ejnet.org/ej/principles.html>. Accessed December 19, 2022.

10) **Environmental Justice** considers governmental acts of environmental injustice a violation of international law, the Universal Declaration On Human Rights, and the United Nations Convention on Genocide.

11) **Environmental Justice** must recognize a special legal and natural relationship of Native Peoples to the U.S. government through treaties, agreements, compacts, and covenants affirming sovereignty and self-determination.

12) **Environmental Justice** affirms the need for urban and rural ecological policies to clean up and rebuild our cities and rural areas in balance with nature, honoring the cultural integrity of all our communities, and provided fair access for all to the full range of resources.

13) **Environmental Justice** calls for the strict enforcement of principles of informed consent, and a halt to the testing of experimental reproductive and medical procedures and vaccinations on people of color.

14) **Environmental Justice** opposes the destructive operations of multinational corporations.

15) **Environmental Justice** opposes military occupation, repression and exploitation of lands, peoples and cultures, and other life forms.

16) **Environmental Justice** calls for the education of present and future generations which emphasizes social and environmental issues, based on our experience and an appreciation of our diverse cultural perspectives.

17) **Environmental Justice** requires that we, as individuals, make personal and consumer choices to consume as little of Mother Earth's resources and to produce as little waste as possible; and make the conscious decision to challenge and reprioritize our lifestyles to ensure the health of the natural world for present and future generations.

Jemez Principles⁴:

1. Be Inclusive
2. Emphasis on Bottom-Up Organizing
3. Let People Speak for Themselves
4. Work Together In Solidarity and Mutuality
5. Build Just Relationships Among Ourselves
6. Commitment to Self-Transformation

4. Sierra Club. *Jemez Principles*. <https://www.sierraclub.org/sites/www.sierraclub.org/files/sce/grand-canyon-chapter/misc-pdf/Jemez%20Principles%20Poster.pdf>. Accessed December 19, 2022.

Appendix B

Bay Area Air District Accessibility and Non-Discrimination Policy

The Bay Area Air 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 the 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 the Air District, including contractors or grantees that the Air District utilizes to provide benefits and services to members of the public.

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

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

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

Appendix C

The CAC Charter was developed using information from various sources, including:

Bay Area Air Quality Management District. *Regulation 2, Permits, Rule 1, Section 2-1-243*.
https://www.baaqmd.gov/~media/dotgov/files/rules/reg-2-permits/2021_amendments/documents/20211215_rg0201.pdf?rev=103cc60e706947d3ad1e4f5a090483c1&sc_lang=en
Accessed January 3, 2023

California Air Resources Board. *Partnering Agreement-West Oakland Toxic Reduction Collaborative*.
(2018, February 14). https://ww2.arb.ca.gov/sites/default/files/2020-04/collaborative_partnering_agreement_west_oakland_acc.pdf
Accessed January 3, 2023

City and County of San Francisco: *Power Plan Task Force By Laws*.
Accessed January 3, 2023

Metropolitan Transportation Commission. *Metropolitan Transportation Commission Resolution No. 3931*.
(2009, November 18).
https://mtc.ca.gov/sites/default/files/documents/2022-01/RES-3931_approved.pdf
Accessed January 3, 2023.

Partnering Agreement-West Oakland Toxic Reduction Collaborative "Collaboration on Call."

San Francisco Bay Conservation and Development Commission. *Environmental Justice Advisors Charter*. Accessed January 3, 2023

San Francisco Bay Conservation and Development Commission. *San Francisco Bay Plan*. Accessed January 3, 2023

The Bay Area Air Quality Management District. *The Path to Clean Air in the Richmond-North Richmond- San Pablo Area Community Steering Committee Charter and Participation Agreement*.
<https://www.baaqmd.gov/~media/files/ab617-community-health/richmond/ptca-charter-agreement%20pdf.pdf?la=en>
Accessed January 3, 2023.

United States Environmental Protection Agency. *Guidance on Considering Environmental Justice During the Development of Regulatory Actions*.

ⁱ Bay Area Air Quality Management District. *Regulation 2, Permits, Rule 1, Section 2-1-243*:
https://www.baaqmd.gov/~media/dotgov/files/rules/reg-2-permits/2021_amendments/documents/20211215_rg0201.pdf?rev=103cc60e706947d3ad1e4f5a090483c1&sc_lang=en

ⁱⁱ Underrepresented community-led: Underrepresented community is used to describe those who have been historically and are still systematically excluded from political and policy-making processes, which includes many disadvantaged and vulnerable communities.

Community Advisory Council Charter

1. Purpose

The Bay Area Air Quality Management District (Air District) Board of Directors approved the formation of the Community Advisory Council (CAC) on Nov. 17, 2021. The Community Equity, Health, and Justice Committee (CEHJ) of the Air District selected the slate of candidates and recommended establishing the CAC on Nov. 4, 2021, to the Board of Directors. The purpose of the CAC is to use environmental justice principles to provide guidance to the Board of Directors on programs and policies that impact overburdened communities within the Air District's jurisdiction to ensure the fair treatment of all people living in those communities. The CAC will use environmental justice principles to identify and inform planning and decision making with the goal of mitigating and remediating projected disproportionate impacts of air pollution exposures and reducing health risks and inequities associated with poor air quality for people who live, work, and play in already vulnerable and historically marginalized, [overburdened communities](#). The CAC will aim to meaningfully engage impacted communities to represent and address stakeholders' interests. The CAC advises Air District leadership on community-related matters to advance an equity-forward policy agenda. The CAC shall function as an independent advisory body to the Board of Directors, with authority to identify community priorities, develop recommendations, request information necessary to inform its advice, and communicate recommendations, concerns, and community-identified needs to the Board of Directors consistent with the Brown Act and this Charter.

Definitions:

- Environmental justice: The State of California defines environmental justice as “the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.” (California Government Code §65040.12(e).) According to the U.S. Environmental Protection Agency “fair treatment” means “no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental and commercial operations or policies.” (Guidance on Considering Environmental Justice During the Development of a Regulatory Action).
- Overburdened community: an area located 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 within 1,000 feet of any such census tract¹.
- Meaningfully engage: Meaningfully involving impacted communities is essential to addressing environmental justice. According to the U.S. Environmental Protection Agency, *meaningful involvement* means “(1) people have an opportunity to participate in decisions about activities that may affect their environment and/or health; (2) the public's contribution can influence the regulatory agency's decision; (3) community concerns will be considered in the decision-making process; and (4) decision makers will seek out and facilitate the involvement of those potentially affected.” (Guidance on Considering

Environmental Justice During the Development of a Regulatory Action).

The CAC will utilize the [17 Principles of Environmental Justice](#) and [Jemez Principles for Democratic Organizing](#), which are both available on the Air District website and hereinafter incorporated by reference in Appendix A.

2. Mission Statement

The CAC believes in protecting the fundamental right to clean air for all communities. We aim to provide access to meaningful community engagement and bring community priorities into focus at the Air District. We are committed to democratic decision making and achieving equitable solutions to the impacts of air pollution and the polluting economy. We prioritize solutions that can be applied to more than one community. We are dedicated to eliminating pollution threats both upstream and downstream, standing in solidarity, sharing power and resources, and listening to and amplifying voices from communities that are the most impacted and overburdened.

2.1 Goals

The goals of the CAC are as follows:

- To provide representation on behalf of all communities, including overburdened communities, to the Air District Board of Directors.
- To serve as a liaison between the community and the Air District Board of Directors and staff to influence decisions, policies, procedures, and processes to ensure equity, inclusion, civil rights, and environmental justice.

2.2 Guiding Principles

CAC members will provide independent and objective advice and be committed to the following principles:

- Laying a solid foundation for successful, future CAC members and ensuring long- term sustainability of the CAC's commitment to environmental justice.
- Elevating voices and advocating for communities who are not currently being represented or heard.
- Building a deep, authentic, and mutually accountable relationship among CAC members.
- Helping CAC members value, actualize, and institutionalize environmental justice principles throughout all CAC practices.
- Being recognized as partners in the fight to define how we mitigate the impacts of climate change and air pollution exposure to reduce health risks and inequities associated with poor air quality.
- Using influence, expertise, and privilege to protect our communities.
- Identifying gaps in underrepresented, community-ledⁱⁱ decision making, and avenues for well-compensated opportunities for people in the Black, Indigenous, and People of Color (BIPOC) communities.
- Striving to include cultural competence.
- Acknowledging that one methodology does not apply to all communities and seeking to address the conditions in each community as needed. Utilizing and

- applying resources and tools based on those differences.
- Maintaining impartiality, fairness, and respect for all CAC members and the communities we represent.
- Following the CAC Charter and providing suggestions for updates, as needed.
- Following the [CAC Environmental Justice priorities](#) and any existing CAC action plans.

To fulfill its advisory role, the CAC may request timely access to non-confidential data, reports, presentations, staff updates, and other information reasonably necessary to evaluate Air District programs, policies, enforcement, permitting, community engagement, and equity impacts.

2.3 Civility

The members of the CAC promote authentic respect for others and strive to see common ground in order to produce our best work for the CAC and the communities that we represent. We are committed to a conscious demonstration of mutual respect — for people, their roles, and their knowledge and expertise. We seek to create a safe environment where diverse viewpoints will be heard and considered. To that end, members of the CAC will act with respect and civility when interacting with each other, the Air District Board of Directors, staff, and members of the public.

Behavior which violates the CAC's commitment to respect and civility includes, but is not limited to, yelling, cursing, interrupting, humiliating, threatening, and all forms of harassment.

Any violations of this provision will be handled as stated in the Conflict Resolution section of the CAC Procedural Guide.

2.4 Conflict Resolution

In the event that a conflict or behavior arises that violates the CAC's commitment to respect and civility between CAC members and/or between CAC members and Air District staff, regarding CAC matters:

Step 1: CAC members agree to work in a collaborative fashion and strive for consensus on the issues before they are brought to the CAC.

Step 2: In the event of an impasse or conflict that continues or becomes an official complaint (sent via email to the Co-Chairs and CAC team staff serving as the in-house mediators), the Co-Chairs and CAC Team Staff shall work with the members in conflict first as in-house mediators.

Step 3: If there continues to be an impasse between CAC Members and/or between CAC Members and Air District staff, those concerned will work with the APCO to reach an agreement.

Step 4: If agreement or resolution cannot be reached with staff or the APCO, a mutually

agreed upon third-party mediator will be utilized to resolve the conflict and provide a recommended action to the Board.

In the event of a conflict on agenda items, CAC members can agree to postpone the action or agenda item for discussion until the next meeting, from the date the issue arises, to allow for the Co-Chairs and CAC team staff to help resolve the issue. If during the meeting the facilitator cannot help the CAC reach an agreement, then the action or agenda item in question will not proceed.

Individual members cannot be compelled to participate in any action to which they do not agree. Individual members may abstain from participation in a decision when they believe it would be inappropriate for them to participate in that action or decision.

3. CAC Co-Chairs

The CAC shall elect at least two but no more than three of its members to serve as Co-Chairs.

3.1 Duties of Co-Chairs

- The Co-Chairs shall preside over bi-monthly meetings of the CAC in rotation.
 - o Presiding over a meeting requires a Co-Chair to open, manage, and adjourn meetings, and to adjust the set order of speakers in collaboration with the facilitator and Air District staff.
 - o In the event the Co-Chair scheduled to preside over the meeting is absent or unable to perform their duties, the Co-Chair scheduled to preside next shall preside over the meeting and perform all chair duties.
- The Co-Chairs shall oversee the preparation and distribution of the agenda and materials for the CAC meetings.
- The Co-Chairs shall work with Air District staff and the CAC meeting facilitator to plan, structure, and coordinate CAC meetings.
- The Co-Chairs shall attend and provide updates to the Air District Board of Directors as needed and/or requested and interact with the Air District Board of Directors in representation of overburdened communities within the nine Bay Area counties, and on behalf of the CAC members.
- The Co-Chairs or another Council Member shall regularly communicate CAC recommendations, proposals, requests, concerns, and community-identified priorities to the Air District Board of Directors or one of its Committees, including updates to the Community Equity, Health, and Justice Committee as needed. These communications shall represent overburdened communities within the nine Bay Area counties and the adopted positions or priorities of the CAC
- The Co-Chairs shall oversee activities of the CAC Ad Hoc Committees, standing committees, staff-led workgroups, and other related efforts.
- The Co-Chairs shall perform all other necessary and incidental duties as prescribed by the CAC Charter.
- The Co-Chairs shall communicate with each other, divide work, and share information and updates in a timely manner.
- The Co-Chairs shall address conflict within the CAC membership and

leadership.

- The Co-Chairs shall ensure that CAC decisions are made in a democratic, equitable, and timely manner.
- The Co-Chairs shall represent the CAC at the Budget Committee and provide feedback on the Air District's budget.
- The Co-Chairs shall work with Air District staff to define and oversee the CAC's annual budget.
- The Co-Chairs shall understand and adhere to the Brown Act and Rosenberg's Rules of Order.

3.2 Terms of Leadership (Co-Chairs)

Leadership is appointed for a one (1) or two (2) year term, and no member may serve as Co-Chair for more than four years.

3.3 Election of Leadership (Co-Chairs)

If a Co-Chair position becomes vacant, the CAC may vote to fill that position no later than two CAC meetings after the vacancy occurs. The Co-Chair position shall be filled through a nomination, selection, and voting process. The process will be as follows:

- Members seeking a vacant leadership position shall submit an essay, which provides a summary of their background and outlines the reasons they seek the position. The full CAC shall be presented with the essays 72 hours in advance of the meeting in which the CAC will vote on each prospective candidate. The candidate receiving the most votes will be selected to fill the vacant leadership position.

4. CAC Members

4.1 Composition of the CAC

The membership of the CAC, including Co-Chairs, shall be composed of seventeen (17) members who live or work in overburdened communities in California, as follows:

- Four (4), Alameda County
- Four (4), Contra Costa County
- One (1), San Francisco County
- One (1), San Mateo County
- Two (2), Santa Clara County
- One (1), Solano County
- One (1), Marin, Napa, or Sonoma County
- One (1), at-large
- Two (2), youth

Youth are individuals between the ages of 14 and 24 at the beginning of their term.

Regarding at-large member seats, priority should be given to individuals with special expertise, such as wildfire management.

Air District staff cannot serve as members of the CAC.

Diversity, equity, and inclusion on the CAC are highly valued and should be reflected in the composition and decision-making process of the CAC.

4.2 Duties of Members

CAC members shall fully participate in bi-monthly meetings and be fully engaged during discussion. The CAC members shall also review materials prior to meetings and come prepared for engaged discussion, active listening, and respectful dialogue. Meeting preparation includes attending required trainings defined below and other trainings as planned by the Co-Chairs, suggested by the CAC, or required by law. Further, CAC members shall perform all other duties as prescribed by this Charter.

All Members, except CAC leadership, are expected to join at least one initiative, Committee, or workgroup annually, to ensure a balance of work for what the CAC has to accomplish, if their schedule allows. The number of hours dedicated to these efforts will align with the compensation allotted for CAC membership.

The CAC will establish a time and day for a regularly scheduled CAC meeting that works best for the majority. Staff will provide an orientation of the expectations related to the CAC membership requirements.

4.2.1 Mandatory Trainings

CAC members and leadership shall attend and participate in the following mandatory trainings:

- Brown Act Training: The Brown Act is a California law that guarantees the public's right to attend and participate in meetings of local legislative bodies.
- Rosenberg's Rules of Order Training: Rosenberg's Rules, widely known as parliamentary procedure, were developed to ensure that meetings are fair, efficient, democratic, and orderly.
- Civility Training: Civility is an essential aspect of every work environment to create and maintain a fair and professional culture. This civility training is designed to teach CAC members the norms of acceptable conduct and how to identify, prevent, and respond professionally to situations of incivility.
- Team building and conflict resolution training.
- Ethics (AB1234) and Harassment Prevention (SB1343/AB1825) Training: This training reinforces the council's commitment to integrity, accountability, and unethical behavior while ensuring compliance with state requirements to foster a respectful and inclusive environment for all.

4.2.2 Virtual, Hybrid, and In-Person Meetings

The CAC will meet in person at a location within the nine-county Bay Area. CAC members

may attend remotely under specific circumstances outlined in the Brown Act and in the Attendance section of this document.

CAC members, and members of the public with disabilities, who need accommodations consistent with Section 504 of the Rehabilitation Act to have equal opportunities to participate in CAC meetings should contact Air District staff.

Reimbursements for travel are outlined in the CAC's [Meeting Compensation and Expense Reimbursement Policy](#).

4.3 Members Terms of Office

CAC members shall serve one four-year term and may be reappointed for a subsequent two-year term. Terms should be staggered to support continuity, institutional knowledge, and meaningful community representation. An initial four-year term recognizes that recruitment, selection, appointment, onboarding, and training can take several months, and that shorter terms can limit members' ability to develop recommendations and carry them through to Board consideration.

Members are limited to serving a cumulative total of six (6) years.

If a CAC member leaves their seat before completing their term, their replacement will be appointed to serve the remainder of their term; they will not, start a new 2- or 4-year term limit.

These provisions for the number and length of members' terms will ensure that others have the opportunity to participate in the CAC and that there is continuity of County or institutional knowledge.

4.3.1 Appointment of Members

The CAC members are appointed by the Board of Directors. When a vacancy arises, or when a member's term is coming to an end such that a vacancy will soon arise, the CAC shall recommend a candidate or candidates to the Board of Directors to fill any such vacancies. The CAC shall select candidates to recommend for appointment based on guidance and selection criteria provided by the Community Equity, Health, and Justice (CEHJ) Committee, as augmented by any additional criteria and considerations the CAC determines is appropriate. The CAC may create an Ad Hoc or standing committee to assist with the process of identifying candidates to consider for recommendation to the Board of Directors.

Priority should be given to individuals from Bay Area communities overburdened by air pollution, environmental justice communities, and/or those with a history of partnering with environmental justice communities.

5. Standing Committees, Ad Hoc Committees, and Workgroups

Upon approval by a majority of its members, the CAC may form Ad Hoc or standing committees to advise the CAC on its ongoing functions. The committee shall be composed of members of the CAC. Committee members shall vote on committee leadership during the first meeting.

The CAC should seek to distribute committee and workgroup opportunities equitably among members and ensure that compensated opportunities are accessible to a broad range of members. These opportunities will be assigned through a transparent process. A member's compensated time shall be governed by the [Meeting Compensation and Expense Reimbursement Policy](#). Nothing in this section is intended to limit voluntary participation where participation is otherwise consistent with the Brown Act, this Charter, and the needs of the CAC.

5.1 Standing Committees

A standing committee is considered a legislative body and is subject to Brown Act requirements of holding public meetings with staffing support, if budget allows. A standing committee should only be created when the CAC identifies a continuing need, and the Air District confirms the staffing, noticing, agenda preparation, public access, and administrative support needed for Brown Act compliance. A committee is considered "standing," irrespective of its composition, if it has a continuing subject-matter jurisdiction, or a meeting schedule fixed by charter, ordinance, resolution, or formal action of a legislative body.

5.2 Ad Hoc Committees

An Ad Hoc committee is an advisory committee composed of less than a quorum of members, which will serve for a limited term or single purpose. After the duties of the Ad Hoc Committee are accomplished, and presented to and approved by the CAC, the Ad Hoc Committee will be dissolved. Ad Hoc Committees can meet under quorum outside of a public meeting. Ad Hoc Committees provide bimonthly, brief, verbal updates to the CAC at the Council's regularly scheduled meetings.

5.3 Workgroups

A workgroup is a small, temporary group composed of less than a quorum of CAC members along with staff subject-matter experts. Air District staff-led workgroups convene for a specific purpose, serve a limited term, and operate flexibly to support the Air District's internal needs.

Furthermore, Ad Hoc committees, standing committees, and workgroups, shall follow the following guidelines:

- Commitment: Once appointed, CAC members must serve on an Ad Hoc committee or workgroup until the Ad Hoc Committee or workgroup has accomplished its purpose and/or is disbanded. A CAC member cannot abandon their commitment to an Ad Hoc Committee or standing committee to join another committee.

- **Accountability:** If there is a vacancy in Ad Hocs, Standing Committees, and/or workgroups, interested Council Members with a track record that matches the attendance requirement set forth above for Ad Hocs, Standing Committees, and workgroups will be placed as alternates if they wish to participate in another committee.
- **Priority:** CAC members not participating on an Ad Hoc committee, standing committee, or workgroup will be given priority to serve on newly formed committees (e.g., ad hoc, workgroup or standing). After which, CAC members currently participating in one (1) committee or workgroup will be given preference. Lastly, CAC members serving on two (2) committees or workgroups will be placed as alternates until one of their current committees or workgroups completes its assigned task and is dissolved.
- **Exceptions:** The CAC may create an Ad Hoc Committee if an emergent topic or situation demands it, which may require exceptions that supersedes the limitations and commitments outlined above. The emergency Ad Hoc Committee will remain active until the mission or task is accomplished.

6. Community Engagement

The CAC will aim to engage the community in the following ways:

- Outreach to community networks, which includes items that have been addressed, future meeting dates and agendas, success stories, and ways to engage with the CAC
- CAC web page
- CAC meetings
- Outreach events or workshops hosted by CAC members or the Air District
- Bi-monthly community meetings led by the Compliance and Enforcement Division of the Air District

7. Meetings

7.1 Facilitation of Meetings

An external professional meeting facilitator will assist the CAC with bimonthly CAC meetings, if budget allows. The external facilitator works directly with the CAC leadership to plan and execute the meeting plan in consultation with Air District staff. The facilitator will keep the meetings on track with guidance from the Co-Chairs and will enforce the following meeting expectations and ground rules for CAC members:

- The first expectation is **preparation**: Come prepared for meetings and review all documents that the CAC will discuss.
- Second, is **communication and language**: Communicate with respect and be mindful of individual speaking time so that everyone has the opportunity to speak in meetings. Zoom meetings are publicly accessible, so CAC members are expected to conduct themselves accordingly.

- Third, is **distractions**: Avoid distractions and stay present. Active listening is imperative to ensure that members understand other people's viewpoints.
- Fourth, is **timing**: Respect time agreements and stay on topic.
- Finally, **facilitation**: The facilitator will intervene to keep the conversation on track and on time and will remind members of these ground rules as necessary.

The facilitator will have limited authority to open the meetings, convey the agenda item(s), confirm the meeting has quorum after the clerk takes roll call, facilitate the flow of meetings in accordance with the Brown Act and Rosenberg's Rules of Order, maintain order, and defer to the Air District legal representative or staff if needed.

7.2 Regular Meetings

The CAC shall hold at least six regular meetings per calendar year, unless otherwise approved by the CAC and Air District leadership. The meeting schedule, date, time, and location may be adjusted as necessary to support member participation, public access, and CAC priorities.

All meetings will be held in accordance with the Brown Act.

7.3 Special Meetings

A majority of Co-Chairs or a majority of the CAC members may call special meetings, following the noticing guidelines set forth in the Brown Act. An annual retreat will be held and considered as a special meeting.

7.4 Notice of Meetings

Meeting agendas and notices must be posted at the meeting site and on the Air District website in compliance with all applicable laws, including but not limited to the Ralph M. Brown Act. (Government Code Section 54950 et seq.)

Agendas and notices shall be emailed to each CAC member and any person who submits a written request to the Air District for such notice.

7.5 Adjournment or Cancellation of Meetings

The presiding Co-Chair or Air District staff may adjourn or cancel a meeting if a quorum will not be present or if the meeting date conflicts with a holiday. Notices of adjournment or cancellation shall be emailed to CAC members and posted at the meeting site and on the Air District [website](#).

7.6 Meetings of CAC Members with the Air District

CAC members that meet with Air District staff or Board of Directors, on behalf of the CAC, should inform the CAC Co-Chairs of the discussion within 72 hours of the date the meeting is held.

Action items directed to CAC leadership from the Board of Directors should be communicated to CAC leadership within 72 hours via memo.

The CAC shall have at least two structured opportunities each year to engage directly with the Board of Directors or Board leadership, which may include retreats, study sessions, workshops, or other noticed meetings consistent with applicable law.

In addition, the CAC may designate one CAC member to participate as a non-voting participant in regular monthly Board meetings, when feasible, to monitor Board matters relevant to CAC priorities, identify opportunities for timely CAC input, communicate relevant CAC priorities and community concerns when appropriate, and report relevant updates back to CAC leadership or the full CAC.

7.7 Meetings of the Ad Hocs

Ad Hoc Committee Chairs are expected to provide a bimonthly verbal report-out on the progress of the Ad Hoc Committees to the CAC. Report-outs should be a brief summary.

7.8 Quorum Requirements

50% plus one of CAC members must be present in person to constitute a quorum and for voting to be conducted.

7.8.1 Action at a Meeting; Quorum and Required Vote

A quorum is required to take any official action beyond roll call and adjournment. The affirmative vote of a majority of the members of the CAC shall be required for the approval of all substantive matters. The public meeting ends upon losing a quorum of CAC members during the meeting.

7.8.2 Voting and Abstention

CAC meetings will be conducted in compliance with the Brown Act (Government Code Section 54950 et seq.), Rosenberg's Rules of Order, CAC Charter, and state and local laws. Participation and voting are based on Brown Act requirements and current legislation. Staff will provide an updated summary of any changes as required by law.

7.8.3 Conduct of Meetings

All meetings shall be governed by the Ralph M. Brown Act (Government Code Section 54950 et seq.), the CAC Charter, and Rosenberg's Rules of Order for decorum and parliamentary procedure.

Cell phones shall be turned off during all CAC meetings.

The Co-Chairs may issue a warning to any member of the public who is disruptive during CAC meetings. In the event of repeated disruption of any kind, the Co-Chairs shall direct the offending member of the public to leave the meeting. If the meeting is

disrupted by *any* member of the public, we hold the right to remove the individual from the meeting with the assistance of security or by muting and turning off the camera of that individual.

The chat feature will be unavailable for the full duration of Zoom meetings due to accessibility limitations.

8. Agenda Items

8.1 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 will have three minutes each to address the CAC per agenda item. Members of the public who wish to speak on non-agenda items will have three minutes to address the CAC under the item "Public Comment on Non-Agenda Items". Members of the public who are speaking through an interpreter will have six minutes to address the CAC. All meetings will have a rebuttal period that allows an additional one (1) minute to any member of the public who would like to provide a rebuttal.

8.2 Agenda Preparation and Setting Process

Air District staff, in coordination with and in support of the Co-Chairs, will prepare, notice, and distribute the agenda and materials for CAC meetings consistent with the Brown Act, applicable Air District procedures, the CAC's adopted priorities and workplan, and priorities identified by CAC members.

Proposed agenda items may be submitted by CAC members, Co-Chairs, committees, Air District staff, or the Board of Directors.

Staff shall maintain a running list of requested agenda items, including the source of each request and whether the item is pending, scheduled, deferred, or completed, and share that list with the Co-Chairs on a regular basis.

The Co-Chairs shall lead the agenda-setting process in consultation with CAC members, Air District staff, and the meeting facilitator, as needed. The Co-Chairs shall structure meeting agendas in a manner that supports timely CAC deliberation, meaningful community input, and progress on CAC priorities.

When a CAC member or committee requests an agenda item, staff shall work with the requesting member or committee to prepare materials, identify presenters, and ensure the item is framed accurately. Final agenda materials shall be shared with the Co-Chairs and the requesting CAC member or committee for review before public distribution, to the extent feasible.

The CAC's agenda-setting and prioritization shall be guided by the [CAC Environmental Justice priorities](#) and any existing CAC action plans, but these guiding documents shall not limit the CAC's ability to respond to timely community concerns, enforcement matters, legislation, Board requests, budget or implementation issues, or other emerging priorities.

The Co-Chairs and the Board of Directors can amend any existing action plans, as needed when an emergency or emergent issue requires it. An emergency is defined as an event that impacts the health and safety of the community (e.g., flaring). An emergent issue is considered emergent if it is new and immediate action from the CAC is required (i.e. funding opportunity, legislative issue). Any current action plans are made available on the community-facing, public CAC website.

Also, the Board may require advice or recommendations of the CAC on a particular matter or issue (refer to the process outlined in 1.7.6).

9. Conflict of Interest Policy

CAC members or their immediate family members cannot benefit financially from their relationship with the Air District by way of the CAC. Any CAC member, or immediate family members of CAC members, who would directly benefit financially from a contract, must recuse themselves and not be present during a vote to avoid influencing other CAC members.

10. Meeting Minutes

Minutes shall be taken at all regular and special CAC meetings and shall comply with all applicable laws, including but not limited to the Ralph M. Brown Act (Government Code Section 54950 et seq.) and the CAC Charter. Minutes shall be approved by the majority vote of CAC members in accordance with applicable statutes.

11. Land Acknowledgement

The CAC recognizes that California Native American and other communities have also faced many environmental injustices and social inequities. These issues are hereby acknowledged as part of the CAC Charter. The following CAC Land Acknowledgement will be included in all CAC meeting agendas and is available on the [CAC web page](#).

We begin by acknowledging that this land is unceded Indigenous land. The territories, or counties we represent, are of the Indigenous people. To acknowledge this history of our country — that this nation was built on genocide, the exclusion and erasure of Indigenous people — grounds our work in truth. We also acknowledge that our modern global economy was founded on the free and forced labor of enslaved Black people. And that exploited labor continuously perpetuates itself in disadvantaged communities of color, as we see in the treatment of farm workers, immigrant workers, prison labor and domestic workers. This practice of land acknowledgment calls on us to recognize our violent history that is the foundation of white supremacy, and to recognize the longstanding

and ongoing resistance of People of Color to dehumanization, repression and homicide. And that the brilliance and leadership of People of Color in resistance, vision, wisdom and love be honored and recognized as we work to dismantle ongoing legacies of settler colonialism and anti-blackness.

The [Air District website](#) will be updated in preparation for each CAC meeting with materials for discussion and, after each meeting, with meeting summaries, presentations, background materials, requested information, and meeting recordings.

12. Dissemination of Materials

All documents, materials, and correspondence produced by or submitted to the CAC, CAC staff, or facilitator are considered public information and subject to the California Public Records Act regulations and procedures for disclosure and transparency.

Information related to the operations of the CAC will be made available to the public as requested.

13. Public Meetings

All CAC meetings will be noticed and open to the public in accordance with the Brown Act.

14. Attendance

The CAC requires active participation and attendance by members of at least 75% of all meetings during every year served. This applies to Co-Chair meetings, committee meetings, and attendance at meetings of the full CAC. CAC members will inform staff and CAC leadership of any potential absences.

14.1 Absenteeism: CAC Meetings

CAC members are allowed to miss two (2) CAC meetings in one calendar year. Continued absenteeism from CAC Meetings constitutes voluntary abandonment after three (3) meetings are missed. After two (2) CAC meetings have been missed, staff will send a courtesy letter reminding the absent member of the attendance requirements of the CAC and warning them that they are at risk of losing their seat. Staff will be responsible for informing the Co-Chairs of absent members. Staff will inform a member that they have lost their seat on the CAC after three meetings are missed. Vacant seats on the CAC will be filled as described in the Appointment section of this document. The CAC maintains the right to approve excused absences for fellow council members and can waive the counting of an absence due to emergency situations that are not covered under AB 2302 upon request by the absent CAC member.

14.2 Absenteeism: Co-Chair Meetings

Co-Chair meetings occur regularly up to four hours per month.

Co-Chairs are allowed to miss two (2) meetings every two (2) consecutive months. Continued absenteeism from Co-Chair meetings constitutes voluntary abandonment. After two (2) Co-Chair meetings have been missed, staff will send a courtesy letter reminding the absent Co-Chair of the attendance requirements of the Co-Chairs and warning them that they are at risk of losing their seat. Staff will be responsible for informing the Co-Chairs and the CAC of absent Co-Chairs. Staff will inform a Co-Chair that they have lost their seat on the CAC after three (3) meetings are missed. The Co-Chairs reserve the right to jointly adjust the schedule.

Any vacant Co-Chair appointment shall be filled following Section 3.3 (Election of Leadership (Co-Chairs)).

14.3 Absenteeism: Ad Hoc Meetings

Ad Hoc Committee meetings will generally occur every other week (biweekly).

Ad Hoc Committee members are allowed to miss two (2) meetings every two (2) consecutive months. Continued absenteeism from Ad Hoc meetings constitutes voluntary abandonment. After two (2) Ad Hoc meetings have been missed, staff will send a courtesy letter reminding the absent Ad Hoc member of the attendance requirements of Ad Hoc members and warning them that they are at risk of losing their seat. Staff will be responsible for informing CAC members of absent members. Staff will inform CAC members that they have lost their seat on the Ad Hoc after three (3) meetings are missed. The Ad Hoc Co-Chairs reserve the right to jointly adjust the schedule.

Any vacant appointment of an Ad Hoc Committee shall be filled within two (2) meetings after the vacancy occurs through using an alternate, or through a nomination, selection, and voting process.

15. Amendment of CAC Charter

The Board of Directors may amend this Charter to ensure its relevance and effectiveness in guiding the CAC's activities. The CAC shall periodically review the Charter and consider recommending amendments for consideration by the Board of Directors. The CAC shall provide thirty (30) days' notice for public comment before adopting any recommendations for amendments to the CAC Charter. Recommended changes to this charter will not take effect until adopted by the Board of Directors.

16. Compensation

Compensation for CAC Members will be subject to attendance and in accordance with the CAC's [Meeting Compensation and Expense Reimbursement Policy](#) and the above

14 Attendance section of the Charter.

Every fiscal year, CAC members may apply for funding in support of activities that align with the Air District's and CAC's mission. For additional compensation details, refer to the [Meeting Compensation and Expense Reimbursement Policy](#).

The CAC will periodically revisit the [Meeting Compensation and Expense Reimbursement Policy](#), including cost-of-living adjustments, and make recommendations to the Board of Directors and Air District leadership.

DRAFT

Appendix A

Delegates to the First National People of Color Environmental Leadership Summit held on October 24-27, 1991, in Washington, D.C., drafted and adopted these 17 principles of Environmental Justice. Since then, the principles have served as a defining document for the growing grassroots movement for environmental justice.

Environmental Justice Principles¹:

- 1) **Environmental Justice** affirms the sacredness of Mother Earth, ecological unity and the interdependence of all species, and the right to be free from ecological destruction.
- 2) **Environmental Justice** demands that public policy be based on mutual respect and justice for all peoples, free from any form of discrimination or bias.
- 3) **Environmental Justice** mandates the right to ethical, balanced and responsible uses of land and renewable resources in the interest of a sustainable planet for humans and other living things.
- 4) **Environmental Justice** calls for universal protection from nuclear testing, extraction, production and disposal of toxic/hazardous wastes and poisons and nuclear testing that threaten the fundamental right to clean air, land, water, and food.
- 5) **Environmental Justice** affirms the fundamental right to political, economic, cultural and environmental self-determination of all peoples.
- 6) **Environmental Justice** demands the cessation of the production of all toxins, hazardous wastes, and radioactive materials, and that all past and current producers be held strictly accountable to the people for detoxification and the containment at the point of production.
- 7) **Environmental Justice** demands the right to participate as equal partners at every level of decision-making, including needs assessment, planning, implementation, enforcement and evaluation.
- 8) **Environmental Justice** affirms the right of all workers to a safe and healthy work environment without being forced to choose between an unsafe livelihood and unemployment. It also affirms the right of those who work at home to be free from environmental hazards.
- 9) **Environmental Justice** protects the right of victims of environmental injustice to receive full compensation and reparations for damages as well as quality health care.

¹ Principles of Environmental Justice, <https://www.ejnet.org/ej/principles.html>. Accessed December 19, 2022.

10) **Environmental Justice** considers governmental acts of environmental injustice a violation of international law, the Universal Declaration On Human Rights, and the United Nations Convention on Genocide.

11) **Environmental Justice** must recognize a special legal and natural relationship of Native Peoples to the U.S. government through treaties, agreements, compacts, and covenants affirming sovereignty and self-determination.

12) **Environmental Justice** affirms the need for urban and rural ecological policies to clean up and rebuild our cities and rural areas in balance with nature, honoring the cultural integrity of all our communities, and provided fair access for all to the full range of resources.

13) **Environmental Justice** calls for the strict enforcement of principles of informed consent, and a halt to the testing of experimental reproductive and medical procedures and vaccinations on people of color.

14) **Environmental Justice** opposes the destructive operations of multinational corporations.

15) **Environmental Justice** opposes military occupation, repression and exploitation of lands, peoples and cultures, and other life forms.

16) **Environmental Justice** calls for the education of present and future generations which emphasizes social and environmental issues, based on our experience and an appreciation of our diverse cultural perspectives.

17) **Environmental Justice** requires that we, as individuals, make personal and consumer choices to consume as little of Mother Earth's resources and to produce as little waste as possible; and make the conscious decision to challenge and reprioritize our lifestyles to ensure the health of the natural world for present and future generations.

Jemez Principles²:

- Be Inclusive
- Emphasis on Bottom-Up Organizing
- Let People Speak for Themselves
- Work Together In Solidarity and Mutuality
- Build Just Relationships Among Ourselves
- Commitment to Self-Transformation

² Sierra Club. Jemez Principles. <https://www.sierraclub.org/sites/www.sierraclub.org/files/sce/grand-canyon-chapter/misc-pdf/Jemez%20Principles%20Poster.pdf>. Accessed December 19, 2022.

Appendix B

Bay Area Air District Accessibility and Non-Discrimination Policy

The Bay Area Air 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 the 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 the Air District, including contractors or grantees that the Air District utilizes to provide benefits and services to members of the public.

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

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

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

Appendix C

The CAC Charter was developed using information from various sources, including:

Bay Area Air Quality Management District. *Regulation 2, Permits, Rule 1, Section 2-1-243*. https://www.baaqmd.gov/~media/dotgov/files/rules/reg-2-permits/2021amendments/documents/20211215_rg0201.pdf?rev=103cc60e706947d3ad1e4f5a090483c1&sc_lang=en
Accessed January 3, 2023

California Air Resources Board. *Partnering Agreement-West Oakland Toxic Reduction Collaborative*. (2018, February 14). https://ww2.arb.ca.gov/sites/default/files/2020-04/collaborative_partnering_agreement_west_oakland_acc.pdf
Accessed January 3, 2023

City and County of San Francisco: *Power Plan Task Force By Laws*.
Accessed January 3, 2023

Metropolitan Transportation Commission. *Metropolitan Transportation Commission Resolution No. 3931*. (2009, November 18). https://mtc.ca.gov/sites/default/files/documents/2022-01/RES-3931_approved.pdf
Accessed January 3, 2023.

Partnering Agreement-West Oakland Toxic Reduction Collaborative “Collaboration on Call.”

San Francisco Bay Conservation and Development Commission. *Environmental Justice Advisors Charter*. Accessed January 3, 2023 <https://www.bcdc.ca.gov/advisory-groups/environmental-justice-advisors/environmental-justice-advisors-charter/>

San Francisco Bay Conservation and Development Commission. *San Francisco Bay Plan*. Accessed January 3, 2023 <https://www.bcdc.ca.gov/resources/plans/san-francisco-bay-plan/>

The Bay Area Air Quality Management District. *The Path to Clean Air in the Richmond-North Richmond-San Pablo Area Community Steering Committee Charter and Participation Agreement*. <https://www.baaqmd.gov/~media/files/ab617-community-health/richmond/ptca-charter-agreement%20pdf.pdf?la=en>
Accessed January 3, 2023.

United States Environmental Protection Agency. *Guidance on Considering Environmental Justice During the Development of Regulatory Actions*. <https://www.epa.gov/sites/default/files/2015-06/documents/considering-ej-in-rulemaking-guide-final.pdf>

ⁱ Bay Area Air Quality Management District. *Regulation 2, Permits, Rule 1, Section 2-1-243*: https://www.baaqmd.gov/~media/dotgov/files/rules/reg-2-permits/2021%20amendments/documents/20211215_rg0201%20pdf.pdf?rev=103cc60e706947d3ad1e4f5a090483c1&sc_lang=en

ⁱⁱ Underrepresented community-led: Underrepresented community is used to describe those who have been historically and are still systematically excluded from political and policy-making processes, which includes many disadvantaged and vulnerable communities.

BOARD MEETING DATE: November 4, 2026

REPORT: Advisory Council

SYNOPSIS: The Advisory Council (Council) held a meeting on Monday, October 5, 2026. The following is a summary of the meeting.

RECOMMENDED ACTION:

This item is provided for the Board's information and awareness; no action is requested at this time.

Dr. Philip T. Martien, Chair
Advisory Council

PM:jmb/dh/rr

Chair Martien called the meeting to order at 9:00 a.m.

Roll Call:

Present: Chairperson Dr. Philip T. Martien; and Members Melanie Colburn, Dr. Garima Raheja, and Dr. Michael Schmeltz.

Absent: Members Dr. Daniel Baldassare and Dr. Stephanie Holm; and Board Liaison Lynda Hopkins

For additional details of the Advisory Council Meeting, please refer to the webcast, which can be found [here](#). Please use the webcast's index to view specific agenda items.

CONSENT CALENDAR

2. APPROVAL OF THE DRAFT MINUTES OF THE ADVISORY COUNCIL MEETING OF JUNE 15, 2026

Public Comments

No requests received.

Council Comments

None.

Council Action

Dr. Raheja made a motion, seconded by Chair Martien, to **approve** the Draft Minutes of the Advisory Council Meeting of June 15, 2026; and the motion **carried** by the following vote of the Council:

AYES:	Martien, Raheja, Colburn, and Schmeltz.
NOES:	None.
ABSTAIN:	None.
ABSENT:	Baldassare, Holm, and Hopkins.

ACTION ITEMS

3. RENAMING OF THE ADVISORY COUNCIL

Greg Nudd, Deputy Executive Officer (DEO) of Policy, explained that the work of the Community Advisory Council and this Advisory Council increasingly have substantial intersection of overlapping work especially on cumulative impacts. Therefore, Chair Martien suggested a discussion on a new working title for this Council that would differentiate the work of the two bodies.

Public Comments

No requests received.

Council Discussion

Chair Martien indicated that it has become potentially confusing to refer to this body as the Advisory Council when another Community Advisory Council exists. He proposed the addition of “Science”, “Scientific”, or “Technical” to the Council’s name. He also noted that some Community Advisory Council members had referred to this body as the “Technical Advisory Council”. Dr. Schmeltz preferred adding “Science” or “Scientific” to the Council’s name, likening the name to the Environmental Protection Agency’s (EPA) Scientific Advisory Board. Councilmember Colburn suggested adding “Technical” to the Council’s name stating that it better represented the Council’s scope, inclusive of members who are not scientists, and used more commonly across different professions. Dr. Raheja also agreed to add “Technical” to the Council’s name to avoid denying that the Community Advisory Council is also based in science. Chair Martien also favored adding “Technical” to the body’s name in the context of distinguishing from the Community Advisory Council.

Dr. Schmeltz made a motion, seconded by Dr. Raheja, to **approve** renaming the Advisory Council to the Technical Advisory Council; and the motion **carried** by the following vote of the Council:

AYES: Martien, Raheja, Colburn, and Schmeltz.
NOES: None.
ABSTAIN: None.
ABSENT: Baldassare, Holm, and Hopkins.

4. ELECTION OF THE VICE CHAIR

Mr. Nudd stated there is a vacancy for the Council's Vice Chair role and the importance of the role in relation to Council planning and coordination between meetings. The Council was asked to discussion nominations and fill this vacancy.

Public Comments

No requests received.

Council Discussion

Chair Martien nominated and asked Dr. Raheja whether she was willing to serve as the Vice Chair for the Council. Dr. Raheja expressed her willingness to serve as Vice Chair and agreed to the nomination.

Council Action

Chair Martien made a motion, seconded by Dr. Schmeltz, to **elect** Dr. Raheja as the Vice Chair of the Technical Advisory Council; and the motion **carried** by the following vote of the Council:

AYES: Martien, Raheja, Colburn, Schmeltz.
NOES: None.
ABSTAIN: None.
ABSENT: Baldassare, Holm, Hopkins.

THE COUNCIL RECESSED AT 9:11 A.M., AND RESUMED AT 9:28 A.M.

NOTED PRESENT: Dr. Baldassare was noted present at 9:12 a.m.

DISCUSSION ITEMS

5. CALIFORNIA AIR RESOURCES BOARD RESEARCH ON CUMULATIVE HEALTH IMPACTS OF AIR POLLUTION IN CALIFORNIA

Mr. Nudd introduced Dr. Pradeep Prathibha, aerosol scientist and epidemiologist at the California Air Resources Board (CARB), to give their presentation on *Cumulative Health Impacts from Air Pollution in California*.

Public Comments

Public comments were given by LaDonna Williams, All Positives Possible.

Dr. Prathibha responded to Ms. Williams' question regarding whether CARB had considered historically disadvantaged communities that may no longer appear on CalEnviroScreen maps. Dr. Prathibha clarified that CalEnviroScreen was only one example of a screening tool that could be used but not limited to when identifying priority communities. CARB is asking researchers and community groups to propose communities, rather than specifying any one tool or providing any other criteria for community selection.

Council Discussion

Vice Chair Raheja asked whether permitting had come up during CARB's outreach and whether this research might inform the permitting process. Dr. Prathibha stated that though permitting was a primary concern that was raised during outreach, at this stage, the work was still a research effort, and the scope has yet to be determined. Therefore, CARB had not made any specific links to permitting.

Councilmember Colburn asked for more concrete detail on community-scale health assessments (CARB's research "Pillar II"), including whether they may use surveys, or take other forms, and what kind of data they might correspond to. Dr. Prathibha stated that given the limited budget, a key stipulation was to utilize existing data sets for both exposures and health outcomes, and that the exposure data sets must meet a certain quality threshold. For example, the research team could potentially combine already extensive heavy-metal monitoring with self-reported survey data on neurological or cognitive behavioral outcomes in children, and determine the burden from those exposures, while adjusting for criteria pollutant effects.

Dr. Schmeltz questioned whether Pillar II's community-scale health assessments community-selection criteria might limit participation, and whether the focus might be broadened in the future. Dr. Prathibha confirmed that the research is a pilot approach, with Pillar II structured to pull in novel types of datasets, including community surveys and self-reported symptoms; CARB's intended approach is to find a balance between facilitating new approaches while maintaining a rigor such that results can later withstand regulatory scrutiny, in applications, allowing for a healthy public process. Dr. Schmeltz followed up by asking whether CARB might later pursue the other research concepts [3 and 4]. Dr. Prathibha responded that ideally CARB would pursue all concepts, and this effort [1 and 2] pushes cumulative impacts research forward and provides its own distinct space for that.

Chair Martien asked whether one contract award would cover both research tiers, and Dr. Prathibha confirmed.

6. STATE CUMULATIVE IMPACTS PERMITTING POLICIES

Chair Martien introduced Dr. Yukyan Lam, Research Director and Senior Scientist at the New School's Tishman Environment and Design Center, to give their presentation on *State Cumulative Impacts Permitting Policies*.

Public Comments

Public comments were given by Joel Ervice, Regional Asthma Management & Prevention.

Dr. Lam responded to Mr. Ervice's questions regarding what factors contribute to cumulative impact bills being stalled or not advancing and requested any updates on Washington D.C.'s cumulative impacts legislation. Dr. Lam stated that the Washington D.C. legislative session was still underway, therefore the bill status was uncertain and suggested following up next Spring for an update. Regarding contributing factors on stalled cumulative impact bills, Dr. Lam cited a difficult political climate for environmental and health regulation, funding cuts, delayed rulemaking, administration turnovers, and a political focus on affordability, with concerns that permitting could raise prices or add additional procedural layers.

Council Discussion

Vice Chair Raheja asked how self-identification as environmental justice (EJ) communities is incorporated into cumulative impacts assessments, including whether petitions for an assessment are the primary mechanism or whether other approaches are used. Dr. Lam stated that a self-identification approach is uncommon, and has not been observed to be tested, even where it has appeared. Dr. Lam viewed them as a potentially useful option, giving the example of rural communities that might otherwise be missed. Vice Chair Raheja followed up and asked if place-based approaches were primarily used to identify EJ communities. Dr. Lam confirmed that most policies rely on place-based approaches to identify affected communities, and at the same time that thresholds can vary quite substantially, affecting the degree of effective coverage, as a percentage of the population.

Dr. Baldassarre asked how different states' cumulative impacts policies account for economic concerns. Dr. Lam stated that New Jersey very clearly does not allow consideration of economic benefits to qualify as compelling health and safety reasons to grant permit exceptions; communities have expressed a lack of trust in such tradeoffs, and view them as fundamentally unfair. Dr. Lam also indicated that community benefit agreements in Minnesota may be a more difficult question, and that strong mandatory language on the issue seems to be becoming more rare.

Dr. Baldassarre asked whether Massachusetts' different rules for clean and fossil-fuel energy could serve as a model for exempting certain projects, business sizes, or sectors. Dr. Lam stated that Massachusetts' different rules could be a model, but cautioned that exemptions or faster permitting should be considered in the broader context of community concerns about reduced protections, particularly in historically disinvested communities. She noted that it can be difficult for underinvested communities to be on an equal bargaining footing when weighing proposed economic benefits against environmental burdens.

Recalling the case of Chicago, Vice Chair Raheja asked for clarification on whether there is precedent for local agencies, more granular than the state level, adopting cumulative impacts legislation. Dr. Lam noted work in progress in New York City, in the Bay Area, in Chicago, and in Newark, which had one of the earliest cumulative impacts municipal ordinances. According to Dr. Lam, Newark's ordinance requires an Environmental Resource Index, updated every three years, to inform zoning and planning decisions, but Dr. Lam noted that it has not produced strong results in practice. She attributed part of the challenge to implementation relying heavily on a volunteer environmental commission, whose influence depends on its ability to persuade zoning and planning decision-makers.

Dr. Schmeltz asked whether Dr. Lam had tracked legal challenges to cumulative impacts regulations and whether there were any common themes or outcomes. Dr. Lam responded with two examples: In New Jersey, a cumulative impacts rule was upheld in appellate court but now challenged in the Supreme Court, with challengers arguing the rule is arbitrary and questioning the methodology; and in New York, there were challenges to the disadvantaged communities' criteria that ultimately lost. Dr. Lam noted that few rules have been finalized, and that is perhaps the reason for minimal legal activity.

Dr. Schmeltz asked whether Dr. Lam's team had examined states where cumulative impacts bills had not advanced, and whether the approaches differed from or resembled the approach of laws that had successfully passed. Dr. Lam stated that her team has not examined in depth, states with little legislative progress, in part due to a limited network of contacts and partners, as well as legislative champions being required to advance proposals. She noted that in some states, including Oregon and Hawaii, even precursor proposals such as cumulative impacts mapping legislation had failed to advance. Dr. Lam explained that her team's research has focused primarily on codified policies that require cumulative impact reviews, or provide authority over permit decisions, rather than advisory or guidance approaches that may have less regulatory force.

THE COUNCIL RECESSED AT 10:49 A.M., AND RESUMED AT 11:04 A.M.

7. DRAFT RECOMMENDATIONS ON CUMULATIVE IMPACTS

Chair Martien introduced the item and presented on the *2nd Draft Recommendations to Address Cumulative Impacts*. These incorporated Council discussion from the June meeting and additional work by the Recommendations Ad Hoc Committee. He highlighted several revisions, including added background on how the recommendations relate to the current permitting process; reorganization of the recommendations based on purpose following input from a Community Advisory Council Co-Chair; revisions to content on place-based approaches; new recommendations concerning continuous improvement, facility compliance history, and tracking emerging risk-assessment methods; removal of Appendix B with risk assessment details and the addition of a change log within future drafts.

Chair Martien summarized the revised recommendations as including broad directional recommendations; approaches to improve identification of impacted communities and expand what is considered in impact assessments; tighter limits and regulatory thresholds in overburdened communities; precautionary measures to reduce impacts; and emerging approaches that the Council recommended tracking rather than implementing at this time. He also presented a preliminary figure intended to help organize the approximately 26 recommendations and outlined next steps, including continued collaboration with the Community Advisory Council and development of a third draft for the upcoming November 9 meeting.

Public Comments

No requests received.

Council Discussion

Dr. Baldassare appreciated the work behind the significant improvements and requested more information from Air District staff to assess recommendations 5a through 5c, 6a, and 6c. Dr. Baldassare asked for more clarity on how the current limits compare with tighter limits in terms of what is prescribed, what activities might no longer be allowed under tighter restrictions, and what effects these changes could have in communities, at least qualitatively. For recommendation 6c, Dr. Baldassare requested more information to better understand potential impacts of lower thresholds for California Environmental Quality Act (CEQA) review, to inform a qualitative sense of how that might affect local development in affected areas.

Chair Martien agreed that additional staff input would be helpful, and suggested that the Recommendations Ad Hoc meet with staff before further developing the recommendations, noting the importance of ensuring that proposed protections do not create unintended adverse consequences.

Dr. Schmeltz suggested that an assessment of the Air District's capacity in terms of implementing recommendations in 6a would be helpful, so that the Council might avoid proposing infeasible recommendations. With regard to Recommendation 1, Dr. Schmeltz suggested distinguishing harm reduction versus precautionary approaches, noting that harm reduction addresses known harms, while precautionary approaches address unknowns. Dr. Schmeltz also posed the question of how to catalog those unknowns, and how the Air District approaches the unknowns before permitting or evaluation occurs. Additionally, in response to recommendation 2b, Dr. Schmeltz encouraged consideration of a broad range of tools beyond CalEnviroScreen, including recreations of federal tools, whose data may have been reused or recreated by nonprofit organizations. Lastly, Dr. Schmeltz expressed appreciation for the updated format and expressed support for collaboration with the Community Advisory Council to discuss these recommendations.

Noting a desire to avoid being overly prescriptive, Chair Martien asked the Council to consider providing guidance on goals for applications of such tools, such as increasing geographic coverage.

Dr. Baldassare expressed support for an additive approach in the recommendations on mapping tools, noting inclusion as a priority. Additionally, with these recommendations being tied to regulation, Dr. Baldassare recommended choosing initial parameters that the Council is confident in, so as to avoid frequent updates, and establishing a clear plan for future updates.

Councilmember Colburn shared that community members and other experts have expressed concern that some of CalEnviroScreen's local maps were not identifying areas whereas a systematic study of gaps between CalEnviroScreen and local historical knowledge could generate improvements.

Dr. Schmeltz emphasized the importance of using mapping data that are maintained over time, noting that some useful datasets may cease to be collected or become unavailable. Dr. Schmeltz stressed the importance of historical data preservation, and maintaining continuity in data collection to support consistent permitting decisions and future assessments.

Chair Martien asked for Council input on whether communities could petition for a cumulative impacts assessment, recognizing how that could be helpful but also raised concern for potential misuse. Councilmember Colburn noted examples of municipalities using criteria that expand on CalEnviroScreen and suggested comparing these approaches to identify models that could also work. Dr. Schmeltz supported the concept of petitioning but cautioned that a petition process could itself create inequities if those with greater time and resources are better positioned to use it, or if petitioners do not necessarily represent the affected community. Councilmember Colburn suggested creating a component of the municipal development process that compares local assessments and periodic opportunities for reassessment. Vice Chair Raheja suggested a broader approach that allows communities to petition in multiple ways for an assessment, as opposed to relying on a single petition process that risks misuse or burdens communities.

Chair Martien asked the Council for input on the developed draft figure (slide 15) and whether it could help frame and organize the recommendations. Chair Martien indicated that one concern with the draft figure is that some expanded risk assessment methods could apply outside of identified impacted areas. Councilmember Colburn expressed that infographics are helpful and suggested developing the draft figure further to create a process timeline to showcase how the recommendations apply, such as pre-development, post-development, and during community process engagement. Vice Chair Raheja asked to clarify the intended audience of this draft figure to help determine the correct level of detail and technical language required. Dr. Schmeltz suggested considering multiple figures to illustrate the process, make the recommendations easier to digest, and to tailor for different audiences, such as the Board of Directors and the community.

Chair Martien asked the Council whether anything was missing or should be removed from the draft recommendations for the future November version. Councilmember Colburn raised a concern regarding recommendation 6, in that tighter permitting thresholds could discourage investment in overburdened communities; she requested the

Community Advisory Council's input on this issue to help avoid unintended consequences.

Chair Martien asked the Council for input on prioritizations for the November draft, and whether the Technical Advisory Council should meet with the Community Advisory Council and staff first. Councilmember Colburn agreed prioritization would help and suggested prioritizing using both the Council's perception of importance and the difficulty of implementation. Vice Chair Raheja proposed including staff's perception of feasibility as well. Mr. Nudd clarified that all of the recommendations were feasible, but would require different levels of effort. He indicated that staff could assist with level-of-effort estimates but proposed that it should not be added as another dimension to the decision matrix. Dr. Rohan Radhakrishna, Health Officer, invited the Council to share specific questions for staff to investigate. Dr. Radhakrishna also indicated staff's plans to consult key staff and internal subject matter experts on the recommendations' legal defensibility, impact, feasibility, and responsiveness to community concerns. Chair Martien indicated that he had heard that basic ideas on level of effort and effectiveness would be helpful to the Council in thinking about prioritization.

Recalling discussion of precautionary approaches and examples of precautionary approaches, Dr. Schmeltz proposed looking for expertise on how applications of the precautionary principle within the European Union, and whether that could translate to or inform the Air District's approaches to policy and regulation. Recalling earlier discussion with Dr. Lam, Vice Chair Raheja wondered about sub-state level agencies, or other comparable agencies to the Air District, that have implemented cumulative impacts approaches and the outcomes of those efforts in the United States.

Chair Martien asked for confirmation from the Council on the idea of collaborating with the Community Advisory Council, and the Council expressed general agreement.

Chair Martien requested input from the Council on two proposed additions from a written public comment letter submitted by Mr. Richard Grow. The first concerned the draft recommendations' discussion of "Alignment with Ongoing Air District Activities," which referenced the Air District's 2024 Strategic Plan and Strategy 2.11, "Cumulative Health Impacts," and proposed adding related civil-rights language from the Strategic Plan. The second proposed adding background on California civil rights law and disparate impacts.

Dr. Baldassare stated that the second proposed addition seemed appropriate, but expressed caution about the first, noting that the reference to compliance with civil rights laws and regulations was broad and that he was not entirely sure what it encompassed. In response, Chair Martien reread the first proposal, including language stating that the Air District will "advance and prioritize compliance with civil rights laws, including the Civil Rights Act of 1964 and related California laws," and referencing review of how permits are issued under that strategy. Chair Martien then asked staff to clarify whether that language was already contained in the Strategic Plan or was new language proposed by the commenter.

Dr. Radhakrishna confirmed that the cited civil-rights language already appears in the Air District's Strategic Plan. He stated that the Air District's Civil Rights Officer would be included in staff's review of the recommendations, would be asked to consider Dr. Baldassare's question about the breadth and implications of the language, and would follow up with the commenter.

Councilmembers Colburn and Schmeltz inquired whether repeating the civil rights language that already exists in the Strategic Plan would have added benefit or be merely duplicative. Dr. Radhakrishna stated that it would be premature to assess that question before consulting the Civil Rights Officer. Chair Martien noted that, because the recommendations already discuss alignment with the Strategic Plan, the civil-rights commitment could also be relevant to the Council's cumulative-impacts work. Councilmember Colburn added that the Council should consider and consult that standard when developing recommendations, rather than formally adopting the language specifically at the Advisory Council level.

Chair Martien requested Council input regarding the draft schedule, and no Council concerns were raised.

Council Action

No action taken.

OTHER BUSINESS

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

Mr. Nudd stated there were no items to report.

9. PUBLIC COMMENT ON NON-AGENDA MATTERS

No requests received.

10. COUNCIL MEMBER COMMENTS

None.

11. TIME AND PLACE OF NEXT MEETING

Monday, November 9, 2026, at 9:00 a.m. The meeting will be held in-person at the Bay Area Metro Center and at satellite locations as may be specified on the meeting agenda using a remote teleconferencing link. Members of the Technical Advisory Council and the public may attend at any of those in-person locations, and members of the public may also attend virtually via webcast.

Adjournment

The meeting was adjourned at 12:01 p.m.

Attachments

- #2 – Approval of the Draft Minutes of the Advisory Council Meetings of June 15, 2026
- #3 – Renaming of the Advisory Council
- #4 – Election of the Vice Chair
- #5 – California Air Resources Board Research on Cumulative Health Impacts of Air Pollution in California
- #6 – State Cumulative Impacts Permitting Policies
- #7 – Draft Recommendations on Cumulative Impacts

BOARD MEETING DATE: November 4, 2026

REPORT: Stationary Source Committee

SYNOPSIS: The Stationary Source Committee (Committee) held a meeting on Wednesday, October 14, 2026. The following is a summary of the meeting.

RECOMMENDED ACTION:

This item is provided for the Board's information and awareness; no action is requested at this time.

Ken Carlson, Chair
Stationary Source Committee

KC:jmb

Stationary Source Committee (Committee) Chairperson, Ken Carlson, called the meeting to order at 10:00 a.m.

Roll Call:

Present, In-Person (Bay Area Metro Center, 1st Floor Board Room, 375 Beale Street, San Francisco, CA 94105): Chairperson Ken Carlson and Director Tyrone Jue.

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

Present, In-Person Satellite Location: (Santa Rosa Junior College Campus, Doyle Library, Room 148, 1501 Mendocino Ave., Santa Rosa, CA, 95401): Director Lynda Hopkins.

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

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

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

Present, In-Person Satellite Location: (Pittsburg City Hall, 65 Civic Ave., Room 301A, Pittsburg, CA 94565): None.

Present, In-Person Satellite Location: (San Mateo County Board of Supervisors' Office, 5th Floor, 500 County Center, Redwood City, CA 94063): None.

Absent: Directors Adams, Mueller, and Quinto.

For additional details of the Stationary Source Committee Meeting, please refer to the webcast, which can be found [here](#). Please use the webcast's index to view specific agenda items.

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

No requests received.

CONSENT CALENDAR

4. **APPROVAL OF THE DRAFT MINUTES OF THE STATIONARY SOURCE COMMITTEE MEETING OF SEPTEMBER 9, 2026**

Public Comments

No requests received.

Committee Comments

None.

Committee Action

Director Medina made a motion, seconded by Director Jue, to **approve** the Draft Minutes of the Stationary Source Committee meeting of September 9, 2026; and the motion **carried** by the following vote of the Committee:

AYES:	Carlson, Gioia, Haubert, Jue, Lee, Medina, Young.
NOES:	None.
ABSTAIN:	Hopkins.
ABSENT:	Adams, Mueller, Quinto.

DISCUSSION ITEM

5. **UPDATE ON FLARING MINIMIZATION EFFORTS AND DEVELOPMENT OF "FLARING 101"**

NOTED PRESENT: Director Adams was noted present at 10:08 a.m. at the Pittsburg satellite location, and Director Mueller at 10:09 a.m. at the Redwood City satellite location.

Greg Nudd, Deputy Executive Officer of Policy, provided context for the item and introduced Katie Gong, Senior Air Quality Engineer in the Regulatory Development Division, who gave the staff presentation *Update on Flaring Minimization Efforts and Development of Flaring 101*,

including: presentation outline; background on flaring; what is a flare?; what comes from a flare?; why does flaring happen?; flare types; impetus and status of rule development efforts; impetus of rule development effort; cause of categories of reportable flaring events 2015-2024; current Air District Refinery Flare Rules; other regulations; South Coast Air Quality Management performance targets; Bay Area flare data; current status of rule development efforts; update on Flaring 101; what is “Flaring 101”; “Flaring 101” update; update on rule development and regulatory concepts; rule development and public engagement; stakeholder engagement; goals of regulatory concepts; alignment of regulatory concepts with goals; section #1 – reduce flaring emissions and frequency; combustion efficiency visual cues; concept 1.1 incorporate key flare combustion efficiency requirements from U.S. Environmental Protection Agency (EPA) refinery sector rule; concept 1.2 establish new flare limits; measures to minimize flaring; concept 1.3 require mitigation measures based on triggering criteria; concept 1.4 require submittal of casual reports based on additional triggering criteria; concept 1.5 require third-party audits for facilities based on triggering criteria; section #2 – flare minimization plans and reporting and monitoring requirements; concept 2.1 strength Flare Minimization Plans (FMP) updates; concept 2.2 standardize reporting requirements; concept 2.3 expand definitions and categories for reporting causes of flaring; concept 2.4 strengthen the monitoring and reporting requirements; concept paper public comments; concept paper stakeholder engagement; rule development next steps; and questions and discussion.

Public Comments

Public comments were given by Kevin Buchan, Western States Petroleum Association (WSPA); Gary Hughes, Biofuelwatch; and Todd Osterberg, Chevron.

Committee Comments

The Committee and staff discussed a request for flaring trend information by facility for data comparison, also highlighting differences in facilities that have converted from crude oil to renewable fuels; future meetings with individual refineries to review historical flare reports, compare how staff and refinery management assess which events were reasonably preventable, and use that review data to clarify and examine possible differences between renewable-feedstock and crude oil refineries; whether any South Coast facilities were processing alternative feedstocks when they implemented their flaring Rule 1118 and how that was accounted for; the rationale for inclusion of the non-operating Valero Benicia facility; the definition of a non-refinery flare; whether flaring caused by a buildup of gas would be considered preventable and subject to regulation; clarification that staff’s review of flare reports and flaring events analyze whether flaring events are preventable and attempt to work with refinery management to improve processes to minimize reasonably preventable flares; whether refineries could be required to provide advanced public notice of planned flaring events to help residents take precautions, or whether competitive and market information prevent this type of disclosure; whether there is refinery coordination on scheduled maintenance to avoid simultaneous refinery shutdowns and potentially affecting fuel production; staff’s efforts to shift from an enforcement-focused approach to a more collaborative process with refineries to review flare events and identify opportunities to reduce flaring; the distinction between preventable and non-preventable emergency flaring events, and distinction between reasonably preventive measures and excessive regulatory

requirements; the rationale for 2015 flaring emissions trends declining, despite no corresponding decline in vent-gas volume nor reportable events, and potential reflection of refineries continuing to implement improvements following the Air District's adoption of Rule 12-12; whether refineries continuously monitor flare video feeds; the Air District's current receipt of flare images after events and exploration of rulemaking requirements for refineries to provide access to flare video feeds in real-time; community concerns being the rationale for additional flaring requirements despite concept paper identifying previous reduction in flaring events; planned public education efforts on flaring; clarification of anticipated timeline of Flaring 101 public education videos and direction to release prior to draft rules public workshops; the scope of proposed mitigation measures, including operational improvements and potential capital investments; clarification on potential use and allocation of mitigation fees in lieu of emission reduction measures; examples of preventable flaring events such as contractor-related incidents, improper valve installation or operation, inaccurate electrical drawings, improved operational planning and flare gas recovery systems; whether flaring events attributed to human error could be prevented, through improved safety protocols, operational procedures, or development of system designs that can mitigate human error; clarification on refinery participation and feedback in the Refinery Technical Working Group; clarification of observed decline in sulfur dioxide and non-methane hydrocarbon emissions, their continued significance despite reductions, and lack of corresponding declines in flaring volume and number of flaring events; clarification on flaring emissions in context of broader emissions total; importance of addressing health impacts of acute exposure to elevated emissions from improperly operating flares, and the frequency acute exposure flaring events occur; continued collaboration and engagement with refineries; comparison of refinery flaring events between Bay Area and South Coast Air Districts, and the effectiveness of South Coast's flaring regulations; whether artificial intelligence (AI) technology or detectors could improve the real-time accuracy of flare data and help identify ways to reduce the need for flaring; suggested pilot program to facilitate real-time refinery data sharing to improve timely public notification of flaring events ahead of rulemaking requirement; direction to maintain discussion minutes for future stakeholder meetings with refineries and labor, and provide all participating stakeholders the opportunity to review and confirm their accuracy; clarification of percentage of flaring events, vent-gas volume, emissions considered reasonably preventable, and differing refinery assessments; examples of methodologies for establishing mitigation fees that incentivize emission reductions rather than serve as a cost of continued flaring; whether socioeconomic analyses and potential alternative compliance pathways should be considered when accounting for the differences between renewal fuel and conventional refineries, including capital investments and broader emissions benefits; the importance of collaborative engagement with the refineries, creating opportunities for industry stakeholders to present proposed flaring reduction measures and share technical information to inform the rulemaking process; evaluation of anticipated emission reductions, equipment costs and benefits; the importance of maintaining the Air District's regulatory oversight while working with refineries to achieve cost-effective reductions in preventable and significant flaring events; and consideration of concentrating on residential wood burning as an additional air quality concern.

Committee Action

No action taken.

OTHER BUSINESS

6. COMMITTEE MEMBER COMMENTS

Director Mueller reiterated his previous request to agendize consideration of an additional study related to Rule 9-4 and Rule 9-6, including a survey of problematic housing stock across the Bay Area counties, to assess the implementation challenges not addressed by the California Air Resources Board (CARB) study. He requested that his comments be reflected in the minutes.

Director Haubert acknowledged that the Rule 9-4 and Rule 9-6 discussion was moved to the November Board meeting; relayed some community feedback questioning the timing of the discussion in relation to the election period; and noted he would likely be unable to attend the meeting due to business travel and the meeting's in-person participation requirements.

Director Adams requested to agendize an update from the Permit Efficiency Task Force at an upcoming Committee meeting; Director Carlson suggested including information on how long permit applications have been pending, noting that the biweekly reports provide application outcomes but limited information on application processing times.

7. TIME AND PLACE OF NEXT MEETING

Wednesday, December 9, 2026, at 10:00 a.m. The meeting will be held in-person at the Bay Area Metro Center and at satellite locations as may be specified on the meeting agenda using a remote teleconferencing link. Members of the Stationary Source Committee and the public may attend at any of those in-person locations, and members of the public may also attend virtually via webcast.

Adjournment

The meeting was adjourned at 12:10 p.m.

Attachments

#4 – Approval of the Draft Minutes of the Stationary Source Committee Meeting of September 9, 2026

#5 – Update on Flaring Minimization Efforts and Development of “Flaring 101”

BOARD MEETING DATE: November 4, 2026

REPORT: Community Equity, Health, and Justice Committee

SYNOPSIS: The Community Equity, Health, and Justice Committee (Committee) held a meeting on Wednesday, October 14, 2026. The following is a summary of the meeting.

RECOMMENDED ACTION:

This item is provided for the Board's information and awareness; no action is requested at this time.

John Gioia, Chair
Community Equity, Health, and Justice Committee

JG:jmb

Community Equity, Health, and Justice Committee (Committee) Chairperson, John Gioia, called the meeting to order at 1:00 p.m.

Roll Call:

Present, In-Person (Bay Area Metro Center, 375 Beale Street, 1st Floor, Board Room, San Francisco, CA 94105): Director Monica Brown.

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

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

Absent: Directors Joelle Gallagher, Linda Sell, and Shamann Walton.

For additional details of the Community Equity, Health, and Justice Committee Meeting, please refer to the webcast, which can be found [here](#). Please use the webcast's index to view specific agenda items.

3. PUBLIC COMMENT ON NON-AGENDA MATTERS

No requests received.

CONSENT CALENDAR

4. APPROVAL OF THE DRAFT MINUTES OF THE COMMUNITY EQUITY, HEALTH, AND JUSTICE COMMITTEE MEETING OF SEPTEMBER 9, 2026

Public Comments

No requests received.

Committee Comments

None.

Committee Action

Director Young made a motion, seconded by Director Adams, to **approve** the Draft Minutes of the Community Equity, Health, and Justice Committee Meeting of September 9, 2026; and the motion **carried** by the following vote of the Committee:

AYES:	Adams, Brown, Gioia, Young.
NOES:	None.
ABSTAIN:	None.
ABSENT:	Gallagher, Sell, Walton.

ACTION ITEM

5. CONSIDER COMMUNITY ADVISORY COUNCIL CHARTER AMENDMENTS

NOTED PRESENT: Director Sell was noted present at 1:08 p.m. at the San Francisco location.

Arsenio Mataka, Deputy Executive Officer of Equity and Community Programs, introduced, Community Advisory Council (CAC) Members Jeff Sanchez and Kevin Ruano Hernandez who gave a presentation *Consider Community Advisory Council Charter Amendments*, including: recommended action; purpose of charter amendments; process and timeline of charter amendments; highlights of charter amendments; what amendments intend to accomplish; and questions and discussion.

Public Comments

Public comments were given by Chalam Tubati, Co-Chair of Bayview Hunters Point San Francisco Community Steering Committee (CSC).

Committee Comments

The Committee and staff discussed clarification of the proposal to designate one of the two at-large seats for representation from Marin, Napa, or Sonoma County, with separately designated seats for Solano County; clarification on the Board's approval of non-voting CAC

participation at Board meetings on a rotating basis; the proposed membership terms and application process, including whether incumbent members seeking a second two-year term would be required to reapply and whether new applicants are eligible for the full four-year term.

Committee Action

Director Young made a motion, seconded by Director Adams, to **recommend** that the Board of Directors adopt the proposed Community Advisory Council Charter amendments as presented, with clarification of the second term language, and the motion **carried** by the following vote of the Committee:

AYES: Adams, Brown, Gioia, Sell, Young.
NOES: None.
ABSTAIN: None.
ABSENT: Gallagher, Walton.

DISCUSSION ITEM

6. ANNUAL ASSEMBLY BILL 617 PROGRAM UPDATE

Diana Ruiz, Acting Director, and Yami Henry, Staff Specialist I, in the Environmental Justice Division; Laura Cackette, Principal Environmental Planner, and Mausam Jamwal, Senior Environmental Planner, in the Planning and Climate Protection Division gave the presentation *Annual Assembly Bill 617 Program Update*, including: recommended action; Assembly Bill (AB) 617 overview; West Oakland *Owning Our Air: West Oakland Community Action Plan (WOCAP)*; West Oakland overview; West Oakland milestones; next steps for West Oakland; Richmond-North Richmond San-Pablo *Path to Clean Air (PTCA)*; Path to Clean Air overview; year 2 progress at a glance; year 2 priorities for community steering committee (CSC) engagement; year 2 priorities for CSC engagement; key accomplishments: CSC highlights; incentives and emission benefits; next steps for Path to Clean Air; East Oakland *Right to Breathe: East Oakland Community Air Quality Justice Plan*; East Oakland overview; East Oakland milestones; next steps for East Oakland; Bayview Hunters Point/Southeast San Francisco (BHVP/SESF) *Community Emissions Reduction Plan (CERP)*; Bayview Hunters Point/Southeast San Francisco; 2025 – 2026 CERP milestones; Draft CERP snapshot; next steps for BVHP/SESF; and questions and discussion.

Public Comments

Public comments were given by Chalam Tubati, Co-Chair of Bayview Hunters Point San Francisco Community Steering Committee (CSC).

Committee Comments

The Committee and staff discussed a request for future, more frequent detailed presentations on the implementation progress of the West Oakland and Richmond-North Richmond-San Pablo CERP, including accomplishments, outstanding actions, and areas requiring additional efforts; the Air District's regulatory authority and efforts to address air quality impacts

associated with the proposed Oakland coal terminal as well as soil contamination at Bayview Hunters Point; and community outreach efforts beyond the CSCs, and plans to inform the broader public about progress and results of the CERPs.

Committee Action

No action taken.

7. UPDATE ON MOBILE COMPLAINT INTAKE AND OPEN AIR INITIATIVES

Dr. Philip Fine, Executive Officer/APCO provided context highlighting the initiatives' alignment with the Air District's strategic priorities of transparency, accessibility of information, and community engagement. Dr. Fine introduced Nicki Ruszczycky, Director of Enterprise Technology Solutions, and Community Advisory Council Member Cynthia Prieto-Diaz who gave the presentation *Update on Mobile Complaint Intake and Open Air Initiatives*, including: mobile complaint intake; background on mobile complaint intake; key features; report air quality concerns; submit a quick report; notification received; file a detailed complaint; confirm the location and submit; Open Air community data portal; background on Open Air; why Open Air?; what we built together; download permits to operate; download neighborhood information; access to facility profiles; understand compliance history; stay informed on permitting data; special thanks; and questions and discussion.

Public Comments

No requests received.

Committee Comments

The Committee and staff discussed the current design phase of the application, including collaboration and testing with five CAC members in the Information Management Work Group; clarification that the application will conduct wider focus group testing in the future; suggestion to incorporate automatic geolocation functionality into the complaint application to simplify the reporting process; support for application overall and community collaboration and creativity; and anticipated deployment of the mobile complaint intake system in early 2027 and the Open Air application in summer 2027.

Committee Action

No action taken.

OTHER BUSINESS

8. COMMITTEE MEMBER COMMENTS

Director Sell asked a follow-up question on Item 7 to clarify the complaint reporting process, including response timeliness, staffing considerations, procedures for follow up to complainants, and ability to track complaint history and trends.

Director Adams also asked a follow-up question on Item 7 regarding the volume of complaints received annually and staff reported receiving 6,000 to 7,000 complaints annually.

9. REPORT OF THE DEPUTY EXECUTIVE OFFICER OF EQUITY AND COMMUNITY PROGRAMS

Arsenio Mataka, Deputy Executive Officer of Equity and Community Programs, reported the following:

- Announced his departure from the Air District, effective October 20, 2026, and expressed appreciation for the opportunity to serve Bay Area communities, with reflection on the collective efforts to advance environmental equity, including distribution of penalty funds to impacted communities, establishment of the Civil Rights Office and CERP implementations.
- The public review period for the Draft Bayview Hunters Point/Southeast San Francisco Community Emissions Reduction Plan closes on October 14, 2026.
- Approximately \$20 million in funding is available to support small fleet operators transitioning to zero-emission trucks, including \$5 million reserved for fleets with 10 or fewer vehicles. Staff agreed to send information to the Committee, and encouraged members and the community to publicize this funding opportunity.

Chairperson Gioia and the Committee expressed gratitude for Mr. Mataka's leadership and his contributions to the Air District and extended best wishes for his future endeavors.

10. TIME AND PLACE OF NEXT MEETING

Wednesday, December 9, 2026, at 1:00 p.m. The meeting will be held in-person at the Bay Area Metro Center and at satellite locations as may be specified on the meeting agenda using a remote teleconferencing link. Members of the Community Equity, Health, and Justice Committee and the public may attend at any of those in-person locations, and members of the public may also attend virtually via webcast.

Adjournment

The meeting was adjourned at 2:32 p.m.

Attachments

#4 – Approval of the Draft Minutes of the Community Equity, Health, and Justice Committee Meeting of September 9, 2026

#5 – Consider Community Advisory Council Charter Amendments

#6 – Annual Assembly Bill 617 Program Update

#7 – Update on Mobile Complaint Intake and Open Air Initiatives

BAY AREA AIR DISTRICT
Memorandum

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

From: Philip M. Fine
Executive Officer/APCO

Date: November 4, 2026

Re: Adoption of Proposed Amendments to Regulation 9: Inorganic Gaseous
Pollutants, Rule 6: Nitrogen Oxide Emissions from Natural Gas-Fired Boilers
and Water Heaters

RECOMMENDED ACTION

Staff recommends that the Board adopt the Resolution, which includes:

- Proposed Amendments to Regulation 9, Rule 6; and
- Findings of necessity, authority, clarity, consistency, non-duplication, and reference.

BACKGROUND

In 2023, the Board adopted amendments to Regulation 9, Rule 6 to reduce emissions of nitrogen oxides (NO_x) from residential and commercial water heating equipment. The rule was adopted because water heaters and furnaces represent one of the largest remaining controllable sources of NO_x emissions in the Bay Area.

NO_x emissions contribute to the formation of ozone and fine particulate matter, both of which are associated with adverse public health impacts, including respiratory and cardiovascular illness. Continued reductions in NO_x emissions are necessary for the region to attain and maintain federal and state health-based air quality standards and to protect public health, particularly in communities disproportionately impacted by air pollution.

The rule is intended to achieve long-term emissions reductions by transitioning the market toward zero-NO_x technologies while delivering significant air quality, climate, and public health benefits.

Existing Requirements:

Under the rule currently in effect, affected residential water heater replacements must comply with zero-NOx requirements beginning January 1, 2027. Subsequent compliance dates apply to larger commercial and specialty equipment categories.

The currently adopted rule does not include exemptions for low-income households, electrical constraints, space limitations, multifamily housing, affordable housing, or other site-specific circumstances.

When adopting the rule in 2023, the Board directed staff to evaluate implementation readiness, market conditions, technology availability, consumer affordability, and potential barriers to compliance and to return with recommendations if modifications were warranted.

Hearing Outcome:

This item is an adoption hearing. Staff requests that the Board take a single action approving:

1. Adoption of the proposed amendments to Regulation 9, Rule 6; and
2. Adoption of the required statutory findings regarding necessity, authority, clarity, consistency, non-duplication, and reference.

This action would provide exemptions for low-income property owners and for situations where installation of compliant equipment is particularly expensive due to electrical or space constraints. The proposed amendments also provide for a 1-year delay in the effective date of the pollution standard in order to provide time to set up the exemption system and conduct additional outreach to property owners, retailers, and other stakeholders. The Board will not be voting on whether to eliminate the zero nitrogen oxides standard altogether. A "no" vote on the proposed amendments leaves the current rule in place with no exemptions and a January 2027 start date.

DISCUSSION**Rule Development Process:**

The proposed amendments are the result of an extensive implementation review process initiated following the Board's adoption of the original rule in 2023.

Major milestones include:

- Board adoption of Regulation 9, Rule 6 amendments in 2023.
- Formation of an Implementation Working Group (IWG) composed of stakeholders representing environmental organizations, environmental justice advocates, manufacturers, contractors, utilities, local governments, housing interests, labor representatives, and technical experts.
- Development of implementation-readiness assessments and stakeholder recommendations.
- Release of the December 2024 implementation assessment report.
- Development and release of a concept paper evaluating potential amendments.

- Multiple Board and committee discussions regarding implementation challenges and potential solutions.
- Development of proposed amendments following additional public outreach and stakeholder engagement.

Key barriers to implementation identified during the IWG process include limited availability of small capacity products, affordability concerns, insufficient installation space, electrical infrastructure limitations, and complex replacement needs in multifamily and affordable housing properties. These barriers are addressed through the proposed amendments discussed below.

A similar implementation review process is underway for the furnace provisions of Regulation 9, Rule 4. Staff expect to return to the Board with recommendations regarding that rule following completion of the ongoing review. No action regarding furnace requirements is requested at this hearing.

Proposed Amendments:

Based on extensive stakeholder engagement, technical analysis, and implementation planning, staff is recommending targeted amendments intended to address identified barriers while preserving the majority of anticipated emissions reductions.

The proposed amendments include:

- Allowing continued sales of water heaters smaller than 30 gallons;
- Establishing exemptions for qualifying low-income households;
- Establishing exemptions for documented space constraints;
- Establishing exemptions for documented electrical constraints;
- Delaying implementation for certain categories to January 1, 2033, including multifamily housing and affordable housing developments; and
- Delaying implementation of requirements for units under 75,000 BTU/hr to January 1, 2028 to allow development of the exemption process and expanded public outreach and education.

These amendments are intended to address key implementation challenges identified through the rule development process.

Impacts of the Proposed Amendments:

The proposed amendments are intended to reduce implementation barriers and compliance costs while maintaining substantial long-term air quality benefits.

Based on staff implementation analysis, approximately 50.2 percent of water heater replacements are expected to transition directly to compliant zero-NOx technologies under the amended rule. Approximately 49.8 percent of replacement events are projected to qualify for an exemption, delayed compliance pathway, or other accommodation established by the amendments.

The exemptions and delayed-compliance provisions are intended to provide targeted relief for households and property owners facing financial, technical, or infrastructure-related barriers while ensuring that a significant portion of replacement activity continues to move toward zero-NOx technologies.

Although the amendments delay compliance for certain categories and provide targeted exemptions, substantial emissions reductions are still expected to occur over time as existing equipment reaches the end of its useful life and is replaced with zero-NOx technologies.

In addition, incentive programs offered by program administrators throughout the region are expected to continue driving voluntary adoption of heat pump water heaters before mandatory compliance dates. As equipment turnover continues throughout the region, annual NOx reductions are expected to increase and provide enduring public health and air quality benefits.

Economic Impacts: A principal objective of the amendments is to reduce compliance costs while preserving long-term public health benefits.

For households transitioning to compliant heat pump water heater technology, the average incremental upfront cost is estimated at approximately \$3,500 per replacement before accounting for incentives and utility-bill savings. When annualized over the useful life of the equipment and accounting for expected operating savings, the estimated net cost is approximately \$384 to \$395 per year for affected households.

The proposed amendments substantially reduce the overall cost burden associated with implementation:

- Estimated annualized costs under the currently adopted rule: \$470.7 million
- Estimated annualized costs under the proposed amended rule: \$372.8 million
- Estimated annualized savings resulting from the amendments: \$97.9 million

These savings are primarily attributable to the proposed exemptions, delayed compliance provisions, continued availability of certain small-capacity water heaters, and other implementation flexibilities.

The socioeconomic analysis indicates that the amendments reduce economic impacts relative to the currently adopted rule while maintaining significant environmental benefits.

Regional economic modeling was used to estimate the employment impacts from the costs of complying with the amended rule. These costs would reduce employment by less than 0.02% in impacted sectors. This model assumes that household expenditures made to comply with this rule are accompanied by an equivalent reduction in other discretionary household spending. It does not account for any economic benefits of the amended rule such as health benefits.

Additional staff analysis concludes that Hispanic and Latino households represent the highest concentration of exempt households in most counties through the region. However, the broad distribution of exempt households among the remaining racial and ethnic groups suggests that the benefits of the exemption are felt by all groups throughout the region in some capacity.

Environmental Impacts: The proposal package includes an addendum to the Environmental Impact Report from the 2023 and finds the following:

- Air Quality and Greenhouse Gases: Beneficial impacts from emission reductions are delayed, with some potentially forgone due to exemptions.
- Utilities and Noise: Adverse electric infrastructure impacts are less than projected in the 2023 EIR; noise impacts remain similar.
- No new significant impacts or substantial worsening of existing significant impacts evaluated in the EIR - no subsequent or supplemental EIR is required.

Exemption Framework: If the Board adopts the proposed amendments, staff will immediately begin implementing the revised rule and developing the associated exemption program. The exemption process will be designed to protect public health while providing equitable access to compliance pathways, maintaining administrative simplicity, ensuring timely restoration of hot-water service when equipment failures occur, promoting transparency and accountability, and applying exemption criteria in a consistent and predictable manner. Implementation efforts will include development of exemption procedures and guidance materials, establishment of application and review processes, education and training for contractors, distributors, and retailers, execution of public awareness and outreach campaigns, coordination with local governments and housing providers, and ongoing evaluation and refinement of the program to ensure effective and efficient administration.

Public Comment:

At the time of drafting this memo, the public comment period is still open. Staff will verbally address the public comments received at the hearing and a response to comments will be published on the Air District website prior to the hearing. Staff evaluated concerns raised during extensive past public comment and incorporated amendments designed to address issues related to affordability, electrical readiness, space limitations, multifamily housing, affordable housing, product availability, and public awareness. The proposed amendments directly respond to many of the concerns identified through stakeholder engagement and public comment while preserving the rule's long-term environmental objectives.

Findings and Recommended Action:

Air District staff has determined that the proposed amendments continue to further the Air District's mission of reducing emissions that contribute to formation of ozone and fine particulate matter and associated public health impacts while addressing implementation concerns identified through extensive stakeholder engagement and technical evaluation.

Air District staff has prepared an Addendum to the Environmental Impact Report and concluded that the proposed amendments do not result in new significant environmental impacts beyond those previously evaluated.

Air District staff has also prepared the findings required by California Health and Safety Code Section 40727 and determined that the proposed amendments satisfy the requirements of necessity, authority, clarity, consistency, non-duplication, and reference.

BUDGET CONSIDERATION/FINANCIAL IMPACT

Air District staff anticipates that the proposed amendments to Rule 9-6 will require additional staff time and resources. The enforcement of the zero-NOx standard is anticipated to result in increased staffing needs.

In order to support the proposed exemption process and associated enforcement review required to ensure a strong implementation process, staff anticipates that the Air District will require additional full-time staff as well as potential contractor support to perform this work and ensure compliance. In addition, staff tasked with implementation will continue to explore the needs associated with specific aspects of implementation including software and technology integration of the exemption process with retailers and customer access points such as call center staffing or other customer service response.

Staff currently estimates that initial costs to implement the program will be approximately \$3 million per year. It is anticipated that these costs will be recovered through a moderate processing fee charged to property owners who apply for project specific exemptions due to space or electrical constraints. Staff will provide the Board with more details on potential costs and funding options in the first quarter of 2027.

Respectfully submitted,

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Executive Officer/APCO

Prepared by: Jennifer Lam
Reviewed by: Gregory H. Nudd

ATTACHMENT(S):

1. Final Staff Report_Rule 9-6_1002826
2. RG0906_Strikethrough_1002826
3. Rule9-6_WaterHeaters_Socioeconomic Report_FINAL
4. Appendix A to Rule 9-6 Socio_Racial Analysis_FINAL
5. Final EIR Addendum
6. Memo_small water heater costs comparison with other data_102826_Final
7. Rule_9-6_Draft_Resolution
8. Adoption of Proposed Amendments to Regulation 9, Rule 6 Presentation

FINAL STAFF REPORT

PROPOSED AMENDMENTS TO BUILDING APPLIANCE RULES – REGULATION 9, RULE 6: NITROGEN OXIDES EMISSIONS FROM NATURAL GAS-FIRED BOILERS AND WATER HEATERS



October 2026

Prepared By:

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I. EXECUTIVE SUMMARY

The Bay Area Air Quality Management District ("Air District") is proposing amendments to Regulation 9, Rule 6: Nitrogen Oxides Emissions from Natural Gas-Fired Boilers and Water Heaters ("Rule 9-6"). These amendments build upon the Rule 9-6 amendments adopted by the Board of Directors in March 2023 and are intended to support successful implementation of the rule's long-term emissions-reduction objectives while addressing implementation barriers identified through subsequent implementation planning and stakeholder engagement efforts.

Natural gas-fired water heaters and furnaces are a significant source of nitrogen oxide (NOx) emissions from buildings in the Bay Area. NOx contributes to the formation of ozone and fine particulate matter (PM2.5), air pollutants that are associated with adverse respiratory and cardiovascular health effects and disproportionately impact communities already burdened by air pollution. To address these emissions and advance regional air-quality goals, the Air District adopted amendments to Rules 9-4 and 9-6 in 2023 establishing future zero-NOx standards for covered furnaces and water heaters.

Since adoption of the 2023 amendments, Air District staff has conducted extensive implementation-review activities, including operation of the Building Appliances Implementation Working Group (IWG), contractor and distributor outreach, market assessments, affordability analyses, and presentations to the Board of Directors and Stationary Source Committee. These efforts culminated in the December 2024 report, *Informational Update Regarding Regulation 9, Rule 6: Nitrogen Oxides Emissions from Natural Gas-Fired Water Heaters less than 75,000 BTU/hr*, and subsequent policy-development efforts during 2025 and 2026.

The implementation review found that many concerns identified during the 2023 rulemaking have improved substantially. Compliant heat-pump water-heater technologies are now commercially established and increasingly available through multiple manufacturers and distributors. Contractor familiarity with compliant technologies has grown, supply-chain constraints have diminished, and statewide and local incentive programs have expanded. Implementation planning also identified new technologies and strategies, including low-voltage heat-pump water heaters, split-system configurations, smart electrical panels, circuit-sharing technologies, and load-management systems that can reduce installation barriers in many circumstances.

At the same time, implementation planning demonstrated that several challenges remain. In particular, affordability concerns, installation constraints, electrical-infrastructure limitations, multifamily housing considerations, affordable-housing impacts, and emergency replacement situations continue to present barriers for certain consumers, property owners, and businesses. As a result, the Air District's implementation review concluded that the primary implementation questions associated with Rule 9-6 have shifted from technology availability toward affordability, accessibility, and equitable deployment.

Implementation Review Findings

The implementation-review process generally found that Rule 9-6 remains technically achievable and that compliant technologies are increasingly available throughout the market. However, implementation planning also demonstrated that compliance costs and installation

challenges are not distributed evenly across all customers.

The proposed flexibility amendments are therefore intended to address implementation challenges associated with:

- Affordability;
- Electrical-service limitations;
- Installation-space constraints;
- Multifamily housing systems;
- Affordable housing projects;
- Emergency replacement situations; and Certain commercial applications with unique hot-water demands.

The proposed amendments are intended to address those implementation issues while preserving the long-term emissions-reduction framework adopted by the Board in 2023 and the associated health benefits.

Key Proposed Amendments

The proposal includes four principal categories of amendments.

Revised Compliance Dates

The proposed amendments revise the implementation schedule for Rule 9-6's zero-NO_x requirements. Covered water heaters and boilers with heat input ratings less than or equal to 75,000 BTU per hour would be subject to the zero-NO_x standard beginning January 1, 2028, rather than January 1, 2027. Covered water heaters and boilers with heat input ratings greater than 75,000 BTU per hour and less than or equal to 2,000,000 BTU per hour would be subject to the zero-NO_x standard beginning January 1, 2033, rather than January 1, 2031.

These revisions are intended to improve affordability outcomes, support equitable implementation, allow additional preparation time for consumers and contractors, and facilitate implementation of the exemption framework established by the proposed amendments.

Exemption Framework

A central element of the proposal is the creation of a structured exemption framework intended to provide targeted flexibility in situations where compliance may present significant economic, structural, electrical, operational, or timing-related challenges.

The exemption framework includes pathways for:

- Low-income qualified property owners;
- Housing cost-burdened property owners;
- Certain high-hot-water-demand businesses
- Space-constrained installations;
- Electrical-constrained installations;
- Hydronic water-heater applications;
- Multifamily housing;

- Deed-restricted affordable housing;
- Temporary emergency replacement loaners; and
- Certain wholesale transactions.

The exemptions are intended to be simple, predictable, and consumer-friendly. In most cases, eligibility is established through self-attestation and limited supporting documentation rather than extensive discretionary review. The Air District intends for the exemption process to avoid unnecessary delays in equipment purchase or installation, particularly in emergency replacement situations.

Administrative and Implementation Provisions

The amendments establish new exemption-certificate procedures, notice requirements, reporting provisions, and recordkeeping obligations intended to support implementation of the exemption framework.

New provisions include:

- Exemption certificate administration;
- Contractor reporting requirements for temporary loaner equipment;
- Point-of-sale notices for exempt equipment;
- Enhanced seller recordkeeping; and
- Enhanced contractor recordkeeping.

The amendments also simplify certain certification and interim-reporting provisions adopted as part of the 2023 rulemaking.

Clarifying Amendments

The proposal includes several technical and administrative revisions intended to improve clarity, consistency, and enforceability of Rule 9-6. New definitions are added for terms associated with the exemption framework and implementation process, including Distributor, Exemption Certificate, Hydronic Water Heater, Licensed Contractor, Low-Income Program, Mobile Home, and Retailer.

The amendments are expected to improve implementation outcomes while preserving the long-term public-health and air-quality objectives of Rule 9-6.

Emissions, Economic and Environmental Analyses

The proposed Rule 9-6 amendments are not expected to result in significant socioeconomic impacts for Bay Area households or the regional economy. The combination of relatively modest household compliance costs in percentage terms, anticipated utility savings, and targeted exemptions for low-income households substantially reduce economic burdens under Rule 9-6 as compared to the current zero-NOx requirements as adopted in 2023 while supporting the District's air quality, public health, and emissions reduction objectives.

The proposed exemptions and delays, as described in Section VI of this report, are expected to result in delayed emissions reductions, similar to those analyzed in the 2023 EIR.

There may also be continuing forgone emissions reductions as compared to the initial 2023 amendments and analysis due to the low-income exemption in the proposed amendments but

as stated above, these changes do not impact the environment as they do not reverse environmental benefits that have already occurred, nor do they eliminate emissions reductions that have already been achieved as the compliance dates as amended in 2023 have not yet occurred. The proposed amendments with the exemptions and delayed compliance dates continue to result in a less than significant (beneficial) impact to regional air quality. Should the Air District Board of Directors direct Staff to delay compliance dates in the proposed rule amendments until January 1, 2029, the analysis of this Addendum and the 2023 EIR remains intact, inclusive of the proposed exemptions.

Recommendation

Based on information gathered through implementation planning, market assessments, stakeholder outreach, public engagement, and technical analysis, Air District staff concludes that the proposed amendments will facilitate successful and equitable implementation of Rule 9-6 while preserving the Board's long-term emissions-reduction objectives.

Accordingly, staff recommends that the Board of Directors adopt the proposed amendments to Rule 9-6 and approve the associated implementation framework, including revised compliance dates, exemption provisions, and administrative requirements.

II. BACKGROUND

Rule 9-6 and the 2023 Zero-NOx Standards

Regulation 9, Rule 6 (Rule 9-6) establishes nitrogen oxide (NOx) emission standards for natural gas-fired water heaters and small boilers used in residential, multifamily, institutional, and commercial applications throughout the Bay Area. NOx is a criteria air pollutant that contributes to the formation of ozone and fine particulate matter (PM2.5), both of which adversely affect public health and regional air quality.

In March 2023, the Board of Directors adopted amendments to Rule 9-6 establishing future zero-NOx standards for covered water-heating equipment. The amendments created a long-term regulatory framework under which newly manufactured residential water heaters would be required to meet a zero-NOx standard beginning January 1, 2027, with larger commercial and multifamily equipment subject to a zero-NOx standard beginning January 1, 2031. The full 2023 amendments implementation schedule is shown in the table below.

Table 1. Current Compliance Schedule for Rules 9-4 and 9-6¹

January 1, 2027	Water heaters less than 75,001 BTU/hr ² (typically residential tank water heaters)
January 1, 2029	Residential and commercial furnaces
January 1, 2031	Water heaters between 75,001 and 2 million BTU/hr (typically commercial and multifamily as well as tankless units)

(The above only applies to appliances manufactured after the noted date)

The 2023 amendments reflected the Board's determination that additional reductions in emissions from water-heating equipment would provide important air-quality and public-health benefits. By phasing out polluting gas furnaces and water heaters starting in 2027, Rules 9-4 and 9-6, as amended in 2023, were projected to result in the health benefits summarized in the table below.³

At the time of adoption, the Board recognized that technology development, market conditions, installation practices, infrastructure readiness, and consumer costs would continue to evolve before future compliance dates. Therefore, the Board directed Staff to continue monitoring implementation conditions and engaging stakeholders regarding issues that could affect successful implementation of the rule.

¹ Please note that the above table shows compliance dates currently in effect based on active regulations. The draft amendments accompanying this regulatory overview introduce delayed compliance dates of January 1, 2028 and January 1, 2033 for small and large water heaters, respectively. More information on this can be found in the "Proposed Rule Amendments" section of this document. The compliance date for furnaces is currently being evaluated as part of the Implementation Working Group process and more a full report from that process is forthcoming in Fall 2026.

² BTU/hr means British thermal unit per hour

³ https://www.baaqmd.gov/~media/dotgov/files/rules/reg-9-rule-4-nitrogen-oxides-from-fan-type-residential-central-furnaces/2021-amendments/documents/20230307_fsr_rules0904and0906-pdf.pdf?rev=100de6caff2342e6b095b59acf2321d0

Table 1. Health Benefits from 2023 Amendments to Rules 9-4 & 9-6

Major health benefits from Rules 9-4 and 9-6	
These appliance rules help improve regional air quality by reducing pollution from furnaces and water heaters.	 Cleaner outdoor air Less NO _x & PM _{2.5} from venting
Lower pollution means lower exposure to fine particles (PM _{2.5})	 Cleaner Bay Area Communities Biggest PM _{2.5} reductions in communities of color & overburdened neighborhoods
Reducing PM _{2.5} and NO _x exposure can prevent dozens of early deaths every year in the Bay Area.	 Up to 85 early deaths avoided each year from cleaner air
Health improvements from cleaner air avert unnecessary costs from health impacts.	 Up to \$890M Annual health benefits saved in avoided illnesses, hospital visits, and early deaths ⁴
Climate co-benefits resulting from electrification of appliances	Based on current technology, zero-NO _x appliances are electric, and their use would result in a reduction of greenhouse gas emissions

Post-Adoption Implementation Review

Following adoption of the 2023 amendments, the Air District initiated a multi-year implementation review to evaluate implementation readiness, identify potential barriers to compliance, and inform future rule administration.

A central component of this effort was the Building Appliances Implementation Working Group (IWG), which included representatives from manufacturers, distributors, contractors, labor organizations, utilities, local governments, housing stakeholders, community-based organizations, environmental organizations, and technical experts. Between 2023 and 2024, the Air District convened more than twenty meetings involving technical discussions, implementation planning, and community and stakeholder engagement.

The implementation review examined a broad range of topics, including technology availability, workforce capacity, permitting practices, electrical infrastructure considerations, affordability, multifamily housing applications, emergency replacement situations, and customer access issues.

⁴ https://www.baaqmd.gov/~media/dotgov/files/rules/reg-9-rule-4-nitrogen-oxides-from-fan-type-residential-central-furnaces/2021-amendments/documents/20221220_sr_appe_rq09040906-pdf.pdf?rev=d4b056153496491fad817c6d4a87df78&sc_lang=en

To support this effort, the Air District commissioned and evaluated technical analyses addressing installation costs, market and sales trends, workforce readiness, permitting requirements, electrical infrastructure considerations, renter impacts, and other implementation issues. Staff also conducted outreach with contractors, distributors, manufacturers, housing organizations, and members of the public. Information collected through these activities provided a more comprehensive understanding of implementation conditions than was available during the 2023 rulemaking.

Findings of the Implementation Review

The implementation review found increased availability of compliant technologies, expanded manufacturer participation, improved contractor familiarity, and reduced supply-chain constraints compared to conditions evaluated during development of the 2023 amendments. Additional incentive programs, workforce-training efforts, and implementation resources also became available during this period.

Collectively, these findings indicate improved market readiness for implementation of the zero-NOx standards adopted in 2023.

At the same time, the review identified several continuing implementation challenges that could affect compliance for certain customers and installation types:

- Affordability and customer access;
- Electrical-service limitations;
- Space-constrained installations;
- Multifamily and centralized hot-water systems;
- Emergency replacement situations;
- Housing providers serving lower-income residents; and
- Certain commercial uses with unusually high hot-water demand.

A central conclusion of the review was that, although concerns regarding technology availability and market readiness were reduced relative to those expressed during the 2023 rulemaking process, implementation challenges remain for some customers and building types. These findings became the primary basis for development of the amendments proposed in this rulemaking.

December 2024 Implementation Report

On December 4, 2024, staff presented an informational update to the Board of Directors summarizing the results of the implementation review and evaluating readiness for the first Rule 9-6 compliance date.

The report concluded that substantial progress had occurred in product availability, workforce readiness, permitting resources, and market development since adoption of the 2023 amendments. The report also identified areas where additional implementation flexibility may be appropriate to address affordability concerns and installation barriers while maintaining the long-term emissions-reduction framework adopted by the Board.

Following discussion of the report by the Board of Directors, Staff continued evaluating potential amendments focused on implementation practicality, affordability, and customer access at the Board's direction.

Development of the Proposed Amendments

Building upon the findings of the implementation review, Staff initiated development of amendments intended to preserve the Board's long-term emissions-reduction objectives while addressing implementation barriers identified through the review process.

In October 2025, staff released a public concepts paper evaluating potential amendments related to affordability, installation constraints, and customer access. Staff subsequently presented implementation findings and regulatory concepts to the Stationary Source Committee, the Board of Directors, stakeholder groups, and members of the public throughout 2025 and 2026. The proposed amendments are the result of that implementation review and stakeholder-engagement process.

The overarching goal of this rule amendment effort for Rule 9-6 is to support equity and affordability for residents while continuing to achieve the air quality benefits associated with the replacement of polluting equipment over time.

Staff have received several recurring questions regarding the applicability and implementation of Rule 9-6 during stakeholder engagement. In some cases, the interpretations stem from misunderstandings about when or how the rule applies. Table 3 below highlights several common misconceptions and provides clarification of the actual requirements of the currently adopted Rules 9-4 and 9-6, prior to any potential changes discussed elsewhere in this document.

Table 3. Simplified Myths Vs. Facts for the Currently Adopted Rule 9-6

Myths	Facts
<i>Mandatory replacements of all equipment starting in 2027</i>	Existing water heaters can remain in operation until they burn out or need replacement
<i>Point-of-purchase requirement</i>	The rule is triggered when equipment is replaced (purchased), not when a property is sold
<i>Applicability based on building type or installation date</i>	Requirements are based on the appliances size and date of manufacture
<i>This rule is an electrification or decarbonization mandate</i>	The rule reduces regional NOx emissions caused by natural gas combustion and the associated PM_{2.5} formation to improve air quality and public health. Additionally the rule applies only to natural gas-fired equipment, not propane or other fuels
<i>This rule applies to stoves, ovens and dryers</i>	The rule does not apply to stoves, ovens, or dryers.
<i>This rule applies to appliances used in mobile homes</i>	The zero-NOx requirements of the rule do not apply to mobile home water heaters and the standards for these will remain unchanged. There is not expected to be a disruption in availability of equipment for mobile homes.

Regulatory and Market Developments

The implementation review occurred during a period of significant regulatory and market activity related to building-appliance emissions and electrification.

At the state level, the California Air Resources Board (CARB) has continued development of statewide clean space and water heater standards intended to reduce greenhouse-gas emissions from buildings. CARB has indicated that any future statewide standards are intended to operate alongside local air district regulations addressing NOx emissions and submitted a letter in support of the draft amendments to Rule 9-6 that were released in July 2026 noting that they were complementary to potential state action.

At the regional level, the South Coast Air Quality Management District (SCAQMD) has conducted extensive rule-development efforts addressing emissions from residential and commercial space- and water-heating equipment. Between 2023 and 2025, SCAQMD evaluated proposed amendments to Rule 1111 (natural-gas-fired furnaces) and Rule 1121 (residential-type natural-gas-fired water heaters). The proposed amendments would have established a regulatory framework intended to accelerate deployment of zero-emission technologies through manufacturer sales requirements and related implementation measures. Following an extensive rule-development process that included working-group meetings, public workshops, technical analyses, socioeconomic review, and public hearings, the SCAQMD Governing Board chose not to adopt the proposed amendments. As a result, the previously amended versions of Rule 1111 and Rule 1121 remain in effect with no zero-NOx requirements.

SCAQMD separately pursued amendments to Rule 1146.2, which introduce zero-NOx requirements for large water heaters, small boilers, process heaters, and certain pool heaters. On June 7, 2024, the SCAQMD Governing Board adopted amendments establishing a phased transition toward zero-NOx equipment for covered sources, with compliance dates beginning in 2026 and extending through 2033 depending on equipment type and application. The amendments include compliance flexibility provisions and exemptions for certain circumstances and are expected by SCAQMD to achieve significant reductions in NOx emissions.

The Air District monitored these efforts throughout the implementation-review process and considered relevant information developed through those proceedings. Staff also observed continuing efforts by local governments, utilities, manufacturers, distributors, contractors, and workforce-development organizations to support deployment of heat pump technologies and other low-emission equipment.

The amendments proposed in this Staff Report do not change the Air District's long-term objective of reducing NOx emissions from water-heating equipment. Instead, they are intended to improve implementation based on information collected since the Board's 2023 action.

Specifically, the amendments are intended to:

- Update compliance timelines where appropriate;
- Establish targeted exemptions for qualifying circumstances;
- Create an exemption-certificate process;
- Clarify implementation responsibilities and administrative procedures;
- Improve notice and recordkeeping provisions; and
- Incorporate lessons learned through implementation planning and stakeholder engagement.

Accordingly, the amendments are intended to support both the long-term air-quality objectives of Rule 9-6 and practical implementation for affected households, businesses, and property owners.

III. PROPOSED RULE AMENDMENTS

The Air District is proposing amendments to Regulation 9, Rule 6: Nitrogen Oxides Emissions from Natural Gas-Fired Boilers and Water Heaters ("Rule 9-6"). The proposed amendments maintain the long-term objective of reducing NOx emissions from water-heating equipment while incorporating implementation lessons learned following adoption of the 2023 amendments. The key proposed amendments are summarized below.

Rule Applicability

In order to provide more clarity on applicability of the rule and ease public understanding, the proposed amendments revise the applicability provisions of Rule 9-6 to clarify that the rule applies to any person who sells, offers for sale, or installs covered natural gas-fired water heaters and boilers within the Air District, indicating that all sales of covered natural gas-fired equipment in the Air District must comply with the provisions of the rule. The applicability section also clarifies that persons subject to the rule must comply with the new monitoring, reporting, and recordkeeping requirements contained in Section 9-6-500.

Exemptions

One of the most significant changes proposed in this amendment package is the creation of a structured exemption framework. The framework is intended to address situations where compliance may present significant affordability, electrical, structural, operational, or timing-related challenges while maintaining the long-term emissions-reduction goals of Rule 9-6.

Low-Income Exemption (Section 9-6-111)

This exemption would provide that a natural gas-fired water heater that does not meet the zero-NOx requirements may be installed in the following situations, but only if the purchaser obtains an Exemption Certificate from the Air District before installation. The low-income exemption is available to all property owners who qualify at the time of application for an exemption certificate, regardless of previous exemptions claimed.

- **Low-income property owners:** Property owners whose income is at or below 80% of Area Median Income or can demonstrate low-income status through participation in a qualifying low-income assistance program may install a non-compliant water heater.

Proposed amendments to Rule 9-6 define qualifying low-income programs for this exemption which include Covered California, Medi-Cal, food assistance programs, energy rate assistance programs and supplemental security income (SSI). This exemption is intended to provide relief from potentially higher incremental costs of installation for low-income property owners. This provision has been updated from the draft amendments released in July 2026 to expand applicability to 80% of area median income (AMI), determined by household size and county, in order to address concerns about costs of compliance. AMI limits are set by the United States Department of Housing and Urban Development (HUD) on an annual basis.⁵ HUD develops AMI income limits based on data from the American Community Survey and other sources.

⁵ <https://www.huduser.gov/datasets/il/il2026>, <https://www.huduser.gov/portal/datasets/il.html>

- **Housing cost-burdened property owners:** Property owners whose annual mortgage and property tax payments are at least 28%⁶ of their annual household gross income may install a non-compliant water heater. Property owners will self-attest to their status as housing cost-burdened. This exemption is intended to provide relief for property owners who spend a large portion of their income on housing cost and may not be able to afford the incremental cost of installing a zero-NOx water heater.

One-Time Limited Exemptions for Qualifying Projects (Section 9-6-112)

This section establishes limited, one-time exemptions that allow replacement of an existing natural gas water heater with another natural gas unit when site conditions make compliance difficult. An exemption certificate must be obtained before installation. Exemptions are available only for existing buildings and are limited to a single use per property address, regardless of ownership changes or prior exemptions. The one-time nature of these exemptions reflects the expectation that the replacement equipment installed under the exemption will remain in service for an average of 13 years⁷, providing additional time for technological improvements, infrastructure investments, building modifications, and market development that are expected to reduce or eliminate the barriers that originally justified the exemption. This approach is intended to provide flexibility for current implementation challenges and a planning horizon for homeowners while maintaining the long-term objective of emission reductions and regional air quality improvements. Air District staff or the Board of Directors may re-evaluate the need for continuation of these exemption types in the future. New construction projects are not eligible for these exemptions. Qualifying circumstances include:

- **Ventilation Space Constraints:** Existing water heaters located in enclosed spaces smaller than 700 cubic feet that cannot be modified to provide the ventilation required for compliant equipment.
- **Ceiling Height Constraints:** Existing water heaters located in garages with ceiling heights below 7.2 feet or other indoor spaces with ceiling heights below 6 feet, where installation of compliant equipment may not be feasible.

The exemption process is intended to address physical site constraints while maintaining the overall transition to compliant water-heating technologies.

- **Electrical Constraints⁸:** A licensed contractor must certify that significant electrical constraints exist in an existing building including:
 - o Existing knob-and-tube wiring where installation of a compliant electric water heater would require more than 50 feet of conduit between the water heater and the electrical panel or subpanel.

⁶ https://www.baaqmd.gov/~media/dotgov/files/rules/reg-9-rule-4-nitrogen-oxides-from-fan-type-residential-central-furnaces/2021-amendments/documents/20260713_rule_9_6_regulatory_overview_updated_july_draft_amendment_package.pdf?rev=f4c5f70f25674a2787eed4d39abc97ab&sc_lang=en

⁷ https://www.baaqmd.gov/~media/dotgov/files/rules/reg-9-rule-4-nitrogen-oxides-from-fan-type-residential-central-furnaces/2021-amendments/documents/20230307_fsr_rules0904and0906.pdf.pdf?rev=100de6caff2342e6b095b59acf2321d0&sc_lang=en

⁸ More detail on these thresholds can be found at:
https://www.baaqmd.gov/~media/dotgov/files/rules/reg-9-rule-4-nitrogen-oxides-from-fan-type-residential-central-furnaces/2021-amendments/documents/20260717_water_heater_rule_flyer_en_final.pdf.pdf?rev=dc29cc0e1b1249c1b24fc96517d3572d&sc_lang=en

- o Electrical service capacity of less than 100 amps for most buildings, or less than 60 amps per dwelling unit in multifamily residential buildings with five or more dwelling units.
- o The need for a new 240-volt electrical connection requiring more than 50 feet of conduit.
- o Electrical panels that lack available circuit breaker space or expansion slots.

Time-Limited Exemptions for Water Heaters Larger than 30 gallons and 75,000 BTU/hour or less (Section 9-6-113)

This exemption allows the installation of natural gas-fired water heaters that do not meet the zero-NOx requirements in certain scenarios, provided an exemption certificate is obtained before installation. These exemptions are intended to provide additional time for installations where electrification may present greater technical, operational, or financial challenges, particularly in multi-family scenarios. Eligible installations would be limited to water heaters manufactured before January 1, 2033. These time-limited exemptions apply to:

- **Hydronic Heating Systems:** Natural gas storage tank water heaters used in hydronic heating applications.⁹
- **Multifamily Residential Buildings:** Buildings with five or more dwelling units.
- **Deed-Restricted Affordable Housing:** Properties subject to federal, state, or local affordability restrictions.
- **Nonprofit Mutual Housing Cooperatives:** Housing properties owned and operated by qualifying nonprofit cooperative housing organizations where residents buy shares in that corporation rather than owning their specific apartment or house directly.
- **Businesses with Specialized Hot Water Needs:** Restaurants, food service establishments, laundries, dry cleaners, healthcare facilities, and assisted living facilities that can demonstrate a need for high-temperature hot water (160°F or greater) for a specific installation.

These exemptions are designed as transitional measures to support housing providers, multifamily property owners, and businesses with specialized hot water demands while replacement technologies and supporting infrastructure continue to develop. All installations would require documentation and approval through the exemption certificate process prior to installation. The continued applicability and need for these exemptions may be re-evaluated by Air District Staff in the years leading up to the 2033 implementation date at which point further amendments may be evaluated to ensure equitable and practical implementation of the rule.

Contractor Temporary Replacement (Section 9-6-114)

Licensed contractors may install a temporary natural gas replacement water heater when an existing unit fails, and immediate installation of compliant equipment is not feasible. The temporary unit must either be removed within 12 months or replaced with, or approved under, a qualifying exemption pathway. Contractors must comply with all reporting requirements associated with the temporary installation.

⁹ The compliance date for hydronic heating systems is proposed to be moved to January 1, 2033, out from January 1, 2031 as drafted in July 2026, in an effort to reduce confusion surrounding multiple compliance dates and align compliance dates for technologies that are frequently found in multifamily housing scenarios to allow for continued holistic implementation review. Air District Staff acknowledges comments received from hydronic heating system manufacturers requesting to align this date with compliance dates for Rule 9-4 for furnaces due to the dual nature of hydronic systems. Air District Staff recommends that stakeholders remain engaged in the implementation review process for Rule 9-4 and potential future amendments to ensure alignment with compliance dates across uses of the technology.

Limited Exemption for Wholesale Sales (Section 9-6-115)

In order to allow for the continued retail availability of water heaters that do not meet the zero-NOx requirements for the above exempt scenarios, this section allows for continued wholesale distribution of these units. Wholesale sales are also exempt from the noticing requirements introduced in proposed Section 9-6-407.

Exemption for Natural-Gas Fired Mobile Home Water Heaters (Section 9-6-116)

In order to provide clarity for mobile home residents and stakeholders, this section was added to clarify that mobile home water heaters are exempt from the requirements of Sections 9-6-301 and 9-6-303 and the zero-NOx standards. Mobile home water heaters continue to be applicable to Section 9-6-304 for which the standard remains 40 ng/J (originally adopted in 2007).

There is no formal compliance mechanism or exemption waiver process required for mobile home owners purchasing non-zero-NOx water heaters as mobile home water heaters are typically sold as a separate equipment class ("mobile home water heaters") that are subject to the emissions standards of 9-6-304. The exemption form may include an additional pathway for those that require larger equipment, which will continue to be explored through the implementation process. Supply chains are expected to continue supplying equipment to distributors and big box stores as equipment class of mobile home water heaters is exempt. Additionally, sales will continue for a large number of units otherwise exempt as described throughout this report, so staff does not anticipate any issues for mobile home owners to access appropriate equipment for purchase as needed and allowed under the proposed and existing rule.

Definitions

To support administration of the new exemption framework, the amendments add several new definitions.

New definitions include:

- **Hydronic Water Heater** - A water heater that heats potable water directly within the appliance and is designed to provide space heating either directly or indirectly through distributing heated fluid to either a fan coil or similar appliance.
- **Licensed Contractor** - A plumber, electrician, heating ventilation & air conditioning (HVAC) contractor, or general contractor licensed through the California Contractors State License Board.
- **Low-Income Program** - Any of the following programs, or other program designated by the Air Pollution Control Officer (APCO) as a "Low Income Program" eligible for an exemption under Section 9-6-111.4: Covered California Silver 94, Covered California Silver 87, Covered California Silver 73, Medi-Cal for Adults, Medi-Cal for Pregnant Individuals, Bureau of Indian Affairs General Assistance, CalFresh/SNAP (Food Stamps), CalWorks (TANF) or Tribal TANF, California Alternate Rates for Energy (CARE), Family Electric Rate Assistance Program (FERA), Free or Reduced National School Lunch Program (NSLP), Head Start Income Eligible (Tribal Only), Women, Infants and Children (WIC), Supplemental Security Income (SSI), Low Income Home Energy Assistance Program (LIHEAP)
- **Mobile Home** - Any home that is a "manufactured home" or "mobile home" as defined in California Health and Safety Code (H&SC) Sections 18007 and 18008. Mobile home does not include a commercial modular, as defined in H&SC Section 18001.8; factory-built housing, as defined in H&SC Section 19971; a manufactured home, as defined in H&SC Section 18007; or a multifamily manufactured home, as defined in H&SC Section

18008.7.

- **Wholesale Sale** – A sale of goods for resale or commercial distribution, rather than for the purchaser's end use, which are not subject to sales tax at the time of the sale.

Additionally, definitions were renumbered throughout the rule to allow for alphabetic listing. These definitions are intended to improve implementation clarity and ensure consistent application of the exemption provisions.

Standards

The proposed amendments retain the zero-NOx performance standard while revising implementation dates.

NOx Standards for Natural Gas-Fired Storage Water Heaters with a Rated Heat Input Capacity of 75,000 BTU/hr or less (Section 9-6-301)

Water heaters manufactured after January 1, 2028, must meet the zero-NOx standard to be sold or installed in the Bay Area. This deadline has been extended one year to ensure appropriate rollout of the exemption process, and to provide more time for outreach to the public. There are a few exceptions to the January 1, 2028, deadline as follows:

- Units less than 30 gallons are subject to the 10 ng/J¹⁰ standard set forth in Section 301.4. Continued sales are allowed as there are currently no 30-gallon or smaller zero-NOx water heaters available in the US market. Editorial changes have been made to Sections 301.3 and 301.4 for consistency in applying this standard.
 - The continued applicability and need for this exception for small equipment may be re-evaluated by Air District Staff as the market continues to develop, at which point further amendments may be evaluated to facilitate continued emissions reductions
- The zero-NOx standard does not apply to exempt projects as limited and described above in the exemptions section (Sections 111 through 114).

NOx Standards for Natural Gas-Fired Boilers and Water Heaters with a Rated Heat Input Capacity of greater than 75,000 BTU/hr to 2,000,000 BTU/hr (Section 9-6-303)

Water heaters manufactured after January 1, 2033, must meet the zero-NOx standard to be sold, purchased, or installed in the Bay Area. The proposed compliance-date revisions do not necessarily reflect a lack of available technology for all exempt categories such as multifamily buildings. Rather, they are intended to provide additional time for:

- Consumer planning;
- Contractor preparation;
- Administration of the exemption program;
- Development of reporting systems;
- Improvement of equitable access to compliant technologies; and
- Expansion of incentive and financing opportunities such as the Equitable Building Decarbonization Program

The zero-NOx standard does not apply to exempt projects as limited and described above in the exemptions section (Sections 111 through 114). This deadline and additional exemptions will be

¹⁰ Nanograms of nitrogen oxides (measured as NO₂) per joule of heat output.

re-evaluated as a report to the Board of Directors by January 1, 2031, as required by Section 9-6-404.

Additionally, editorial changes to this section were made to clarify the applicability of the standard to units greater than 75,000 BTU/hr (as opposed to 75,001 BTU/hr).

Administrative Requirements

Equipment Certification (Section 9-6-402)

The proposal renames and simplifies the existing compliance-statement provisions by establishing an Equipment Certification structure tied directly to the certification requirements in Section 9-6-302.

Identification (Section 9-6-403)

The amendments revise product-identification requirements to clarify that no person may sell, offer for sale, purchase, or install covered equipment unless the equipment can be identified through model number, certification status, and date of manufacture.

Interim Reporting (Section 9-6-404)

Following completion of the first implementation review cycle, the interim-report requirement for small water heaters is removed.

The remaining interim-report requirement would apply only to larger equipment regulated under Section 9-6-303.5 and would occur approximately two years before the January 1, 2033, compliance date.

Exemption Certificate Requirements for Non-Compliant NOx-Emitting Equipment (Section 9-6-405)

This section was added to set forth exemption certificate requirements. Applicants seeking an exemption must submit:

- Verified address for the dwelling unit where the NOx-emitting equipment will be installed;
- Applicant name and contact information; and
- Additional documentation establishing eligibility of an exemption

This section also states that the APCO would issue an exemption certificate authorizing installation of one qualifying non-compliant water heater per approved exemption upon receipt of the required information.

Reporting Requirements for Temporary Emergency Replacement Loaners (Section 9-6-406)

This section was added to set forth requirements for licensed contractors utilizing the temporary loaner exemption under Section 9-6-114.2. Licensed contractors utilizing temporary replacement loaners must report:

- Serial numbers of units;
- Installation locations;
- Exemption-certificate information;
- and must notify the Air District when loaner equipment is removed, sold, or disposed of.

Noticing Requirements for NOx Emitting Equipment Offered for Sale (Section 9-6-407)

This section was added to set forth requirements for sellers of NOx emitting equipment. After January 1, 2028, sellers offering non-compliant water heaters must clearly display a notice stating that the equipment may only be purchased and installed with a valid Exemption Certificate. The notice must also provide information on how to access Air District compliance guidance and the exemption registration process. Prior to the compliance date, the Air District will work with relevant stakeholders to provide sample language for noticing as well as guidance for providing notice through online retailers. If a unit is to be sold or delivered within the Bay Area Air District, online retailers must comply with this requirement as well as with exemption and other recordkeeping requirements.

Monitoring and Records

Recordkeeping Requirements for Water Heater Sellers (Section 9-6-501)

This new section adds requirements for water heater sellers to maintain records of any NOx emitting water heater 75,000 BTU/hr or less and related exemption certificates beginning January 1, 2028, for five years. Records must include the following verifiable information:

- Date of the sale or purchase
- Name, business name, and address of the purchaser and seller
- Location of the sale, purchase, delivery and/or installation (as applicable)
- Serial number of the water heater
- Whether the sale/purchase is covered by an Exemption Certificate number and supporting records for the exemption, if applicable

Air District Staff intend for the information that is collected through the recordkeeping process to be evaluated on an aggregate basis to ensure compliance with the requirements of the rule. Information such as the name and address of the purchase of equipment is required to ensure compliance with the requirements of one-time exemptions and other rule provisions. Air District staff will publish implementation guidance prior to the proposed compliance date of January 1, 2028, regarding recordkeeping and reporting requirements. For example, the retention of an exemption certificate which can be linked to the address of the purchaser may suffice to fulfill the requirements for the purchaser of Section 9-6-501.2 in certain circumstances.

Implementation guidance will also include information about automated pathways or regular intervals at which records may be submitted to the Air District, however this section does not require regular reporting. The Air District, as part of regular course of action, may send inspectors to review records. This also allows businesses to choose to keep the records onsite as opposed to submitting them to the Air District for storage. That being said, any records submitted to or reviewed by the Air District under Section 501 will be treated as confidential business information and handled in accordance with relevant privacy requirements.

Section 9-6-502 Contractor Recordkeeping

Additionally, a new section was added for contractor recordkeeping in which, beginning January 1, 2028, licensed contractors must maintain records documenting purchase dates, installation dates, installation locations and exemption-certificate information for all NOx-emitting water heaters purchased, sold or installed. Records must be maintained for five years and provided to the APCO upon request. Contractors who both purchase and install equipment must satisfy both seller and contractor recordkeeping requirements.

Air District Staff intends to utilize the recordkeeping provisions of this rule to monitor overall

compliance with the requirements of the rule and investigate repeated or intentional circumvention of the rule requirements. The recordkeeping requirements are necessary to ensure the ability of the Air District to validate the use of Exemption Certificates and that the program is functioning as intended. Air District Staff intends to continue working with stakeholders to determine the most efficient method for review of records or potential optional reporting for sellers with the intention to maximize program compliance while minimizing disruptions to regular business.

IV. Exemption Framework and Implementation Process

Purpose of the Exemption Framework

The proposed amendments establish a structured exemption framework intended to address circumstances where immediate compliance with the Rule 9-6 zero-NOx requirements may create substantial affordability, infrastructure, operational, or installation challenges. The framework is designed to provide targeted flexibility while preserving the long-term emissions-reduction objectives established by the Air District Board of Directors in 2023.

The proposed exemptions are intended to address situations identified through the Air District's post-adoption implementation review process, including affordability concerns among low-income and housing cost-burdened households, electrical infrastructure limitations, constrained installation conditions, multifamily and affordable-housing applications, emergency replacement scenarios, and certain commercial applications with unusually high hot-water demand.

Guiding Principles

The proposed exemption framework is designed around three implementation principles:

- **Simple:** Eligibility requirements are intended to be clearly defined, straightforward and based primarily on self-attestation and limited supporting documentation.
- **Timely:** Consumers should not experience delays in restoring hot water service or replacing failed equipment.
- **Targeted:** Exemptions are intended to address specific affordability, infrastructure, and installation barriers identified through the implementation review process.

The proposed exemption framework is designed to function as an administrative certification process rather than a traditional permitting program. The Air District's role is to verify eligibility under clearly defined exemption categories and maintain records supporting implementation of the rule. The process is not intended to require extensive case-by-case review, discretionary approvals, or prolonged waiting periods before equipment can be purchased or installed. For most exemption categories, eligibility is established through applicant self-attestation combined with limited supporting documentation. This approach minimizes administrative burden while allowing the Air District to maintain sufficient records for enforcement and program-evaluation purposes. It also helps ensure that implementation of Rule 9-6 does not interfere with time-sensitive appliance replacement decisions, particularly when property owners are responding to unexpected equipment failures.

As a matter of clarification, Staff would like to acknowledge that in the event of a product failure, manufacturers, through a wholesaler, can be allowed to furnish a replacement water heater of the same type. The manufacturer's warranty offered at the time of purchase shall be applicable regardless of whether the property owner has obtained an exemption under the proposed rule. This aligns with the Air District's intention that equipment may be repaired under the proposed amendments.

How the Exemption Process Works

In most cases, exemption eligibility is expected to be established through objective criteria and applicant self-attestation. The exemption process is intended to operate concurrently with normal appliance replacement activities and is designed to not delay purchases, installations, or restoration of hot-water service.

Step 1: Determine Eligibility

The applicant determines whether the proposed project qualifies under one of the exemption categories established in Sections 9-6-111 through 9-6-114.

Potential exemption categories include:

- Low-income qualified property owners;
- Housing cost-burdened property owners;
- Certain high-hot-water-demand businesses;
- Space-constrained installations;
- Electrical-constrained installations;
- Multifamily and affordable-housing installations;
- Hydronic water-heater applications;
- Temporary emergency replacement loaners; and
- Qualifying wholesale transactions.

Step 2: Submit Application and Documentation

The applicant submits an exemption application to the Air District. The application would generally include:

- Installation address;
- Applicant contact information;
- Identification of the requested exemption category;
- Documentation demonstrating eligibility;
- Equipment information, where applicable; and
- Any required certifications or attestations.

Examples of Supporting Documentation

- **Income Eligibility:** Documentation sufficient to demonstrate that household income is at or below 80 percent of the Area Median Income (AMI), subject to the documentation requirements established for the program.
- **Housing Cost Burden:** A signed self-certification demonstrating that housing-related costs consume a significant portion of gross household income, consistent with program requirements.
- **Space Constraint:** Information reasonably demonstrating that site conditions satisfy applicable program criteria. Documentation may include photographs, measurements, contractor information, plans, or other supporting materials.
- **Electrical Constraints:** Information reasonably demonstrating eligibility under the program's electrical-constraint criteria. Documentation may include contractor assessments, equipment information, photographs, or other supporting materials.

Step 3: Administrative Review and Certificate Issuance

If the required eligibility information and supporting documentation are provided, the Air District issues an exemption certificate authorizing installation of qualifying equipment under the applicable exemption category.

For exemption categories that are limited to a single use per address, the Air District would maintain records to ensure that future applications can be evaluated against prior approvals.

During the initial implementation phase, documentation requirements will be limited to those reasonably necessary to establish eligibility and administer the program and exemptions are planned to be issued on an immediate basis following submission of the exemption certificate request if all fields are completed. Following an overall review of program performance and

administration, the APCO, in consultation with the Board of Directors, may consider whether additional documentation or exemption application review requirements are appropriate. Any potential changes to this process would be discussed in a public meeting of the Air District Board of Directors and follow the appropriate public process for adoption of such a policy.

Step 4: Equipment Purchase and Installation

After issuance of an exemption certificate, the applicant may purchase and install the authorized non-compliant equipment in accordance with the applicable exemption provisions.

The certificate number would also become part of the recordkeeping requirements established under Rule 9-6.

Step 5: Recordkeeping and Enforcement

The exemption program relies primarily on documentation, reporting, and recordkeeping requirements rather than pre-installation inspections. Beginning on the applicable start date of zero-NOx requirements, sellers and licensed contractors would be required to maintain records associated with exempt transactions for a minimum of five years. These records would support:

- Verification of eligibility;
- Enforcement activities;
- Program evaluation; and
- Future assessment of exemption utilization rates.

The Air District may use this information to evaluate whether additional amendments or implementation adjustments are warranted in the future.

The proposed exemption framework is intended to provide flexibility for qualifying installations while maintaining the long-term emissions-reduction objectives of Rule 9-6. The process is intended to rely on objective eligibility criteria, self-attestation, and protection against unnecessary delays in equipment replacement. By addressing affordability, installation barriers, and emergency replacement challenges, the exemption framework is intended to support equitable and practical implementation of Rule 9-6 throughout the Bay Area and address the concerns of residents regarding affordability and delays of equipment replacement.

V. TECHNOLOGY EVALUATION

As described above, the proposed Rule 9-6 amendments build upon implementation experience and market developments that have occurred since the Board adopted the 2023 amendments. At the time of the original rulemaking, significant uncertainty existed regarding future technology availability, contractor readiness, market development, supply-chain capacity, and infrastructure requirements associated with compliant technologies. The information in this section is a summary of multiple reports prepared as part of the Implementation Working Group Process including Market and Sales Trends for Zero-NOx Appliances¹¹, Workforce Challenges for Zero-NOx Requirements¹² and Challenging Use Cases and Emerging Solutions for Zero-NOx Appliances¹³. All consultant work products and other information associated with the Implementation Working Group can be found on the associated Air District webpage.¹⁴

Since adoption, the Air District has continued to evaluate technology availability and implementation readiness through the Implementation Working Group process, stakeholder engagement activities, contractor outreach, distributor surveys, and market studies. These efforts indicate that substantial progress has occurred in the development, commercialization, and deployment of zero-NOx-compliant water-heating technologies.

As a result, the rationale for the proposed flexibility amendments differs substantially from the rationale underlying the original compliance dates adopted in 2023. The proposed amendments are not driven by concerns that compliant technologies will be unavailable. Rather, they reflect efforts to improve affordability, address installation barriers, and provide equitable access to technologies that are now increasingly available throughout the market.

Other implementation factors relevant to technology deployment, including economic impacts and infrastructure considerations, are discussed further in Section VI and the associated appendices.

Evolution of Market Readiness Since 2023

During development of the 2023 Rule 9-6 amendments, a significant portion of stakeholder discussion focused on whether compliant technologies would be commercially available in sufficient quantities by the proposed compliance dates. Since adoption of those amendments, market conditions have evolved substantially.

Manufacturers have expanded production of heat-pump water-heating equipment, contractor familiarity with installation practices has increased, supply-chain constraints have eased, and state and local incentive programs have expanded. Market assessments commissioned and reviewed by the Air District indicate that compliant technologies are no longer confined to pilot or demonstration-scale deployment and are increasingly becoming part of the mainstream water-heating market.

As a result, the primary implementation questions facing Rule 9-6 have shifted. Whereas the 2023 rulemaking focused heavily on technology availability and market readiness, post-

¹¹ https://www.baaqmd.gov/~media/files/community-health/building-appliance-implementation/market-and-sales-trends-for-zero-nox-appliances-clean-pdf.pdf?rev=86e5b084773c4cf0b822ea64efc9778b&sc_lang=en

¹² https://www.baaqmd.gov/~media/files/community-health/building-appliance-implementation/workforce-summary-memo-pdf.pdf?rev=a8670756237f4fcd4e3b8603ff951b&sc_lang=en

¹³ https://www.baaqmd.gov/~media/files/community-health/building-appliance-implementation/challenging-use-cases-and-emerging-solutions-for-zero-nox-appliances-final-08012024-pdf.pdf?rev=ec22a136aca846f49512f5e3f7659997&sc_lang=en

¹⁴ <https://www.baaqmd.gov/en/Community-Health/Building-Appliances-Rule-Implementation/Building-Appliances-Implementation-Working-Group>

adoption implementation planning has focused increasingly on affordability, installation constraints, customer access, and equitable implementation.

Zero-NOx Natural Gas Systems

At the time of preparation of this Staff Report, Air District staff is not aware of any commercially available natural gas-fired water-heating technologies that can reliably meet the Rule 9-6 zero-NOx performance standard for the full range of covered applications.

However, development efforts continue within the broader water-heating industry. Future innovation may produce technologies capable of satisfying the Rule 9-6 performance requirements using combustion-based approaches. Consistent with the 2023 rulemaking, Rule 9-6 remains technology-neutral and does not prescribe a specific compliance pathway. Any technology capable of meeting the applicable performance standard may be certified for compliance.

For purposes of implementation planning and impact assessment, currently available electric heat-pump water-heating technologies remain the primary commercially available technology capable of consistently satisfying the Rule 9-6 zero-NOx requirements.

Zero-NOx 240-Volt Electric Systems

Heat-pump water heaters operating on 240-volt electrical service are now widely available in residential and commercial markets and represent the most mature category of compliant technology.

Since adoption of the 2023 amendments:

- Product availability has increased significantly.
- Manufacturer participation has expanded.
- Contractor familiarity and installation experience have improved.
- Supply-chain constraints have diminished substantially.

A wide range of residential and commercial heat-pump water-heating systems are now commercially available in capacities suitable for most applications covered by Rule 9-6.

While installation costs remain higher than conventional gas-fired systems in many cases, implementation planning demonstrates that availability of compliant products is no longer the primary implementation concern.

Low-Voltage Heat Pump Water Heater Market Development

One of the most significant developments since adoption of the 2023 amendments has been the maturation of the low-voltage heat-pump water-heater market.

At the time of the original rulemaking, low-voltage heat-pump water heaters were generally considered emerging technologies with limited deployment history. Since then, multiple commercial products have entered the market, demonstration and validation programs have advanced, distribution networks have expanded, and contractors have accumulated substantial installation experience.

The Air District's market assessment found that concerns regarding basic technology availability have diminished substantially since 2023. Manufacturers continue to invest in product development, distributors report improving product availability, and contractors report increasing familiarity with heat-pump water-heater installations.

Distributor and contractor outreach conducted as part of the implementation review also suggests that heat-pump water-heater equipment can generally be obtained within timeframes comparable to those associated with conventional gas-fired equipment. These findings indicate

that supply-chain constraints are no longer a primary implementation barrier.

The market assessment further concluded that low-voltage and alternative installation configurations are playing an increasingly important role in serving retrofit applications where electrical upgrades or installation constraints might otherwise create barriers to compliance.

Taken together, these findings indicate that compliant water-heating technologies have progressed beyond the early commercialization stage. Continued innovation is expected; however, affordability and installation challenges have emerged as more significant barriers than basic technology availability.

Contractor Readiness

Implementation planning and market research indicate that contractor readiness has improved substantially since adoption of the 2023 amendments.

Contractors throughout California have gained increasing experience with heat-pump water-heater installations, including equipment sizing, condensate management, electrical coordination, ventilation considerations, and retrofit applications. In parallel, industry training opportunities and workforce-development initiatives have expanded, helping increase familiarity with emerging technologies and installation practices.

Although workforce development remains an important implementation consideration, information collected through Air District outreach indicates that contractor readiness is improving and is no longer viewed as a primary barrier to implementation.

Installation Constraints and Mitigation Strategies

Implementation planning identified installation constraints as one of the most significant remaining challenges associated with Rule 9-6 implementation.

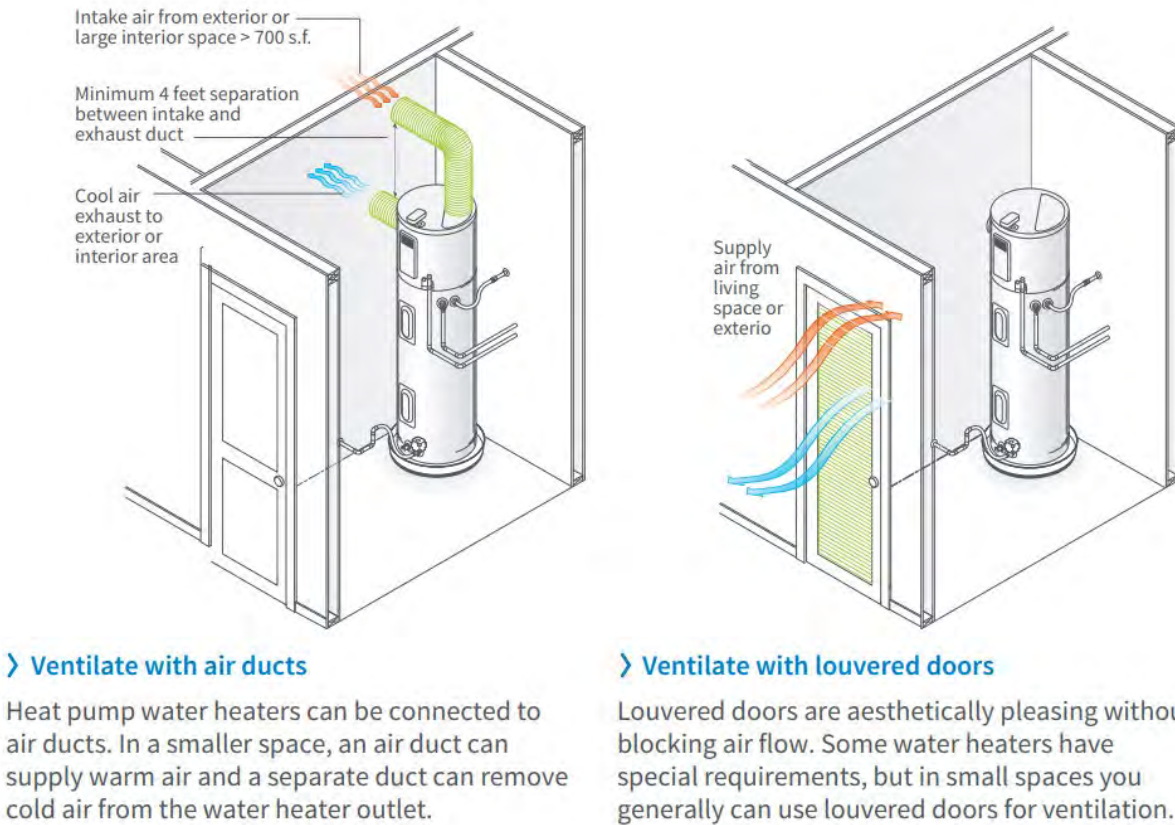
Space Constraints

Heat pump water heaters (HPWHs) need adequate ventilation space as well as physical space (because of the integrated compressor unit, they are typically a bit taller than NOx-emitting units). Modifications to address space constraints range in costs.

Ventilation measures (air openings such as louvered doors, see below) were mostly relatively low cost (average=\$208 and max=\$1,701) according to Palo Alto HPWH program data.¹⁵ Lower costs for these measures are also dependent upon having adequate ventilation space in the adjoining room or access to an outdoor wall. Figure 1 shows standard configurations for these solutions.

¹⁵ Data provided by Palo Alto Utilities staff, September 2024. Note that the Palo Alto program is one of the few programs documenting detailed measures such as ventilation or carpentry measures, with hundreds of projects.

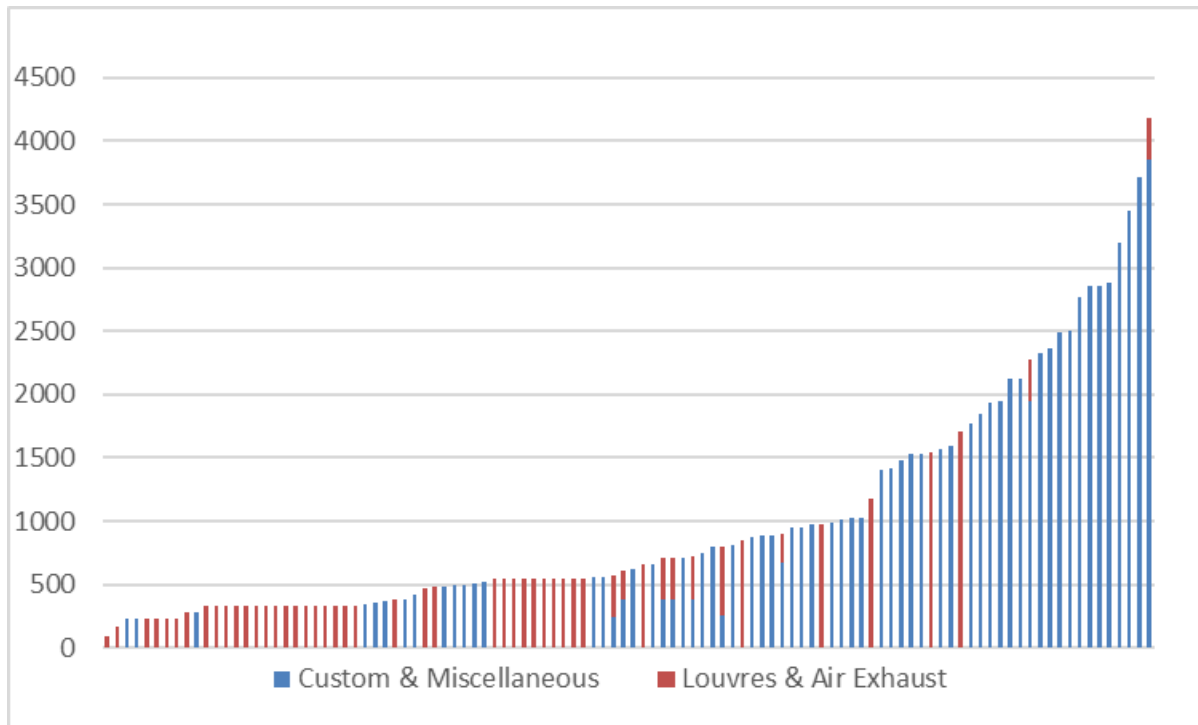
Figure 1. Ways to circulate more air¹⁶



HPWHs, due to their slower recharge times, are typically upsized approximately 10-15 gallons compared to a gas water heater; these larger tanks, in addition to the integrated compressor, can lead to lack of physical space for the new HPWH if the existing location is a utility closet, a basement space with low ceilings, etc. Space reconfiguration or relocating the water heater can cause significant costs (average= \$1,287 and max= \$4,540), according to Palo Alto HPWH program data, as seen below in Figure 2. Program data as illustrated in the Figure 2 bar chart shows that for individual projects, ventilation measures (red bars) were generally less expensive to add (<\$1,000) compared to space reconfiguration and carpentry measures (blue bars). Bars showing both red and blue represent projects and costs that deployed both ventilation measures and space reconfiguration or carpentry measures.

¹⁶ <https://library.peninsulacleanenergy.com/m/c76176ab7d47195/original/Heat-Pump-Water-Heater-Space-and-Air-Guidance.pdf>

Figure 2. Palo Alto HPWH Program: Additional Space Constraint Costs (\$) for Space Reconfiguration, Carpentry, and Ventilation Measures¹⁷



HPWH solutions for small spaces are emerging. Split-system HPWHs offer an unattached, outside condenser/heat pump (see Figure 3) but there are fewer and less common market options. While some mitigation strategies have been identified, certain buildings contain space-constrained scenarios that will continue to result in higher cost water-heater installations due to required significant construction such as those located in small enclosed closets, confined utility rooms, mechanical spaces with limited clearance, multifamily equipment rooms. As a result, the proposed amendments to Rule 9-6 are intended to provide flexibility in situations where significant installation barriers remain.

Electrical Constraints

In most homes, some electrical work will be needed to switch to a HPWH from an older gas water heater. This can range from minor work (e.g., simply installing a short length of new electrical conduit or outlet), to major work resulting in significant time and cost (e.g., extensive rewiring, electrical panel upsizing and potential utility service upgrades).

Additional challenges may arise in buildings that contain:

- Undersized electrical-service panels;
- Limited breaker capacity;
- Legacy wiring systems;
- Long conduit requirements; and
- Multifamily electrical-infrastructure constraints.

These conditions can increase installation costs substantially in some cases

¹⁷ Data provided by Palo Alto Utilities staff, September 2024. Note that the Palo Alto program is one of the few programs documenting detailed measures with hundreds of projects.

A minimum of 44 percent of single-family homes in the Bay Area is estimated to have electric panels with 200 amps,¹⁸ which is considered to be the modern standard, and could fully electrify without panel upsizing.

32 percent of single-family and 59 percent of multifamily homes in California have panels of intermediate size (100 amps for single-family, 60 amps for multi-family)¹⁹ and will likely require “right-sizing”, “watt diet” or panel optimization strategies (low-voltage appliances; circuit pausing/sharing; smart panels) to avoid panel and service upsizing in these homes. Newer 120-volt plug-in HPWHs (see Figure 3) can also help mitigate the need for extensive electrical upgrades, particularly for smaller households with less hot water demand.

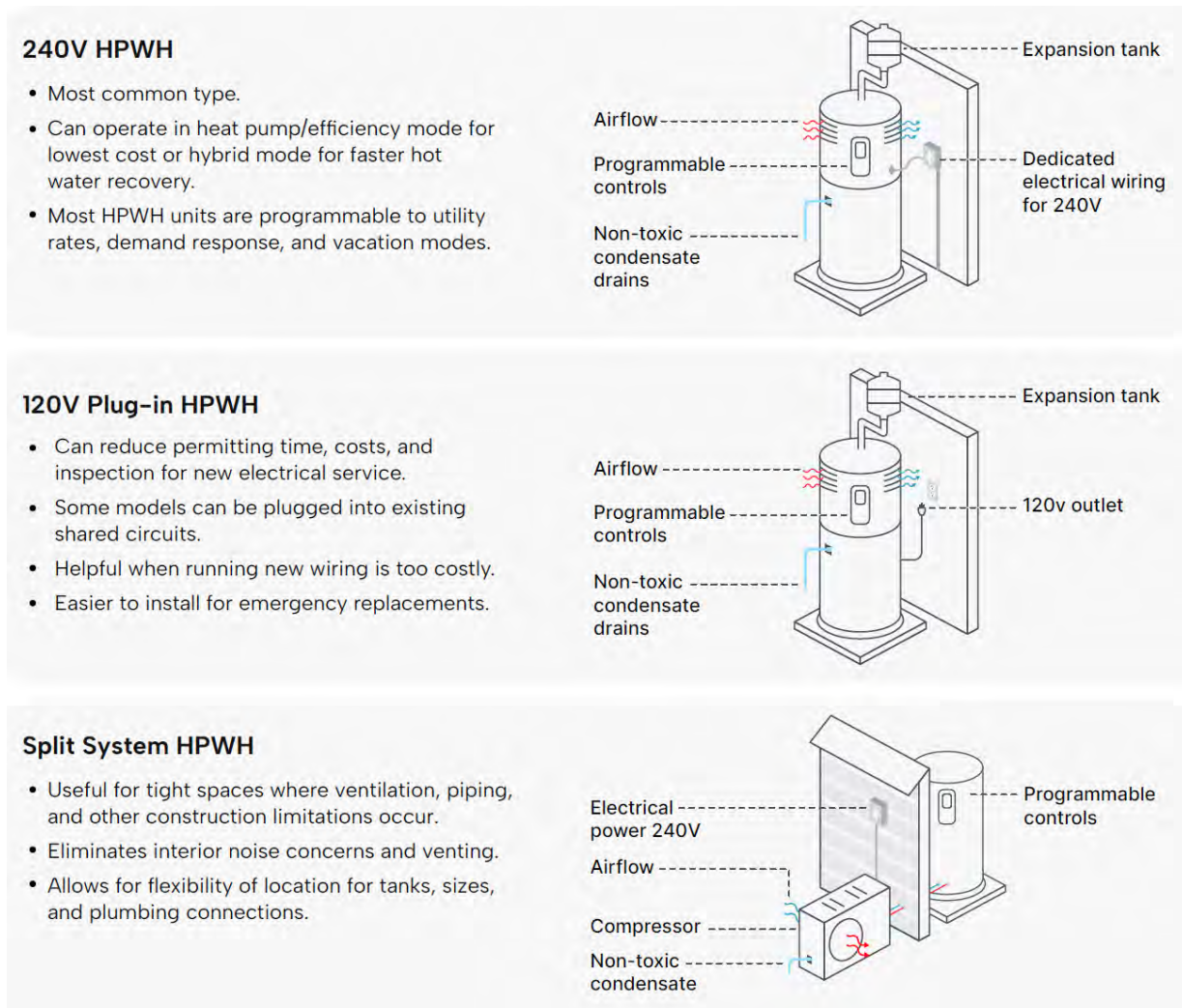
For a small portion of homes, extensive electrical work likely cannot be avoided and would be especially costly, encompassing panel upsizing and in some cases, subsequent utility service upsizing. Statewide, 3 percent of single-family homes have panels smaller than 100 amps and 10 percent of multi-family homes have panels smaller than 60 amps (per dwelling unit) which will most likely require upsizing for electrification. In disadvantaged communities (DACs), the number of single-family homes with panels smaller than 100 amps is disproportionately higher at 8 percent.²⁰

¹⁸ NREL model, as described in Table 19. https://www.baagmd.gov/~media/files/community-health/building-appliance-implementation/task1_electrificationcosts-pdf.pdf?rev=3cb66a09f3094f94b35fa7fc90cfd4ec&sc_lang=en

¹⁹ Fournier, Eric et al. *Quantifying the electric service panel capacities of California's residential buildings*. 2024. <https://www.sciencedirect.com/science/article/pii/S0301421524002581>

²⁰ Ibid.

Figure 3. Heat Pump Water Heater (HPWH) configurations and wiring, siting and installation needs



Available Mitigation Strategies

The Implementation Working Group process identified a variety of approaches that can reduce installation barriers, including:

- Low-voltage heat-pump water heaters;
- Split-system heat-pump water heaters;
- Smart electrical panels;
- Automatic load-management systems;
- Circuit-sharing technologies; and
- Other panel-optimization strategies.

These technologies and installation approaches can expand the range of buildings capable of accommodating compliant equipment while reducing the need for major electrical-service upgrades. The proposed exemption framework is intended to provide flexibility in situations where significant installation barriers nevertheless remain.

Technology Readiness and Market Availability

The Air District's post-adoption evaluation indicates that technology readiness has progressed substantially since the original rulemaking. Key findings of this study include:

- Heat-pump water-heating technologies are commercially established.
- Multiple manufacturers actively compete within the market.
- Distributor inventory availability has improved.
- Contractor familiarity has increased.
- Low-voltage product offerings have expanded
- Installation-support technologies are becoming more common.
- Incentive availability has grown significantly.

However, implementation planning also demonstrated that technology availability alone does not guarantee practical accessibility for all consumers.

Affordability, installation constraints, emergency replacement situations, multifamily applications, and electrical-infrastructure limitations remain significant barriers in some circumstances. These considerations form the basis for the flexibility amendments proposed in this rulemaking.

Summary

Based on information gathered through implementation planning, stakeholder engagement, market assessments, contractor outreach, distributor surveys, and manufacturer developments since 2023, Air District staff concludes that the primary implementation challenges associated with Rule 9-6 are no longer driven by technology availability. Instead, affordability, installation constraints, electrical infrastructure limitations, and equitable access to compliant technologies represent the most significant remaining implementation barriers addressed by the proposed amendments.

VI. EMISSIONS AND EMISSION REDUCTIONS

2023 Amendments Emissions Context

The 2023 amendments to Rules 9-4 and 9-6 sought to reduce emissions from natural gas-fired space and water heating equipment in residential and commercial buildings, which represent the largest source of emissions within the building sector. Emission estimates for this sector are based on regional natural gas consumption and appliance usage data.

The building sector is a significant source of air pollution in the Bay Area, with residential and commercial space and water heating accounting for the vast majority of emissions from natural gas use in buildings. These sources are among the largest stationary-source contributors of NO_x emissions within the Air District's regulatory authority. As a result, the Air District identified additional regulation of these appliances as an important opportunity to improve air quality and advance objectives established in the 2017 Clean Air Plan, which specifically called for reducing emissions from residential and commercial heating equipment.

The primary focus of amendments to Rules 9-4 and 9-6 is the reduction of NO_x emissions. NO_x is a key precursor to both ground-level ozone and secondary fine particulate matter, making it an important target for air quality improvement efforts. Secondary particulate matter forms through atmospheric reactions involving NO_x and contributes to adverse health effects, including respiratory and cardiovascular illnesses. Reducing NO_x emissions is therefore expected to provide significant public health benefits by lowering concentrations of both ozone and fine particulate pollution. NO_x exposure itself can also negatively affect respiratory health. Emissions reductions from this sector are also intended to support regional and statewide efforts to attain state and federal air quality standards for ozone and PM_{2.5}. Ozone formation increases when NO_x and other precursor pollutants react in the atmosphere, particularly during hot and stagnant weather conditions. Because the Bay Area remains in nonattainment for ozone and certain particulate matter standards, reducing NO_x emissions from building appliances is expected to contribute to long-term improvements in regional air quality, help protect public health, and support attainment of ambient air quality standards both within the Bay Area and in neighboring downwind regions.

Estimated emissions reductions from the 2023 amendments to Rules 9-4 and 9-6 are shown below as well as the specific reductions associated with water heating equipment, as is relevant to the proposed amendments discussed in this report. As seen below, reductions associated with Rule 9-6 account for approximately 18 percent of reductions initially estimated for the 2023 rule amendments, which were considered as a package.

Table 4: Cumulative Emission Reductions (tons NO_x/year) under 2023 Amendments

Year	Projected NO _x Reduction Total (tons/yr)	Projected NO _x Reduction Rule 9-6 (tons/yr)
2030	874	142
2035	1,835	363
2040	2,761	548
2046	3,236	575

Impacts of Proposed Amendments – Delayed Compliance Date

The proposed amendments to Rule 9-6 presented in this report propose delayed compliance dates for water heaters, delaying the zero-NOx requirement for water heaters less than 75,000 BTU/hr from January 1, 2027, to January 1, 2028; and delaying the zero-NOx requirement for water heaters over 75,000 BTU/hr and less than 2 million BTU/hr from January 1, 2031, to January 1, 2033. Another option is to delay the compliance dates for water heaters less than 75,000 BTU/hr from January 1, 2027, to January 1, 2029.

The table below shows the impacts of delayed implementation of the rules to the proposed compliance dates discussed above, as well as how emissions reductions could be delayed should all compliance dates be delayed to 2035 as presented in Alternative 3 to the 2023 Environmental Impact Report and referenced in the Draft Addendum to the Environmental Impact Report published along with this Preliminary Staff Report.

Table 5: Impact of Delayed Compliance Dates

Year	2027 and 2031 zero-NOx compliance dates	2028 and 2033 zero-NOx compliance dates	2029 and 2033 zero-NOx compliance dates
	Projected Annual Reduction of NOx (tons/yr) vs. baseline		
2030	142	106	71
2035	363	310	274
2040	548	531	495
2045	575	575	575
2047	575	575	575

Staff does not recommend extending the compliance date beyond 2029 at this time. Rule 9-4 for furnaces currently has compliance deadlines for 2029. In addition, EPA may designate the Bay Area as nonattainment for the 2024 annual National Ambient Air Quality Standard for PM_{2.5}. The Air District is still evaluating the emissions reductions that would be needed to attain by the deadline. Extending the compliance date beyond 2029 creates a risk of confusion with the deadlines for furnaces and may create a need for additional rulemaking on other sources and industries in order to comply with federal health standards for PM_{2.5}.

Impacts of Proposed Amendments – Exemptions

The proposed amendments to Rule 9-6 presented in this report provide for flexibility in cases where installation of a zero-NOx water heater has been proven through the Implementation Working Group process to pose a potential obstacle to the property owner, either financially or based on the time and potential loss of hot water service that would be experienced by residents. A summary of the proposed exemptions is presented below including estimates of the percentage of Bay Area households that would fall under each exemption.

Table 6 – Proposed Exemption Percentages

Exemption Category	Proposed Regulatory Change	Percentage of Bay Area Households
Low Income (less than 80% AMI) and Housing Cost Burdened	9-6-111	19.8% ²¹
Project Constraints (Electrical and Space)	9-6-112	20% ²²
Continued sales of units 30 gallons and below	9-6-301.5	10% ²³

Given that the purchase of Emergency Replacement Loaner water heaters will not displace zero-NOx water heaters nor be installed permanently, Staff has not estimated an emissions impact associated with the proposed exemption under Section 9-6-114. For businesses with specialized applications and high hot water demand, many may already be utilizing water heaters above the 75,000 btu/hour threshold based on high hot water needs. However, estimated numbers of these businesses are listed below.

- Food service/restaurant facilities - approximately 2,427 food service buildings²⁴
- Healthcare clinics and assisted living facilities - while not separate categories, BayREN buildings inventory estimates “Medical - Hospital & Clinic” and “Medical – Other” at 3,021 buildings in the Bay Area²⁵
- Laundry, dry cleaner and laundromat - estimates in the Bay Area are not available.

Overall, staff expect the annual number of exemptions granted to specialized business applications to be low as compared to other exemption pathways as described above.

While the estimates above are conservative and staff anticipates that these scenarios may overlap, the proposed exemptions result in approximately half of the initially estimated emissions reductions associated with Rule 9-6 as adopted in 2023 to be potentially exempt. Given the extensive incentives available, especially for low-income property owners, many property owners may voluntarily switch to cleaner water heaters, even though they would be exempt from the regulatory mandate.

Health Modeling Impacts

Staff considered both health equity and economic equity implications when evaluating future potential amendments to Rule 9-6. From a health equity perspective, the rule is intended to reduce NOx and PM_{2.5} exposure, particularly in communities that have historically experienced higher pollution burdens. At the same time, staff evaluated potential economic impacts on low-income property owners and renters, including whether compliance costs could create financial

²¹ American Community Survey Data for 2024; <https://www.census.gov/programs-surveys/acs/data.html>
564,674 households qualify of 2,845,928 in the Bay Area

²² Updated Regulatory Overview, July 2026 https://www.baaqmd.gov/~media/dotgov/files/rules/reg-9-rule-4-nitrogen-oxides-from-fan-type-residential-central-furnaces/2021-amendments/documents/20260713_rule_9_6_regulatory_overview_updated_july_draft_amendment_package-pdf.pdf?rev=f4c5f70f25674a2787eed4d39abc97ab&sc_lang=en

²³ Ibid.

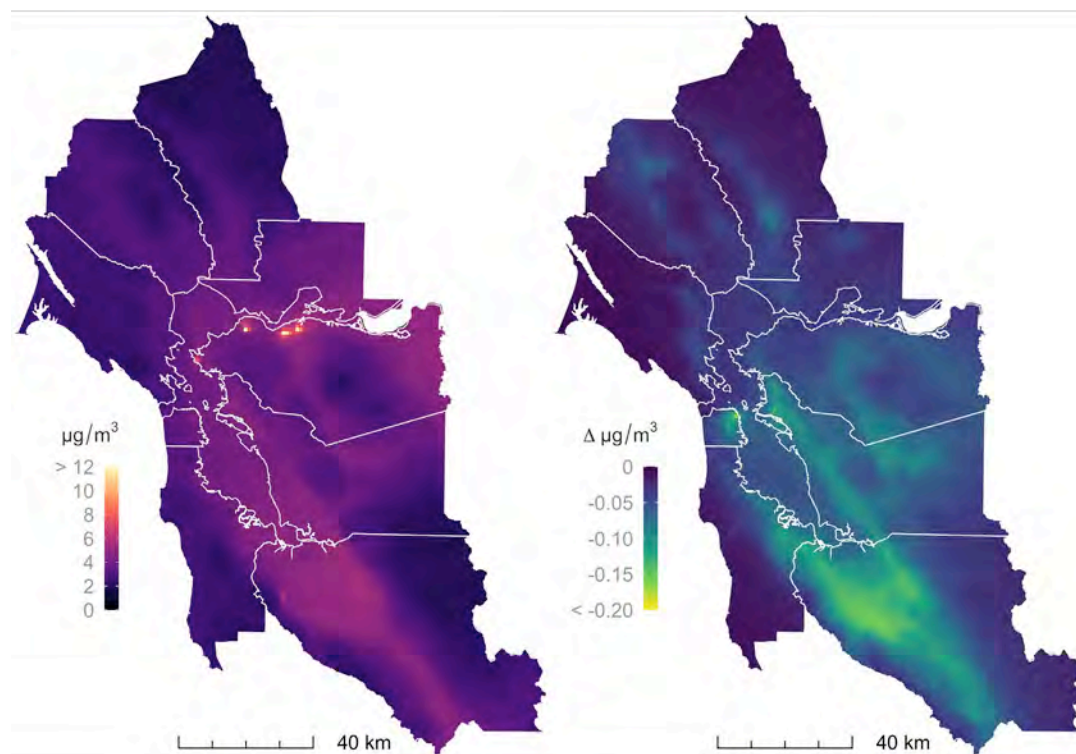
²⁴ <https://bayren-existing-buildings.mtcanalytics.org/>

²⁵ Ibid.

hardship or housing instability. To address these considerations, the potential rule amendments incorporate targeted exemptions, phased implementation timelines, and other implementation safeguards intended to mitigate potential cost impacts and help preserve access to housing.

For the zero NO_x amendments to Rules 9-4 and 9-6 in 2023, staff evaluated ambient air quality and health impacts from covered appliances. Staff estimated NO_x and PM_{2.5} emissions from these sources, as well as their contributions to levels of fine particulate matter exposures.²⁶ Approximately 60 percent of average PM_{2.5} exposure in the Bay Area associated with the target appliances results from secondary formation driven by NO_x emissions. In general, because secondary PM_{2.5} formation requires time and atmospheric transport, exposure to secondary PM_{2.5} occurs at a regional scale rather than near the original emission sources. As a result, certain homes or locations that may forgo local emission reductions due to an exemption would still benefit from region-wide improvements in exposure if the flexibility amendments were implemented. Figure 1, below, depicts the modeled annual average baseline concentrations and reductions of secondary particulate matter attributed to the elimination of emissions associated with appliances impacted by the 2023 zero NO_x amendments to Rules 9-4 and 9-6, which accrue on a regional basis.

Figure 1. Baseline concentrations (left) and reductions (right) for secondary PM_{2.5}



Staff believe that it is too speculative to make assumptions about the locations at which property owners will choose to utilize a certified exemption for project constraints or low-income qualification as there are many factors that would impact this decision. As summarized above, up to 50 percent of small water heaters could be eligible for an exemption or extension of the

²⁶ https://www.baaqmd.gov/~media/dotgov/files/rules/reg-9-rule-4-nitrogen-oxides-from-fan-type-residential-central-furnaces/2021-amendments/documents/20221220_sr_appe_rq09040906-pdf.pdf?rev=d4b056153496491fad817c6d4a87df78&sc_lang=en

compliance timeline. However, due to the regional benefit of reduction of secondary fine particulate matter exposure and the focus of Rule 9-6 on the reduction of nitrogen oxides, a precursor for secondary particulate matter, staff does not believe that the flexibility amendments discussed in this document will result in a significant disparity in health benefits in existing overburdened communities. Additionally, the non-income based exemption pathways are intentionally designed as one-time exemptions so that any disparity does not exist in perpetuity. Staff intend for outreach related materials and the exemption portal to point all projects, including low-income property owners, to available incentives to mitigate any remaining equity concerns.

With regards to renters, under the Air District's flexibility concepts, exemptions would be provided in scenarios requiring significant construction including space and/or electrical constraints. Landlords would *not* be required to install zero NOx water heaters in scenarios that align with "substantial repair" exemptions, thus greatly decreasing "renoviction" risks. Since the remaining projects that would be required will be more standard, average-cost projects, the risk of major pass-through costs will also be reduced as a result.

VII. ECONOMIC IMPACTS

Socioeconomic Impacts

Eastern Research Group, Inc. (ERG) conducted a socioeconomic analysis of the proposed amendments to 9-6. ERG evaluated the potential impacts of the proposed amendments on Bay Area households, affected populations, and the regional economy. The analysis focused on the incremental costs associated with replacing existing gas-fired water heaters at the end of their equipment life with compliant electric heat pump water heaters. ERG assessed the impacts of these costs on households across income levels and counties.

Across the Bay Area, ERG estimates annualized net compliance costs of approximately \$372.8 million for households after accounting for utility bill savings and applicable exemptions. Compared to the current regulatory environment, which accounts for the current zero-NOx requirements outlined in Rule 9-6 as passed in March of 2023 by the Air District Board of Directors, the proposed amendments result in \$97.9 million of annual savings across the Bay Area as a result of flexibility measures introduced. Utility savings associated with the transition from gas-fired to electric water heating are estimated to offset approximately \$60.8 million of annual compliance costs.

As noted in the Preliminary Staff Report, the socioeconomic report has been updated to reflect Air District staff estimates that up to 120,000 households per year are expected to replace their water heater in the Bay Area under the proposed amendments. The annual cost and savings values above reflect this change as well as an adjustment to the discount rate for financed projects from 4.5% to 7.7% to more accurately reflect current market conditions.

ERG used the IMPLAN regional economic input-output model to evaluate broader regional economic impacts associated with changes in household spending resulting from compliance costs. The analysis shows a significant reduction in negative regional economic benefits due to the amendments. The IMPLAN analysis estimated that the costs of compliance with the rule would reduce employment by less than 0.02% in impacted sectors. This model assumes that household expenditures made to comply with this rule are accompanied by an equivalent reduction in other discretionary household spending. It does not account for any economic benefits of the amended rule such as health benefits.

Additional exemptions are available through the proposed amendments to Rule 9-6 that are not captured in the socioeconomic analysis but it is too speculative to consider where these exemptions may be located throughout the Bay Area based on housing cost burden or those households that may claim an exemption due to project specific conditions such as space and electrical constraints. Additionally, the space and electrical constraint exemptions are limited to one time use so those installations will occur at a future date. Therefore, the analysis in this report is limited to the exclusion of households under 80 percent Area Median Income to provide a high-end estimate of the potential costs of the rule, and low-end estimate of the potential savings from the amendments, within the region.

Overall, ERG concludes that the proposed Rule 9-6 amendments are not expected to result in significant socioeconomic impacts for Bay Area households or the regional economy. The combination of relatively modest household compliance costs in percentage terms, anticipated utility savings, and targeted exemptions for low-income households substantially reduce economic burdens under Rule 9-6 while supporting the District's air quality, public health, and emissions reduction objectives. The full updated socioeconomic impact analysis is included as

an attachment to the Board of Directors hearing packet as well as published along with this Final Staff Report on the Bay Area Air District rule development webpage.

Enhanced Analysis by Race and Ethnicity

Appendix A to the Socioeconomic Impact Report has been drafted by Bay Area Air District Staff since initial publication of the Preliminary Staff Report in order to provide additional details aligned with the recently adopted Policy for Socioeconomic Impact Analysis on the impacts of the proposed amendments across race and ethnicity across counties.

This analysis concludes that Hispanic or Latino/a households represent the highest concentration of exempt households in most counties through the region. However, the broad distribution of exempt households among the remaining racial and ethnic groups suggests that the benefits of the exemption are felt by all groups throughout the region in some capacity.

Valuation of Health Impacts

Air District Staff modeled the health impacts associated with full implementation of Rules 9-4 and 9-6 as adopted by the Board of Directors in 2023. The methodologies and complete results of this analysis can be found in the 2023 Staff Report as well as the related modeling appendices²⁷. The results are also summarized in the table below.

Table 7 - Valuations of reductions in annual average PM_{2.5} concentrations due to an assumed case that eliminates space and water heating natural gas combustion emissions in the Bay Area

Health Impact ^a	Total Valuation in 2020 U.S. Dollars, Million Dollars Per Year	
	Secondary PM _{2.5}	Total PM _{2.5}
Premature mortality		
All causes ^b	230–530	380–870
Chronic/severe illness		
Non-fatal acute myocardial infarction (heart attack)	0.23–2.1	0.38–3.5
Hospital admission, neurological ^c	0.11	0.19
Incidence, out of hospital cardiac arrest	0.019	0.03
Incidence, stroke	0.059	0.096
Incidence, lung cancer	0.056	0.091
Hospital admissions^d		
Respiratory ^e	0.028	0.045
Cardiovascular ^f	0.055	0.090
ER visits		
Respiratory ^g	0.013	0.021
Cardiovascular ^h	0.0084	0.014
Other effects		

²⁷ https://www.baaqmd.gov/~media/dotgov/files/rules/reg-9-rule-4-nitrogen-oxides-from-fan-type-residential-central-furnaces/2021-amendments/documents/20221220_sr_appe_rg09040906-pdf.pdf?rev=d4b056153496491fad817c6d4a87df78&sc_lang=en;
https://www.baaqmd.gov/~media/dotgov/files/rules/reg-9-rule-4-nitrogen-oxides-from-fan-type-residential-central-furnaces/2021-amendments/documents/20221220_sr_appf_rg09040906-pdf.pdf?rev=a6f1c065273243b99cfcf290a08fe74&sc_lang=en

Health Impact ^a	Total Valuation in 2020 U.S. Dollars, Million Dollars Per Year	
	Secondary PM _{2.5}	Total PM _{2.5}
Restricted activity days	1.9	3.2
Work loss days	1.1	1.8
Hay fever/allergic rhinitis	0.31	0.52
Asthma-related effects		
Asthma symptoms/albuterol use	0.0037	0.0059
Onset of asthma	3.6	5.8
Sum		
All health impacts included	240–540	400–890

^a Each health impact is associated with one or more unique International Classification of Diseases-9-Clinical Modification (ICD-9-CM) code(s) (Medicode, 1996).

^b Includes all ICD-9 codes.

^c First hospital admission (cause-specific, to indicate onset of the chronic disease) for dementia, Alzheimer's disease, or Parkinson's disease (ICD-9 codes 290, 331.0, or 332, respectively), and other neurological morbidities.

^d Hospital admissions due to acute exposure to air pollution are assumed to pass through the emergency room; however, the calculated value of hospital admissions does not account for the cost incurred in the emergency room visit. This strategy avoids double-counting.

^e Includes all respiratory diseases (ICD-9 codes 460–519).

^f Includes cardio-, cerebro-, and peripheral vascular diseases (ICD-9 codes 410, omitting 410.x2; 410–414; 426–427; 428; 429; 430–438; 440–448).

^g Includes respiratory diseases (ICD-9 codes 480–486, 491, 492, 496, 460–465, 466, 477, 493, 786.07).

^h Includes all cardiac outcomes (ICD-9 codes 390–549).

These valuations were determined using EPA's May 2021 version BenMAP-CE paired with three sets of health impact functions deemed appropriate for use in the Bay Area. BenMAP-CE was designed to estimate changes in human health due to changes in air pollution levels and to estimate conventional valuations of these impacts (in 2020 U.S. dollars). The valuation process considers the direct and indirect costs of illnesses as well as the willingness to pay to avoid premature death. Direct costs include actual medical costs and lost worker hours, while indirect costs reflect willingness to pay to avoid pain and suffering. Staff acknowledge a few key updates to the BenMAP methodologies in the time since the 2022 analysis was completed and that the quantified benefits represented above should be understood as a partial accounting for the assumed case that eliminates space and water heating natural gas combustion emissions in the Bay Area. The January 2026 documentation for updated BenMAP modeling shows that some methods have already evolved and that current defaults would raise at least certain morbidity valuations. However, morbidity endpoints comprised less than 5% of the overall reported valuation. Therefore, this 2026 rule review will retain the 2022 assessment as the documented product of the methods, inputs, software, and evidence available for that analysis. Staff's position is that the assessment was conducted appropriately, and that at the present time, no generalized numeric adjustments, recalculations of health impacts or valuations, or re-expressions of results in later dollar years are needed.

However, as detailed in Section VI of this report, emission reductions associated with water heaters account for approximately 18% of the original emissions reductions estimated for the 2023 amendments, as the majority of emissions reductions are associated with appliance replacements under Rule 9-4. The scaled health valuations associated with Rule 9-6 are summarized below.

Table 8: Scaled Health Valuation

Implementation Scenario	Annual Health Savings
Elimination of space and water heating natural gas combustion emissions in the Bay Area	Up to \$890 million per year
Elimination of water heating natural gas combustion emissions in the Bay Area	Up to \$160 million per year
Valuation assuming low-income exemption usage, complete implementation expected by 2059 ²⁸	Up to \$112 million per year

Air District Impacts

Air District staff anticipates that the proposed amendments to Rule 9-6 will require additional staff time and resources. The enforcement of the zero-NOx standard is anticipated to result in increased staffing needs.

In order to support the proposed exemption process and associated enforcement review required to ensure a strong implementation process, staff anticipates that the Air District will require additional full-time staff as well as potential contractor support to perform this work and ensure compliance. In addition, staff tasked with implementation will continue to explore the needs associated with specific aspects of implementation including software and technology integration of the exemption process with retailers and customer access points such as call center staffing or other customer service response. While not currently estimated, staff expect additional cost to the Air District associated with complete implementation of the rules, and any additional programs proposed will follow the Board of Directors' public process for approval of use of funds.

Staff currently estimates that initial costs to implement the program will be approximately \$3 million per year. It is anticipated that these costs will be recovered through a moderate processing fee charged to property owners who apply for project specific exemptions due to space or electrical constraints. Staff will provide the Board with more details on potential costs and funding options in the first quarter of 2027.

²⁸ Complete implementation by 2059 takes into account proposed 2028 and 2033 implementation dates as well as one-time exemption usage, assuming a 13 year average life span for a water heater

VIII. REGULATORY IMPACTS

Section 40727.2 of the California Health and Safety Code requires an air district, when adopting, amending, or repealing a regulation, to identify existing federal, state, and local air-pollution-control requirements applicable to the source category affected by the proposed amendments and to describe any differences between those requirements and the proposed rule.

The amendments proposed in this Staff Report modify the implementation framework associated with Regulation 9, Rule 6: Nitrogen Oxides Emissions from Natural Gas-Fired Boilers and Water Heaters ("Rule 9-6"), which was amended by the Air District Board of Directors in March 2023 to establish future zero-NOx performance requirements for covered water-heating equipment.

Unlike the 2023 rulemaking, the current amendments do not establish a new emissions performance standard. Rather, the amendments modify implementation timelines, establish a structured exemption framework, create exemption-certificate procedures, establish new notice and reporting requirements, and update recordkeeping responsibilities associated with Rule 9-6.

Existing Regulatory Requirements

Rule 9-6 currently regulates emissions of nitrogen oxides from covered natural gas-fired water heaters and boilers sold and installed within the Air District. The rule contains emissions standards, certification requirements, testing procedures, and compliance provisions applicable to covered equipment.

The rule does not require removal of existing equipment and applies at the point of sale, installation, and manufacture of covered equipment.

The 2023 amendments established future zero-NOx standards with compliance dates beginning in 2027 for smaller water-heating equipment and 2031 for larger water heaters and boilers.

Proposed Regulatory Changes

The proposed amendments make several changes to the existing regulatory framework:

- Revise compliance dates to January 1, 2028 and January 1, 2033;
- Establish a structured exemption framework;
- Create exemption-certificate procedures;
- Add new definitions necessary to administer the exemption provisions;
- Implement contractor reporting requirements for temporary loaner equipment;
- Establish point-of-sale notification requirements;
- Expand seller and contractor recordkeeping requirements; and
- Simplify certain certification and interim-reporting provisions adopted in 2023.

Relationship to State and Regional Efforts

The Air District continues to coordinate with other agencies evaluating emissions from building appliances.

The California Air Resources Board (CARB) is developing statewide clean space and water heater standards focused primarily on reducing greenhouse-gas emissions from newly sold appliances. CARB has stated that any future statewide requirements are intended to complement rather than replace local air-district regulations addressing emissions of nitrogen oxides. Manufacturers would be required to comply with both applicable state and local

requirements.

The South Coast Air Quality Management District (SCAQMD) has also continued rule-development efforts related to emissions from residential and commercial water-heating and space-heating equipment. In June 2024, SCAQMD adopted amendments to Rule 1146.2. SCAQMD also considered amendments to Rule 1111 and Rule 1121, although those amendments were not adopted by the Governing Board in June 2025.

The Air District's proposed amendments are therefore consistent with broader regulatory efforts occurring throughout California while remaining focused on implementation of Rule 9-6 within the Bay Area.

Federal Requirements

There are currently no federal regulations that establish point-of-sale NOx emission standards equivalent to those contained in Rule 9-6 for the covered categories of residential and commercial water-heating equipment.

The proposed amendments therefore do not duplicate existing federal requirements.

Effect on Existing Rule Requirements

The proposed amendments do not alter the fundamental emissions-reduction framework established by the Board in 2023. The amendments retain the underlying zero-NOx performance requirements while introducing implementation mechanisms intended to address affordability concerns, installation constraints, and equitable deployment of compliant technologies.

Because the amendments primarily affect implementation rather than emissions-performance requirements, they are intended to facilitate successful compliance with Rule 9-6 while preserving the long-term emissions-reduction objectives established by the Board of Directors.

IX. ENVIRONMENTAL IMPACTS

The California Environmental Quality Act (CEQA) requires public agencies to evaluate the environmental impacts of discretionary actions and determine whether those actions may result in significant environmental effects.

The Air District previously evaluated the environmental impacts associated with the 2023 amendments to Rule 9-6 through preparation and certification of an Environmental Impact Report (EIR).²⁹ The current amendment package modifies implementation provisions associated with Rule 9-6 but does not alter the long-term emissions-reduction objectives established by the Board of Directors in 2023.

Overview of Previously Certified Environmental Review

The Environmental Impact Report certified in 2023 evaluated the environmental impacts associated with implementation of future zero-NOx standards for covered water-heating equipment. The analysis concluded that the rule would result in beneficial air-quality and greenhouse-gas impacts through reductions in combustion-related emissions from water-heating equipment.

The EIR also identified potentially significant impacts associated with:

- Utility and service systems;
- Energy demand;
- Electrical infrastructure requirements; and
- Operational noise associated with certain heat-pump technologies.

The EIR evaluated several project alternatives, including alternatives with delayed implementation schedules, and concluded that delayed implementation could reduce certain environmental impacts while delaying realization of expected air-quality benefits.

Environmental Review for the Proposed Flexibility Amendments

The proposed amendments do not change the underlying zero-NOx performance standard adopted in 2023. Instead, the amendments revise compliance schedules, establish a targeted exemption framework, create exemption-certificate procedures, and implement other administrative provisions intended to address affordability concerns and installation barriers identified through the implementation-review process.

To evaluate how the proposed amendments alter the CEQA environmental analysis provided the previously certified EIR, staff have prepared an addendum to the 2023 EIR. The addendum evaluates whether the proposed amendments:

- Create any new significant environmental impacts;
- Result in substantially more severe impacts than those previously analyzed;
- Introduce new information that changes the conclusions of the certified EIR; or
- Require additional environmental review under CEQA.

In particular, the original EIR already evaluated alternative implementation scenarios involving delayed compliance schedules including a delay of all compliance dates to 2035. Because the current amendments primarily revise implementation timing and establish flexibility mechanisms rather than changing the underlying emissions-performance standard, the environmental analysis conducted in 2023, and specifically the 2035 alternatives analysis

²⁹ Final Environmental Impact Report for Proposed Amendments to Rule 9-4 and Rule 9-6
https://www.baagmd.gov/~media/dotgov/files/rules/reg-9-rule-4-nitrogen-oxides-from-fan-type-residential-central-furnaces/2021-amendments/documents/20230307_feir_rules0904and0906-pdf.pdf?rev=7e8845220137443fb2cf6771fed7caf2

remains directly relevant.

Basis for the Addendum Approach

A key consideration supporting the Addendum approach is that the compliance dates established in the 2023 amendments have not yet taken effect.

As a result:

- The January 1, 2027 compliance date has not occurred;
- The January 1, 2031 compliance date has not occurred;
- Emissions reductions anticipated under the original rule have not yet been realized;
- Associated implementation activities have not yet occurred to a meaningful extent; and
- The environmental changes evaluated in the original EIR have not yet been triggered.

Consequently, the proposed amendments do not reverse environmental benefits that have already occurred, nor do they eliminate emissions reductions that have already been achieved.

Instead, the amendments primarily affect the timing and implementation pathway associated with future compliance.

Air Quality and Greenhouse Gas Impacts

The certified 2023 EIR concluded that implementation of Rule 9-6 would produce beneficial air-quality and greenhouse-gas impacts through reductions in combustion-related emissions at both the compliance schedule intended in 2023 as well as with a 2035 compliance date as analyzed in the alternatives analysis.

The proposed amendments retain the underlying zero-NO_x performance requirements. However, revised compliance dates and targeted exemptions may affect the timing and magnitude of near-term emissions reductions relative to the implementation scenario evaluated in the original EIR as described in Section VI. Therefore, as compared to the 2023 amendments, the proposed amendments to Rule 9-6 delay some beneficial impacts, with some beneficial impacts potentially forgone due to exemptions.

For Utilities and Noise, adverse electrical infrastructure impacts are less than projected in the 2023 EIR and noise impacts remain similar.

X. RULE DEVELOPMENT / PUBLIC PARTICIPATION PROCESS

Public Participation During Development of the Flexibility Amendments

The flexibility amendments proposed in this Staff Report are the result of an extensive implementation-review process conducted following adoption of the 2023 Rule 9-6 amendments. Unlike the original rulemaking effort, which focused primarily on technology readiness and future market availability, the subsequent implementation-review process focused on evaluating actual implementation experience, affordability considerations, installation barriers, and equitable access to compliant technologies.

Following adoption of the 2023 amendments, the Air District initiated a multi-year implementation-review effort consisting of Implementation Working Group meetings, market assessments, contractor outreach, distributor outreach, Board updates, Stationary Source Committee discussions, and stakeholder-engagement activities. These efforts were intended to evaluate whether assumptions made during the original rulemaking remained valid as implementation approached and to identify barriers that could affect successful implementation of Rule 9-6.

The Air District's Building Appliances Implementation Working Group (IWG) served as the primary mechanism for gathering technical information, market data, stakeholder feedback, and implementation experience. The IWG included more than 40 invited members representing manufacturers, contractors, labor organizations, utilities, local governments, affordable-housing stakeholders, community organizations, environmental organizations, and technical experts. The IWG was organized around a Technical Subcommittee, Community/Equity Subcommittee, and Steering Committee and was supported by an independent facilitator.

Between May 2023 and August 2024, Air District staff hosted more than twenty IWG meetings, including plenary sessions, Technical Subcommittee meetings, Community/Equity Subcommittee meetings, and Steering Committee meetings. Information generated through these meetings ultimately informed the December 2024 implementation report and development of the flexibility amendments proposed in this Staff Report.

Rule Development Milestones

Major milestones associated with development of the flexibility amendments include:

- **March 15, 2023** – Board adoption of Rule 9-6 amendments.
- **May 2023 – August 2024** – Building Appliances Implementation Working Group process, including more than twenty meetings.
- **December 4 and 11, 2024** – Board consideration of *Informational Update Regarding Regulation 9, Rule 6: Nitrogen Oxides Emissions from Natural Gas-Fired Water Heaters less than 75,000 BTU/hr.*
- **October 2025** – Release of *Concepts for Rule 9-6 Amendments: Affordability and Availability Considerations for Zero NOx Small Water Heaters* and opening of a 30-day public comment period.
- **December 10, 2025** – Stationary Source Committee discussion of comments received on the Concepts Paper and review of affordability-focused implementation concepts.
- **February 11, 2026** – Stationary Source Committee review of low-income qualification approaches and additional flexibility concepts.

- **May 6 and May 13, 2026** – Board discussion of the Regulatory Overview and flexibility-amendment concepts. The May 13 meeting continued discussion following loss of quorum on May 6.
- **July 14 – August 13, 2026** – Public review period for draft Rule 9-6 amendments, draft regulatory language, and the Updated Regulatory Overview. Written comments were accepted through the Air District's online comment portal.
- **September 2026** – Release of Draft Staff Report and Proposed Rule Language
- **November 2026 (anticipated)** – Board consideration of the proposed Rule 9-6 flexibility amendments

Considerations to Ensure Equitable Outcomes

Throughout the implementation-review process, stakeholders consistently emphasized the importance of balancing public-health and air-quality benefits with affordability and equitable access to compliant technologies. Discussions focused on ensuring that implementation of Rule 9-6 does not disproportionately burden:

- Low-income households;
- Housing cost-burdened property owners;
- Affordable-housing providers;
- Multifamily property owners;
- Customers facing electrical constraints;
- Customers facing space-constrained installations; and
- Businesses that rely heavily on hot-water availability.

The proposed exemption framework, revised compliance dates, and administrative provisions were developed specifically to address these implementation concerns while maintaining the long-term emissions-reduction objectives of Rule 9-6.

Overview of Comments Received on Draft Amendments

The Air District released draft Rule 9-6 flexibility amendments, draft regulatory language, and an Updated Regulatory Overview for public review on July 14, 2026. Written comments were accepted through August 13, 2026.

The public-review process generated substantial participation from community members, environmental organizations, industry representatives, contractors, housing stakeholders, local governments, and other interested parties. A total of 699 comments and submissions were submitted on the draft amendments. In addition, the Air District received a petition submitted through the Sierra Club that included 1,435 signatories supporting retention of the core Rule 9-6 emissions standards while supporting targeted flexibility measures. This resulted in approximately 2,134 expressions of public input associated with the amendment package. The comments broke down as follows:

Table 9: Draft Amendment Comments Summary

Comment Focus	Count of Comments
Directly addressed the draft amendments	235
Primarily commented on the underlying rule or other broader issues	464
Petition signatures that Support Rule 9-6 and targeted flexibility to address implementation and affordability concerns	1,435

The 464 comments that did not address the draft amendments mainly expressed concern regarding regulation of natural gas-fired appliances generally or expressed concerns about cost of compliance with the 2023 rule for situations that will be addressed by the exemptions introduced in the draft amendments. Of the 235 individual comments received that directly addressed the draft amendments:

- 135 comments generally supported amendments to Rule 9-6 and provided comments suggesting edits and clarifications, many of which are reflected in the proposed amendments;
- 75 comments supported additional or broader flexibility amendments;
- 25 comments supported narrower exemptions and greater rule stringency than presented in the draft amendments.

Comments received throughout the implementation-review process consistently focused on:

- Affordability and installation costs;
- Consumer choice and regulatory authority concerns;
- Scope and administration of exemptions;
- Multifamily housing and renter impacts;
- Space and structural feasibility;
- Timing of implementation;
- Electrical-service and utility constraints;
- Technology readiness and equipment performance; and
- Emergency replacement challenges.

Supportive commenters generally emphasized:

- Public-health benefits associated with NO_x reductions;
- Improved air quality;
- Reduced pollution exposure;
- Climate and electrification benefits; and
- Continued support for Rule 9-6's long-term emissions-reduction objectives.

Many commenters expressed support for targeted implementation flexibility and assistance for lower-income households while cautioning against broad exemptions that could substantially reduce emissions benefits.

Staff Response

The comments received during the implementation-review process reinforced many of the findings developed through the IWG and supporting technical studies. In particular, commenters consistently focused on affordability, installation constraints, emergency replacement situations, and administrative simplicity rather than concerns regarding basic technology availability. The exemption framework, revised compliance dates, emergency-loaner provisions, multifamily housing provisions, contractor-reporting requirements, and streamlined administrative processes proposed in this Staff Report are intended to address many of these concerns while preserving the long-term emissions-reduction framework adopted by the Board in 2023.

Proposed Amendments and Preliminary Staff Report

The proposed amendments discussed in this Staff Report and a preliminary Staff Report were released for public review and comment on October 2, 2026. At the time of initial release of this Final Staff Report, the public comment period is still open until 6:00 PM PST on November 1, 2026.

Following the close of the public comment period and prior to the Board of Directors Hearing on November 4, 2026, the Air District will release a Response to Comments document including responses to all comments received during the public comment period on the proposed amendments.

In response to stakeholder engagement and comments received up to the point of the release of this Final Staff Report, Air District Staff have made three non-substantive changes to the proposed rule language with the intent to clarify requirements of the rule.

1. In Section 9-6-112, the statement “This exemption is not applicable to installations in newly constructed buildings” [was removed from subsections 112.1 and 112.2 and added to the header section of Section 9-6-112 which now states:](#)

Notwithstanding the limitations of Sections 9-6-301.5 and 9-6-303.5, any person may install a natural gas-fired water heater that does not meet the requirements specified in Sections 9-6-301.5 and/or 9-6-303.5 in the following circumstances, provided they obtain an Exemption Certificate pursuant to Section 9-6-405 prior to installation; and any person may sell or purchase a water heater that does not meet the requirements specified in Sections 9-6-301.5 and/or 9-6-303.5 for installation in such circumstances upon presentation of such Exemption Certificate. All exemptions under this section are not applicable to installations in newly constructed buildings.

The intention of this change is to clarify that this exclusion of the exemption for new construction applies to all subsections of 9-6-112, including 9-6-112.3. This change is only meant to be clarifying and does not change the intention of the requirement as expressed in the Preliminary Staff Report or any related analysis.

2. In Section 9-6-113.4, clarification that the non-profit mutual housing cooperative time-limited exemption applies to 501(c)(3) and 501(c)(12) organizations as well as other nonprofit stock cooperatives as defined by the Davis-Stirling Common-Interest Development Act and Civil Code Section 4190. This change is only meant to be clarifying and does not impact any analysis related to the proposed amendments.
3. In Section 9-6-115, Section 9-6-407 was added to the list of sections that wholesale sales are exempt from. This change is meant to clarify that wholesale sales do not need to meet the noticing requirement laid out in Section 9-6-407 as this section was intended to provide information to consumers in retail settings. This change is only meant to be clarifying and does not impact any analysis related to the proposed amendments.

Planned Continued Outreach

The *Air District's* communication and outreach effort is being implemented through a phased approach designed to build awareness and support for the transition to zero-NOx appliances. During Phase I, *up until this point*, outreach activities have focused on developing clear, audience-specific messaging, conducting a baseline public awareness survey, and launching media, contractor, and social media engagement efforts. Following Board action *on the proposed amendments*, Phase II will expand communications through a local advertising campaign and enhanced community outreach, including door-to-door engagement, with clear timelines and calls to action for affected stakeholders. Beginning in 2027 and continuing thereafter *through the implementation dates outlined in the proposed amendments*, Phase III

intends to maintain ongoing advertising, public relations, stakeholder engagement, and social media outreach to support public awareness and implementation of program requirements.

Coordinated Efforts

Available Programs, Incentives, and Technical Resources

A growing network of regional agencies, utilities, and local governments is working to support heat pump water heater (HPWH) adoption by providing incentives, technical assistance, streamlined permitting, and customer education. BayREN offers programs and resources for single-family homeowners, multifamily property owners, and small businesses, along with training and technical resources for local building departments. PG&E provides customer-facing tools such as buyer guides, cost and savings calculators, contractor selection resources, and information on avoiding unnecessary electrical panel upgrades. Funding and incentive programs are also available through local load-serving entities and community choice aggregators, although access is dependent on the customers location within the Bay Area.

To improve public access to current information, the Air District continues to encourage organizations offering incentives, rebates, financing, or other assistance to register their programs with The Switch Is On³⁰, which serves as a centralized resource for Bay Area residents.

Regional Coordination and Rule 9-6 Implementation Support

Regional coordination efforts are underway to support implementation of Rule 9-6. The San Francisco Environment Department is leading a collaboration among cities, counties, utilities, nonprofit organizations, and technical experts to reduce barriers to HPWH adoption. Key focus areas include lowering equipment, labor, permitting, and inspection costs; addressing common electrical and space constraints; expanding homeowner technical and financial assistance; and sharing successful local practices.

Current activities include development of a regional electrification campaign, standardized outreach materials, coordinated communications, and expanded engagement with homeowners and property managers. These efforts are intended to increase awareness of available resources and support broader HPWH adoption throughout the Bay Area. The Air District will continue to coordinate with local jurisdictions and working groups to assist in smooth implementation of the proposed rule amendments.

Legislative Updates

Senate Bill 222 (Wiener) is set to streamline permitting and inspections for residential heat pump water heaters and heat pump HVAC systems by requiring electronic permitting, allowing asynchronous inspections, and establishing online instant permits for simple replacement projects. The bill also limits local requirements that create barriers to heat pump installations and establish permit fee caps for qualifying projects. SB 222 was signed into law in September 2026. The bill is expected to reduce installation costs, simplify the permitting process, and accelerate adoption of heat pump technologies statewide.

Local Permitting and Incentive Best Practices

Several jurisdictions and load-serving entities have already implemented programs that align with the goals of Rule 9-6 and SB 222. Examples include instant or same-day permitting programs in Palo Alto, San José, and San Francisco; simplified permitting pathways in Santa

³⁰ <https://www.switchison.org/>

Clara; permit fee rebates; alternative electrical load calculation methods that can help avoid panel upgrades; and incentive programs such as smart panel rebates.

These local efforts demonstrate how streamlined permitting, technical assistance, and financial incentives can reduce project costs, improve the customer experience, and support increased adoption of heat pump water heaters.

XI. CONCLUSION/RECOMMENDATIONS

Pursuant to California Health and Safety Code Section 40727, before adopting, amending, or repealing a rule, the Board of Directors must make findings of necessity, authority, clarity, consistency, non-duplication, and reference. The following discussion addresses each of these findings for the proposed amendments to Rule 9-6.

Necessity

California Health and Safety Code Section 40727(b)(1) provides that a regulation must be necessary, meaning that a need exists for the regulation or amendment as demonstrated by the rulemaking record.

The Bay Area continues to face significant air-quality challenges associated with emissions of nitrogen oxides (NOx), including impacts related to ozone formation and secondary particulate matter. Rule 9-6 remains an important component of the Air District's strategy for reducing emissions from residential, multifamily, institutional, and commercial water-heating equipment.

The proposed amendments are necessary to support successful implementation of the Rule 9-6 zero-NOx standards adopted by the Board in 2023. Information gathered through the Air District's implementation review process, the Implementation Working Group, market assessments, contractor outreach, affordability analyses, socioeconomic research, and stakeholder engagement demonstrated that the principal implementation challenges associated with Rule 9-6 are now concentrated around affordability, installation constraints, electrical limitations, multifamily housing considerations, affordable-housing impacts, and emergency replacement situations.

The amendments address these issues through revised compliance timelines, a structured exemption framework, streamlined administrative procedures, and targeted implementation flexibility while preserving the long-term emissions-reduction objectives established by the Board. The amendments are therefore necessary to promote practical, equitable, and successful implementation of Rule 9-6 throughout the Air District.

Authority

California Health and Safety Code Section 40727(b)(2) defines authority as the legal basis permitting an air district to adopt, amend, or repeal a regulation.

The Air District has authority to adopt these amendments pursuant to California Health and Safety Code Sections 40000, 40001, 40702, and 40725 through 40728.5.

Clarity

California Health and Safety Code Section 40727(b)(3) requires that regulations be written so their meaning can be easily understood by affected persons.

The proposed amendments improve clarity by:

- Updating compliance schedules;
- Adding clearly defined exemption categories;
- Establishing exemption-certificate procedures;
- Clarifying contractor, retailer, distributor, purchaser, and installer responsibilities;
- Adding notice and reporting requirements;
- Expanding recordkeeping provisions; and
- Adding new definitions necessary to support implementation of the rule.

The amendments are intended to provide clear and predictable implementation pathways for equipment owners, contractors, retailers, distributors, manufacturers, and consumers.

Consistency

California Health and Safety Code Section 40727(b)(4) requires that regulations be consistent with applicable state and federal law.

The proposed amendments are consistent with existing Rule 9-6 requirements and do not alter the underlying emissions-performance standards established by the Board in 2023. The amendments are also consistent with the Board's direction to evaluate implementation conditions and develop appropriate implementation-flexibility measures based on information gathered following adoption of the 2023 amendments.

The amendments complement ongoing state and regional efforts to reduce emissions associated with building appliances while continuing to support the Air District's air-quality and public-health objectives.

Non-Duplication

California Health and Safety Code Section 40727(b)(5) requires that regulations not duplicate existing state or federal requirements unless necessary to carry out the responsibilities of the Air District.

The proposed amendments are not duplicative of any existing federal or state regulation. The amendments establish implementation provisions specific to Rule 9-6 and are intended to facilitate administration of the Air District's existing authority to regulate emissions from water-heating equipment sold and installed within its jurisdiction.

Reference

California Health and Safety Code Section 40727(b)(6) requires identification of the statutes, court decisions, or other legal authorities being implemented, interpreted, or made specific by the regulation.

The proposed amendments implement, interpret, and make specific the provisions of California Health and Safety Code Sections 40000, 40001, 40702, and 40725 through 40728.5.

Recommendations

Based on the information presented in this Staff Report, Air District staff concludes that the proposed amendments will facilitate successful implementation of Rule 9-6 while maintaining the long-term emissions-reduction objectives adopted by the Board in 2023.

The implementation review process demonstrated that compliant water-heating technologies are increasingly available and commercially established. However, the review also identified continuing challenges associated with affordability, electrical-service limitations, installation constraints, multifamily housing systems, affordable-housing projects, and emergency replacement situations. The proposed amendments are specifically intended to address those challenges while preserving the long-term public-health and air-quality benefits associated with the Rule 9-6 zero-NOx requirements.

Accordingly, Air District staff recommends that the Board of Directors:

1. Review and consider the 2023 EIR and the Addendum staff have prepared for the current proposed amendments, and in particular the evaluation of beneficial and potential adverse environmental impacts contained in those documents;
2. Adopt the proposed amendments to Regulation 9, Rule 6: Nitrogen Oxides Emissions from Natural Gas-Fired Boilers and Water Heaters;
3. Approve the revised compliance dates for covered Rule 9-6 equipment;

4. Approve the exemption framework and associated administrative requirements, including exemption certificates, notice requirements, reporting provisions, and recordkeeping requirements;
5. Approve the implementation provisions intended to address affordability concerns, installation constraints, multifamily-housing considerations, affordable-housing considerations, and emergency replacement situations; and
6. Direct staff to continue implementation-support activities, compliance assistance, and future reporting related to Rule 9-6 as appropriate.

The proposed amendments are intended to preserve the long-term public-health and air-quality benefits of Rule 9-6 while improving affordability, implementation practicality, and equitable access to compliance pathways. Staff therefore recommends adoption of the proposed amendments.

**REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 6
NITROGEN OXIDES EMISSIONS FROM
NATURAL GAS-FIRED BOILERS AND WATER HEATERS**

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REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 6
NITROGEN OXIDES EMISSIONS FROM NATURAL GAS-FIRED BOILERS
AND WATER HEATERS

(Adopted April 1, 1992)

9-6-100 GENERAL

9-6-101 Description: This rule limits the emissions of nitrogen oxides from natural gas-fired water heaters and boilers.

(Amended November 7, 2007)

9-6-102 Applicability: This Rule applies to any person who sells, installs, or offers for sale a natural gas-fired water heater ~~for use~~ within the District ~~(Section 9-6-300s Standards)~~ and any manufacturer who ~~intends to sell~~s or distributes for sale or installation a natural gas-fired water heater for use within the District ~~(Section 9-6-400s Administrative Requirements and Section 9-6-600s Manual of Procedures)~~.

(Adopted March 15, 2023)

9-6-110 Exemptions: The requirements of Sections 9-6-301 and 9-6-303.5 shall not apply to the following:

110.1 Natural gas-fired boilers and water heaters with a rated heat input capacity of greater than 2,000,000 BTU/Hour.

110.2 Natural gas-fired water heaters used in recreational vehicles.

110.3 Water heaters using a fuel other than natural gas.

110.4 Natural gas-fired pool/spa heaters with less than 400,000 Btu/Hour rated heat input capacity used exclusively to heat swimming pools, hot tubs or spas.

(Amended November 7, 2007)

9-6-111 Low-Income Exemption: Notwithstanding the limitations of Sections 9-6-301.5 and 9-6-303.5, any person may install a natural gas-fired water heater that does not meet the requirements specified in Sections 9-6-301.5 and/or 9-6-303.5 in the following circumstances, provided they obtain an Exemption Certificate pursuant to Section 9-6-405 prior to installation; and any person may sell or purchase a water heater that does not meet the requirements specified in Sections 9-6-301.5 and/or 9-6-303.5 for installation in such circumstances upon presentation of such Exemption Certificate.

111.1 Low-Income Program Qualified Property Owner – Installation of a water heater at a property owned by a person who is a participant in a Low-Income Program or is at or below 80% Area Median Income (AMI).

111.2 Housing Cost Burdened Property Owner – Installation of a water heater at a property owned by a person whose annual property taxes and mortgage costs are 28% or more of annual household gross income.

9-6-112 One-Time Limited Exemptions for Qualifying Projects: Notwithstanding the limitations of Sections 9-6-301.5 and 9-6-303.5, any person may install a natural gas-fired water heater that does not meet the requirements specified in Sections 9-6-301.5 and/or 9-6-303.5 in the following circumstances, provided they obtain an Exemption Certificate pursuant to Section 9-6-405 prior to installation; and any person may sell or purchase a water heater that does not meet the requirements specified in Sections 9-6-301.5 and/or 9-6-303.5 for installation in such circumstances upon presentation of such Exemption Certificate. All exemptions under this section are not applicable to installations in newly constructed buildings.

112.1 Ventilation Space Constraint – One-time replacement of an existing natural gas-fired water heater in an enclosed space that (i) is less than 700 cubic feet in volume and (ii) cannot be fitted with a louvered door, transfer grille or air duct(s) because it is not adjacent to a space of greater than 700 cubic feet in volume, including attic space.

112.2 Ceiling Height Space Constraint – One-time replacement of an existing natural gas-fired water heater in (i) a garage with a ceiling height less than 7.2 feet high or (ii) any other indoor space with ceiling height less than 6 feet high.

112.3 Contractor-Certified Electrical Constraints – One-time replacement of an existing natural gas-fired water heater of a water heater provided that a Licensed Contractor has certified that the following circumstances exist:

- 1.1** The building has knob-and-tube wiring and installation of the water heater would require more than 50 feet of conduit connecting the water heater to the electrical panel or subpanel;
- 1.2** The electrical panel that would serve the water heater is less than 100 amps, or is less than 60 amps per housing unit for a residential building containing five or more separate dwelling units with separate mailing addresses;
- 1.3** The water heater would require a new 240v electrical connection with more than 50 feet of conduit; or
- 1.4** The electrical panel that would serve the water heater has no open circuit breaker space nor expansion slot(s).

The “One-Time” exemptions in Subsections 112.1 through 112.3 shall be limited to a single installation of a water heater that does not comply with the requirements specified in Sections 9-6-301.5 and/or 9-6-303.5 at an installation address. Once a non-compliant water heater has been installed at an address, no further non-compliant water heater may be installed at that installation address pursuant to any of the exemptions in Section 112 (although other exemptions may still apply).

9-6-113 Time-Limited Exemptions for Water Heaters Larger than 30 gallons and 75,000 BTU/Hour or less: Notwithstanding the limitations of Section 9-6-301.5, any person may install a natural gas-fired water heater manufactured prior to January 1, 2033 that does not meet the requirements specified in Sections 9-6-301.5 in the following circumstances, provided they obtain an Exemption Certificate pursuant to Section 9-6-405 prior to installation; and any person may sell or purchase a natural gas-fired water heater manufactured prior to January 1, 2033 that does not meet the requirements specified in Section 9-6-301.5 for installation in such circumstances upon presentation of such Exemption Certificate.

113.1 Hydronic Water Heaters – Installation of a natural gas-fired hydronic water heater.

113.2 Multifamily Buildings – Installation of a water heater in a residential building containing five or more separate dwelling units with separate mailing addresses.

113.3 Deed-Restricted Affordable Housing – Installation of a water heater in a building covered by a Federal, State, or Local Deed Restriction/Regulatory Agreement (e.g. HUD HAP, CA HCD, LITC).

113.4 Non-Profit Mutual Housing Cooperative – Installation of a water heater in a property owned by a nonprofit stock cooperative, or a 501(c)(3) or 501(c)(12) corporation, where residents buy shares in that corporation rather than owning their specific dwelling unit directly.

113.5 Qualifying Businesses with Specialized Applications and High Hot Water Demand – Installation of a water heater that solely serves a business that (i) is classified as a Restaurant, Food Service, Laundry, Dry Cleaner, Healthcare or Assisted Living business, as stated on the business license and (ii) has a documented need for use of hot water at 160 degrees Fahrenheit or higher.

9-6-114 Contractor Temporary Replacement: Notwithstanding the limitations of Sections 9-6-301.5 and 9-6-303.5, a Licensed Contractor may install a natural gas-fired water heater that does not meet the requirements specified in Sections 9-6-301.5 and/or 9-6-303.5 as a replacement for an existing natural gas-fired water heater on a temporary basis pending permanent replacement with a compliant water heater, provided that the

Licensed Contractor (i) obtains an Exemption Certificate pursuant to Section 9-6-405 prior to the installation, (ii) ensures that the temporary replacement water heater is removed within 12 months after installation OR permanently installed per Sections 9-6-111, 9-6-112, or 9-6-113 and (iii) complies with the reporting requirements specified in Section 9-6-406.

9-6-115 **Limited Exemption for Wholesale Sales:** The requirements of Sections 9-6-301.5, 9-6-303.5 and 9-6-407 shall not apply to wholesale sales and purchases of water heaters and boilers.

9-6-116 **Exemption for Natural Gas-Fired Mobile Home Water Heaters:** Mobile home water heaters shall not be subject to the requirements of Sections 9-6-301 and 9-6-303.

9-6-200 **DEFINITIONS**

9-6-201 **Area Median Income:** Median income for a county as calculated annually by the United States Department of Housing and Urban Development.

9-6-201~~2~~ **Boilers and Water Heaters:** Any combustion equipment used to heat water or produce steam and that is not exclusively used to produce electricity for sale. For the purposes of this Rule, a boiler does not include any waste heat recovery boiler that is used to recover sensible heat from the exhaust of a combustion turbine or any unfired waste heat recovery boiler that is used to recover sensible from the exhaust of any combustion equipment.

(Adopted November 7, 2007)

9-6-20~~2~~3 **BTU:** British thermal unit or units.

(Adopted November 7, 2007)

9-6-20~~3~~4 **Direct-Vent Water Heater:** A storage tank water heater with air intake and exhaust ducts that use a gravity system to collect air from outside a building for combustion and exhaust combustion byproducts to the outside of a building.

(Adopted November 7, 2007)

9-6-20~~4~~5 **Heat Input:** The heat of combustion released by fuels burned in a unit based on the higher heating value of fuel. This does not include the enthalpy of incoming combustion air.

(Adopted November 7, 2007)

9-6-20~~5~~6 **Heat Output:** The product obtained by multiplying the recovery efficiency, as defined by Section 6.1.3 of the Code of Federal Regulation, Title 10, Part 430, Subpart B, Appendix E, by the input rating of the water heater.

(Renumbered November 7, 2007)

9-6-207 **Hydronic Water Heater:** A water heater that heats potable water directly within the appliance and is designed to provide space heating either directly or indirectly through distributing heated fluid to either a fan coil or similar appliance.

9-6-20~~6~~8 **Instantaneous Water Heater:** A device in which water is heated only when the water flows through a heat exchanger (also known as a "tankless" water heater).

(Adopted November 7, 2007)

9-6-209 **Licensed Contractor:** A plumber, electrician, heating ventilation & air conditioning (HVAC) contractor, or general contractor licensed through the California Contractors State License Board.

9-6-210 **Low-Income Program:** Any of the following programs, or other program designated by the Air Pollution Control Officer (APCO) as a “Low Income Program” eligible for an exemption under Section 9-6-111.4:

Covered California Silver 94
Covered California Silver 87
Covered California Silver 73
Medi-Cal for Adults
Medi-Cal for Pregnant Individuals
Bureau of Indian Affairs General Assistance
CalFresh/SNAP (Food Stamps)
CalWorks (TANF) or Tribal TANF
California Alternate Rates for Energy (CARE)
Family Electric Rate Assistance Program (FERA)
Free or Reduced National School Lunch Program (NSLP)
Head Start Income Eligible (Tribal Only)
Women, Infants and Children (WIC)
Supplemental Security Income (SSI)
Low Income Home Energy Assistance Program (LIHEAP)

9-6-211 **Mobile Home:** Any “manufactured home” as defined in California Health and Safety Code (H&SC) section 18007 or “mobile home” as defined in H&SC section 18008.

9-6-20712 **Mobile Home Water Heater:** A closed vessel manufactured exclusively for mobile home use in which water is heated and is withdrawn for use external to the vessel at pressures not exceeding 160 psig, including the apparatus by which heat is generated and all controls and devices necessary to prevent water temperatures from exceeding 210°F (99°C).

(Adopted November 7, 2007)

9-6-20813 **Natural Gas:** A mixture of gaseous hydrocarbons containing at least 80% ~~percent~~ methane by volume as determined according to Standard Method ASTM D1945-64.

(Renumbered November 7, 2007)

9-6-20914 **NO_x Emissions:** The sum of nitric oxide and nitrogen dioxide in the flue gas, collectively expressed as nitrogen dioxide.

(Adopted November 7, 2007)

9-6-2105 **Pool/Spa Heater:** A device in which water is heated when pool or spa water circulates through a heat exchanger.

(Adopted November 7, 2007)

9-6-2116 **Power Direct-Vent Water Heater:** A storage tank water heater with an air intake duct outside of a building with a blower installed to assist in the expulsion of exhaust gases.

(Adopted November 7, 2007)

9-6-2127 **Power-Vent Water Heater:** A storage tank water heater with an air intake duct outside of a building with a blower installed to assist in the expulsion of exhaust gases.

(Adopted November 7, 2007)

9-6-2138 **Rated Heat Input Capacity:** The heat input capacity specified on the nameplate of the combustion unit.

(Renumbered November 7, 2007)

9-6-2149 **Storage Tank Water Heater:** A closed vessel, in which water is heated and is withdrawn for use external to the vessel at pressures not exceeding 160 psig, including the apparatus by which heat is generated and all controls and devices necessary to prevent water temperatures from exceeding 210°F.

9-6-220 **Wholesale Sale:** A sale of goods for resale or commercial distribution, rather than for the purchaser's end use, or where the holder of a resale license is not subject to sales tax at the time of sale.

9-6-300 STANDARDS

9-6-301 Natural Gas-Fired Storage Tank Water Heaters with a Rated Heat Input Capacity of 75,000 BTU/Hour or Less:

- 301.1** No person shall sell, install, or offer for sale within the District any natural gas-fired storage tank water heater, manufactured after July 1, 1992, with a rated heat input capacity of 75,000 BTU/Hour or less, that emits more than 40 nanograms of nitrogen oxides (calculated as NO₂) per joule of heat output.
- 301.2** No person shall sell, install, or offer for sale within the District any natural gas-fired storage tank water heater less than or equal to 50 gallons capacity that is manufactured after January 1, 2009, and that emits more than 10 nanograms of nitrogen oxides (calculated as NO₂) per joule of heat output. This subsection shall not apply to direct-vent, power-vent, power direct-vent water storage tank heaters and water heaters used for mobile homes.
- 301.3** No person shall sell, install, or offer for sale within the District any natural gas-fired storage tank water heater greater than ~~530~~ 30 gallons capacity that is manufactured after January 1, 2010, and that emits more than 10 nanograms of nitrogen oxides (calculated as NO₂) per joule of heat output. This subsection shall not apply to direct-vent, power-vent, power direct-vent storage tank water heaters and water heaters used for mobile homes.
- 301.4** No person shall sell, install, or offer for sale within the District any natural gas-fired storage tank water heater with a capacity of 30 gallons or smaller that is manufactured after January 1, 2011, and that emits more than 10 nanograms of nitrogen oxides (calculated as NO₂) per joule of heat output. This subsection shall not apply to water heaters used for mobile homes.
- 301.5** ~~No-Except as provided in Sections 9-6-111 through 114, no~~ person shall sell ~~or install, or offer for sale~~ within the District any natural gas-fired storage tank water heater that is manufactured after January 1, 202~~7~~8, with a capacity greater than 30 gallons and a rated heat input capacity rating of 75,000 BTU/hour or less, that emits more than 0 nanograms of nitrogen oxides (calculated as NO₂) per joule of heat output. This subsection shall not apply to mobile home water heaters.

(Amended 11/7/07 and 3/15/23)

9-6-302 Certification of Boilers and Water Heaters: No person shall sell ~~or install, or offer for sale~~ within the District any natural gas-fired boiler or water heaters subject to Sections 9-6-301, 303, 304, or 305 unless the water heater manufacturer brand name and model is tested and certified in accordance with Sections 9-6-401 and 402.

(Amended November 7, 2007)

9-6-303 Natural Gas-Fired Boilers and Water Heaters with a Rated Heat Input Capacity of greater than 75,000~~1~~ to 2,000,000 BTU/Hour:

- 303.1** No person shall sell, install, or offer for sale within the District any large natural gas-fired boiler, storage tank water heater, or instantaneous water heater with a rated heat input capacity of greater than 75,000~~1 from~~ to 400,000 BTU/Hour; ~~inclusive,~~ manufactured after January 1, 2008, that emits more than 40 nanograms of nitrogen oxides (calculated as NO₂) per joule of heat output.
- 303.2** No person shall sell, install, or offer for sale within the District any large natural gas-fired boiler, storage tank water heater, or instantaneous water heater with a rated heat input capacity of greater than 75,000~~1 from~~ to 400,000 BTU/Hour; ~~inclusive,~~ manufactured after January 1, 2013, that emits more than 14 nanograms of nitrogen oxides (calculated as NO₂) per joule of heat output.

303.3 No person shall sell, install, or offer for sale within the District any large natural gas-fired boiler, storage tank water heater, or instantaneous water heater with a rated heat input capacity of greater than 400,000~~1 from~~ to 2,000,000 BTU/Hour, ~~inclusive,~~ manufactured after January 1, 2008, that emits more than 20 nanograms of nitrogen oxides (calculated as NO₂) per joule of heat output, or more than 30 ppm NO_x at 3% O₂, dry.

303.4 No person shall sell, install, or offer for sale within the District any large natural gas-fired boiler, storage tank water heater, or instantaneous water heater with a rated heat input capacity of greater than 400,000~~1 from~~ to 2,000,000 BTU/Hour, ~~inclusive,~~ manufactured after January 1, 2013, that emits more than 14 nanograms of nitrogen oxides (calculated as NO₂) per joule of heat output, or more than 20 ppm NO_x at 3% O₂, dry.

303.5 ~~No~~ Except as provided in Sections 9-6-111 through 114, no person shall sell or install, ~~or offer for sale~~ within the District any large natural gas-fired boiler, storage tank water heater, or instantaneous water heater with a rated heat input capacity of greater than 75,000~~1 from~~ to 2,000,000 BTU/Hour, ~~inclusive,~~ manufactured after January 1, 203~~1~~3, that emits more than 0~~0~~ nanograms of nitrogen oxides (calculated as NO₂) per joule of heat output.

(Adopted 11/7/07; Amended 3/15/23)

9-6-304 Natural Gas-Fired Mobile Home Water Heaters: No person shall sell, install, or offer for sale within the District any natural gas-fired mobile home water heater manufactured after January 1, 2008, that emits more than 40 nanograms of nitrogen oxides (calculated as NO₂) per joule of heat output.

(Adopted November 7, 2007)

9-6-305 Natural Gas-Fired Pool/Spa Heaters:

305.1 No person shall sell, install, or offer for sale within the District any natural gas-fired pool/spa heater with an input rating of greater than 400,000~~1 from~~ to 2,000,000 BTU/Hour, inclusive, manufactured after January 1, 2008, that emits more than 40 nanograms of nitrogen oxides (calculated as NO₂) per joule of heat output, or more than 55 ppm NO_x at 3% O₂, dry.

305.2 No person shall sell, install, or offer for sale within the District any natural gas-fired pool/spa heater with an input rating of greater than 400,000~~1 from~~ to 2,000,000 BTU/Hour, inclusive, manufactured after January 1, 2013, that emits more than 14 nanograms of nitrogen oxides (calculated as NO₂) per joule of heat output, or more than 20 ppm NO_x at 3% O₂, dry.

(Adopted November 7, 2007)

9-6-400 ADMINISTRATIVE REQUIREMENTS

9-6-401 Compliance with Emissions Standards: The manufacturer shall obtain confirmation from an independent testing laboratory that each boiler or water heater model it intends to sell or distribute for sale into the District that is subject to the requirements of Sections 9-6-301, 303, 304, or 305 has been tested in accordance with the procedures in Section 9-6-601.

(Amended November 7, 2007)

9-6-402 ~~Compliance Statement~~ Equipment Certification: To certify a boiler or water heater for sale and installation in the District pursuant to Section 9-6-302, the manufacturer shall submit to the APCO either of the following:

402.1 The manufacturer shall submit a statement to the APCO that ~~each the~~ boiler or water heater model meets the emission standard set forth in Section 9-6-301 or 303. The compliance statement must:

~~402.1.1~~ Provide the following general information: name and address of manufacturer, brand name, trade name, model number and heat input rating as it appears on the water heater rating plate.

~~402.1.2~~ Provide a description of the model being certified.

- ~~402.1.3~~ Include a complete certification source test report demonstrating that the boiler or water heater model was tested in accordance with procedures in Section 9-6-601 and a written statement that the model complies with Section 9-6-301.1 through 301.4, 303.1 through 303.4, 304, or 305.
- ~~402.1.4~~ Be submitted to the APCO no more than 90 days after the date of the emissions compliance test conducted in accordance with Section 9-6-401.
- ~~402.1.5~~ Be submitted to the APCO no less than 90 days before ~~the intention to selling~~ or ~~distributing~~ a new water heater model within the District, or no less than 90 days before the effective dates in Section 9-6-301.1 through 301.4, 303.1 through 303.4, 304, or 305.
- 402.2** The manufacturer shall submit to the APCO an approved South Coast Air Quality Management District (SCAQMD) certification issued pursuant to SCAQMD Rules 1121 and 1146.2 to demonstrate compliance with Section 9-6-301.1 through 301.4, 303.1 through 303.4, 304, or 305.

(Amended 11/7/07 and 3/15/23)

9-6-403 Identification: ~~The water heater manufacturer shall display~~ No person shall sell, install, or offer for sale within the District any natural gas-fired water heater subject to Section 9-6-301, 303, 304, or 305 unless the model number, and certification status, and date of manufacture of a the water heater complying with this rule is displayed on the shipping carton and on the rating plate of each the unit.

(Amended November 7, 2007)

9-6-404 Interim Report: At least two years prior to the compliance date listed in Sections ~~9-6-301.5 and~~ 303.5, the APCO shall present to the ~~Air~~ District Board of Directors for consideration at a public meeting a report that includes the technology options currently (and projected to be) available to be sold, installed or offered for sale ~~that do not conflict with the standard in Section 301.3;~~ the projected costs of purchase and installation of such technology, including any ancillary costs, as applicable; any incentive programs available to reduce these costs; and infrastructure readiness associated with rule compliance.

(Adopted March 15, 2023)

9-6-405 Exemption Certificate Requirements for Non-Compliant NOx-Emitting Equipment: A person seeking an Exemption Certificate to authorize the installation, sale, and purchase of a water heater that does not meet the requirements specified in Sections 9-6-301.5 or 9-6-303.5 shall apply to the APCO, provide the following information, and certify that the information is true and accurate:

405.1 Verified address for dwelling unit where the water heater will be installed

405.2 Applicant name and contact information

405.3 Information required by the APCO to demonstrate applicability of an exemption under Sections 9-6-111 through 114.

Upon receipt of a complete application with information demonstrating eligibility for an exemption under Sections 9-6-111 through 9-6-114, the APCO shall issue an Exemption Certificate allowing the installation, sale, and purchase of one non-compliant water heater.

9-6-406 Reporting Requirements for Temporary Emergency Replacement Loaners: Any Licensed Contractor that has purchased a NOx emitting water heater under the exemption in Section 9-6-114 shall report the serial number of each water heater purchased pursuant to the exemption, its Exemption Certificate number, and any address that the unit was installed at during the prior year to the APCO by January 31st of each year. Licensed Contractors must comply with requirements in Section 9-6-502 and report information for all units owned pursuant to the exemption in Section 9-6-114. If any water heater purchased pursuant to Section 9-6-114 is sold or disposed of, the Licensed Contractor must report who the equipment was sold to or how it was disposed of.

9-6-407 **Noticing Requirements for NOx Emitting Equipment Offered for Sale:** Beginning January 1, 2028, any person selling or offering for sale any water heater that does not meet the requirements of Sections 9-6-301.5 or 9-6-303.5 must display prominent notice within the vicinity of the following information:

407.1 Notice that any water heater that does not meet the requirements of Sections 9-6-301.5 and 9-6-303.5 can be purchased and installed only with a valid Exemption Certificate issued pursuant to Section 9-6-405.

407.2 Web address to access District information on compliance and registration form to obtain an Exemption Certificate.

9-6-500 **MONITORING AND RECORDS**

9-6-501 **Recordkeeping Requirements for Water Heater Sellers:** Beginning January 1, 2028, any person who sells any water heater 75,000 BTU/Hour or less that is subject to this rule, and not part of a wholesale sale, shall maintain records associated with each sale of a water heater subject to this rule for a period of at least five years from the date of the sale and make these records available to the APCO upon request. The records must include the following information:

501.1 The date of the sale or purchase;

501.2 The name, business name (if applicable), address, of the purchaser and seller;

501.3 The location of sale and the location of delivery if the seller delivered the water heater to a location different from the location of the sale;

501.4 Serial number of the water heater;

501.5 Whether the sale/purchase is covered by an Exemption Certificate under Sections 9-6-111 through 9-6-114 and the associated Exemption Certificate number, if applicable;

9-6-502 **Recordkeeping Requirements for Licensed Contractors:** Beginning January 1, 2028, any Licensed Contractor who purchases and/or installs a water heater subject to this rule shall maintain records of the date and location of the purchase and/or installation; and if the water heater was purchased and/or installed pursuant to an exemption under Sections 9-6-111 through 9-6-114, the associated Exemption Certificate number. The Licensed Contractor must maintain the records for a period of at least five years from the date of purchase or installation and make the records available to the APCO upon request. If the Licensed Contractor purchases and installs a water heater subject to this provision, it must maintain records for both the purchase and the installation.

9-6-600 **MANUAL OF PROCEDURES**

9-6-601 **Determination of Emissions:** Emissions of oxides of nitrogen from water heaters subject to Section 9-6-301, 303, 304, or 305 shall be tested in accordance with the following provisions:

601.1 Each water heater model shall receive certification based on emission tests of a randomly selected unit of that water heater model.

601.2 The measurement of nitrogen oxides emissions shall be conducted in accordance with EPA Reference Method 7, including 7A-7E.

601.3 Each tested water heater shall be operated in accordance with Section 2.4 of American National Standards ANSI Z21.10.1-1990 at normal test pressure, input rates, and with a five-foot exhaust stack installed during the nitrogen oxides emissions tests.

601.4 The following procedure shall be used to calculate the NO_x emission rate in nanograms of NO_x per joule of heat output:

$$N = \frac{4.566 \times 10^4 \times P \times U}{H \times C \times E}$$

Where:

N = NO_x Emission Rate in nanograms of NO_x emitted per joule of heat output

P = Concentration of NO_x in the flue gas in parts per million (volume)

U = Dry volume percent of CO₂ in flue gas necessary for stoichiometric combustion

H = Gross heating value of the gas, BTU/ft³ (at 60°F and 30"Hg)

C = Dry volume percent of CO₂ in flue gas

E = Recovery efficiency, percentage, as defined in Section 6.1.3 of the Code of Federal Regulation, Title 10, Part 430, Subpart B, Appendix E.

(Amended 12/7/07 and 3/15/23)

Final Report

Socioeconomic Analysis for Amendments to Regulation 9 Rule 6: Nitrogen Oxides Emissions from Natural Gas-Fired Water Heaters

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Executive Summary

Eastern Research Group, Inc. (ERG) conducted a socioeconomic analysis of the proposed amendments to Bay Area Air District (District) Regulation 9, Rule 6 (Rule 9-6), which establishes nitrogen oxides (NOx) emissions standards for natural gas-fired water heaters. The proposed amendments are intended to support implementation of previously adopted zero-NOx standards while addressing practical challenges associated with compliance through targeted exemptions, delayed compliance provisions, and flexibility mechanisms for certain households and property types. ERG evaluated the potential impacts of the proposed amendments on Bay Area households, affected populations, and the regional economy.

The analysis focused on the incremental costs associated with replacing existing gas-fired water heaters at the end of their equipment life with compliant electric heat pump water heaters. ERG assessed the impacts of these costs on households across income levels and counties.

Across the Bay Area, ERG estimates annualized net compliance costs of approximately \$372.8 million for households after accounting for utility bill savings and applicable exemptions. Compared to the current regulatory environment, which accounts for the current zero-NOx requirements outlined in Rule 9-6 as passed in March of 2023 by the Air District Board of Directors, the proposed amendments result in \$97.9 million of annual savings across the Bay Area as a result of flexibility measures introduced. Utility savings associated with the transition from gas-fired to electric water heating are estimated to offset approximately \$60.8 million of annual compliance costs.

ERG used the IMPLAN regional economic input-output model to evaluate broader regional economic impacts associated with changes in household spending resulting from compliance costs. Comparing the impacts of Rule 9-6 as passed in March of 2023 to those under the proposed amendments results in about 425 fewer jobs lost if the amendments are adopted.

Overall, ERG concludes that the proposed Rule 9-6 amendments are not expected to result in significant socioeconomic impacts for Bay Area households or the regional economy. The combination of relatively modest household compliance costs in percentage terms, anticipated utility savings, and targeted exemptions for low-income households substantially reduce economic burdens under Rule 9-6 while supporting the District's air quality, public health, and emissions reduction objectives.

Introduction

This report presents a socioeconomic analysis of proposed amendments to Regulation 9, Rule 6 (Rule 9-6), which establishes nitrogen oxides (NOx) emissions standards for natural gas-fired water heaters in the Bay Area. The proposed amendments are intended to support implementation of the Bay Area Air District's previously adopted zero-NOx standards while addressing practical challenges associated with compliance, including installation constraints, electrical infrastructure requirements, multifamily housing considerations, and affordability concerns for certain households. The amendments also include compliance flexibilities and exemptions designed to ensure that implementation remains feasible and equitable across the diverse communities served by the Bay Area Air District (District).

As part of the rule development process, the District evaluates whether proposed regulatory actions could result in significant socioeconomic impacts on residents, businesses, or the regional economy. This analysis examines the potential economic effects associated with compliance with the proposed Rule 9-6 amendments, focusing primarily on the incremental costs that households may incur when replacing existing gas-fired water heaters with compliant zero-NOx equipment and comparing these costs to the current regulatory environment with a higher level of burden on Bay Area households. Because currently available zero-NOx water heating equipment are predominantly electric, the analysis evaluates the costs associated with a transition from utility gas-fired equipment to electric heat pump water heaters, including potential electrical service upgrades where applicable.

The Bay Area encompasses a diverse population of nearly 7.7 million residents and approximately 2.8 million households spread across nine counties (Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma). Household incomes, housing costs, housing tenure, and building characteristics vary considerably throughout the region. These factors influence both the population potentially affected by Rule 9-6 and the magnitude of any compliance costs. Consequently, this report begins with an overview of demographic, economic, housing, and energy-use characteristics within the District to provide context for understanding how the proposed amendments may affect different household groups, including low-income households, renters, and homeowners.

The analysis then estimates the incremental costs associated with compliance, considering appliance replacement costs, electrical panel upgrades, and expected changes in household utility expenditures. Particular attention is given to recently proposed exemptions and compliance flexibilities, including provisions for low-income qualified property owners.

In addition to evaluating impacts on representative households, this report assesses aggregate effects across the Bay Area economy. The analysis estimates the extent to which compliance-related expenditures may alter household spending patterns and examines potential impacts on employment using a regional input-output modeling framework.

The sections that follow describe the need for the proposed amendments, summarize demographic and economic conditions within the Bay Area, present estimates of household compliance costs, and evaluate the resulting regional economic impacts associated with implementation of the proposed Rule 9-6 amendments compared to the status quo under Rule 9-6.

Need for Action

Rule 9-6 aims to reduce nitrogen oxides emissions from natural gas-fired water heaters, a substantial source of these emissions throughout the Bay Area. NOx is a precursor to both ground-level ozone and fine particulate matter (PM2.5). The District has identified natural gas appliances in buildings as a major contributor to region's residential NOx emissions, with furnaces and water heaters accounting for approximately 89 percent of residential NOx emissions (ADE, 2022).

Rule 9-6 requires the replacement of natural gas-fired water heaters as they reach the end of their useful life with zero-NOx alternatives. The rule does not require the premature replacement of functioning equipment. Instead, it establishes progressively cleaner point-of-purchase standards, culminating in a zero-NOx emission requirement for new replacement water heaters. By targeting equipment turnover, the rule achieves emissions reductions over time while avoiding immediate retrofit requirements.

The proposed amendments to Rule 9-6 are necessary to continue achieving the air quality and public health objectives that formed the basis for the Board's 2023 adoption of zero-NOx standards, while also addressing implementation challenges identified through the District's Implementation Working Group process. Staff's technical analyses demonstrated that emissions from water heaters contribute to regional ozone formation and secondary PM2.5 formation, resulting in widespread population exposure to harmful air pollution. Approximately 60 percent of the PM2.5 exposure associated with covered appliances results from secondary particulate formation driven by NOx emissions (Bay Area Air District, 2026). Because these pollutants disperse across the region, reducing emissions from water heaters provides broad community-wide benefits rather than benefits limited to individual properties.

Reducing exposure to PM2.5 and ozone precursors is a critical public health objective. Exposure to fine particulate matter is associated with increased risks of respiratory disease, cardiovascular disease, hospitalizations, and premature mortality. The District estimated that implementation of the zero-NOx appliance standards under Rules 9-4 and 9-6 could prevent up to 85 premature deaths annually and generate as much as \$890 million per year in avoided health impacts (i.e., reduced illness, hospital visits, and mortality). As older gas-fired water heaters are replaced with zero-NOx technologies, emissions reductions are expected to improve outdoor air quality throughout the region and reduce cumulative public health burdens.

Rule 9-6 is also necessary to help meet applicable state and federal air quality requirements. The Bay Area remains subject to planning and attainment obligations for ozone and particulate matter standards under the federal Clean Air Act and California clean air statutes. NOx reductions from stationary sources, including building appliances, are an important component of the District's broader strategy for attaining and maintaining ambient air quality standards. The 2017 Clean Air Plan identified reductions in emissions from residential and commercial combustion sources as an important measure for achieving long-term air quality goals. Continued implementation of Rule 9-6 supports these obligations by securing enforceable, long-term reductions in NOx emissions from a major category of emission sources.

The proposed amendments further support implementation of the zero-NOx standard by addressing documented barriers related to installation costs, electrical upgrades, space constraints, multifamily housing, hydronic systems, and low-income households. Through stakeholder engagement and technical evaluation, the District determined that limited flexibility mechanisms are necessary to ensure that implementation remains practical, equitable, and enforceable. The amendments maintain the fundamental objective of eliminating NOx emissions from covered water heaters while providing pathways to address circumstances where immediate compliance may be infeasible.

In addition to air quality and public health benefits, Rule 9-6 provides climate co-benefits. Because currently available zero-NOx water heater equipment are electric, compliance with the rule is expected to reduce greenhouse gas emissions relative to conventional natural gas-fired equipment. While the primary

purpose of Rule 9-6 is the reduction of NOx emissions and associated health impacts, these greenhouse gas reductions contribute to California's broader climate goals and support long-term decarbonization efforts in the building sector.

Affected Population and Demographic Trends

This section of the report discusses the larger context of the Air District region within which the proposed Rule 9-6 amendments would apply. It includes a broad overview of demographic and economic trends, and discussion of households potentially affected by the proposed rule amendments.

Population Trends

Eastern Research Group, Inc. (ERG) summarized population data since the Great Recession recovery period to understand how the nine-county San Francisco Bay Area has changed. As shown in Table 1, between 2010 and 2019, the Bay Area grew at a slightly higher rate than California as a whole (0.9 percent versus 0.7 percent, respectively). Population has trended downward in the Bay Area in the post-COVID years though, while remaining largely stagnant throughout California.

Santa Clara County is the most populous county in the Bay Area with approximately 1.9 million inhabitants, while Napa is the least populated with roughly 136,000 people. From 2010 to 2026, Contra Costa grew the fastest at 0.7 percent per year (CADOF, 2026a-b).

Table 1. Population Trends: Bay Area Counties, Region, and California, 2010-2024

Jurisdiction	2010	2019	2026	10-19 CAGR	19-26 CAGR	10-26 CAGR
Alameda	1,510,271	1,675,964	1,666,136	1.2%	-0.1%	0.6%
Contra Costa	1,049,025	1,161,077	1,163,891	1.1%	0.0%	0.7%
Marin	252,409	263,645	250,823	0.5%	-0.7%	0.0%
Napa	136,484	138,982	136,374	0.2%	-0.3%	0.0%
San Francisco	805,235	872,219	845,658	0.9%	-0.4%	0.3%
San Mateo	718,451	765,726	748,182	0.7%	-0.3%	0.3%
Santa Clara	1,781,642	1,936,821	1,932,468	0.9%	0.0%	0.5%
Solano	413,344	450,545	452,050	1.0%	0.0%	0.6%
Sonoma	483,878	494,708	484,022	0.2%	-0.3%	0.0%
Bay Area	7,150,739	7,759,687	7,679,604	0.9%	-0.1%	0.4%
California	37,253,956	39,503,656	39,592,978	0.7%	0.0%	0.4%

Source: ERG, based on CADOF, 2026a-b.

Note: CAGR = compound annual growth rate.

Industry Trends

Table 2 represents the employment environment over the last decade and a half within the Bay Area. In total, there are 3.9 million employees as of 2024 (CAEDD, 2026). Job growth across the Bay Area stood at 3 percent annualized from 2010 to 2019. Compared to the state, the Bay Area grew at a higher rate during this period. Overall employment in the Bay Area decreased in the post-COVID environment, though, led by the manufacturing sector,¹ while California recognized modest growth at the same time.

The industries in Table 2 are sorted by the share of total employment in 2024. The top five sectors in the Bay Area in terms of total number of workers are:

1. Professional and Business Services (NAICS 54-55): 796,900 workers;
2. Educational and Health Services (NAICS 61-62): 676,900 workers;
3. Trade, Transportation and Utilities (NAICS 22, 42, 44-45, 48-49): 514,600 workers;
4. Government (NAICS 92): 475,100 workers, including public sector health and education; and
5. Leisure and Hospitality (NAICS 71-72): 404,300.

¹ As Applied Development Economics (ADE), Inc. indicated in their [2022 analysis](#) of Rule 9-6 impacts, the leisure and hospitality industry was the hardest hit initially during the COVID pandemic. Since then this industry has started to recover but is still not quite at pre-pandemic levels in terms of employment.

Table 2. Bay Area Employment Trends by Sector, 2010 - 2024

Industry Sector		2010	2019	2024	2024 % of Total	2024 CA % of Total	Bay Area CAGR 10- 19	Bay Area CAGR 19- 24	CA CAGR 10-19	CA CAGR 19-24
54-56	Professional and Business Services	546,559	775,039	796,935	20.3%	15.3%	4.0%	0.6%	3.1%	0.4%
61-62	Educational and Health Services	399,130	597,192	676,943	17.2%	17.5%	4.6%	2.5%	5.1%	3.0%
42, 44-45, 48-49, 22	Trade, Transportation, and Utilities	472,958	561,484	514,594	13.1%	16.9%	1.9%	-1.7%	1.8%	0.1%
92	Government	434,839	459,472	475,079	12.1%	14.5%	0.6%	0.7%	0.6%	1.0%
71-72	Leisure and Hospitality	324,800	445,311	404,296	10.3%	11.1%	3.6%	-1.9%	3.5%	-0.2%
31-33	Manufacturing	305,378	362,498	308,961	7.9%	6.9%	1.9%	-3.1%	0.8%	-1.2%
51	Information	110,725	230,703	224,729	5.7%	3.0%	8.5%	-0.5%	3.0%	-0.5%
11, 21, 23	Natural Resources and Construction	148,631	227,565	222,945	5.7%	7.4%	4.8%	-0.4%	3.6%	0.2%
52-53	Financial Activities	170,839	199,632	178,081	4.5%	4.4%	1.7%	-2.3%	1.2%	-1.0%
81	Other Services	155,133	131,971	130,553	3.3%	3.1%	-1.8%	-0.2%	-3.0%	0.8%
Total, All Industries		3,068,992	3,990,867	3,933,116	100.0%	100.0%	3.0%	-0.3%	2.3%	0.6%

Source: ERG, based on CAEDD, 2026.

Note: CAGR = compound annual growth rate; Public sector education and public sector health included in government.

Employment grew the fastest in the Educational and Health Services industry group since 2019, representing the only industry group with job growth greater than 1 percent in the Bay Area.

The data in Table 2 shows that the Bay Area continues to exhibit a highly knowledge-based economy. In 2024, the combined Professional and Business Services and Information sectors accounted for nearly 26 percent of all regional employment (20.3 percent and 5.7 percent, respectively), compared with approximately 18.3 percent statewide.

Household Income

Given the concentration on professional and information services in this region, household income in the Bay Area tends to be much higher than California as a whole. Based on household counts available in Table 3, Table 4 shows that a very high proportion of households in the Bay Area (34.4 percent) have an annual income greater than \$200,000 (U.S. Census Bureau, 2026a). Santa Clara and San Mateo counties each have over 40 percent of households with an annual income over \$200,000, while Solano and Sonoma have the lowest concentration of these households in the Bay Area (18.1 and 21.8 percent, respectively).

Table 3. Households by Income Bracket for Bay Area Region and Counties, 2024

Income Bracket	Bay Area	Alameda	Contra Costa	Marin	Napa
Less than \$15,000	173,865	43,465	21,092	5,452	1,801
\$15,000 to \$29,999	159,497	39,184	24,192	5,696	3,234
\$30,000 to \$39,999	104,567	22,857	16,969	4,319	2,106
\$40,000 to \$49,999	107,642	24,855	16,730	4,027	1,891
\$50,000 to \$69,999	224,682	49,950	36,586	7,683	4,822
\$70,000 to \$99,999	322,613	69,627	51,082	10,984	6,438
\$100,000 to \$149,999	439,954	96,329	71,161	13,909	8,945
\$150,000 to \$199,999	334,362	72,267	55,924	9,879	6,532
\$200,000 or more	978,747	194,141	123,951	40,026	13,708
Total Households	2,845,928	612,675	417,686	101,974	49,477
Median Income	\$139,540	\$129,130	\$127,221	\$147,017	\$122,754
Income Bracket	San Francisco	San Mateo	Santa Clara	Solano	Sonoma
Less than \$15,000	34,454	12,562	32,703	10,887	11,449
\$15,000 to \$29,999	23,437	10,589	29,543	12,288	11,337
\$30,000 to \$39,999	13,244	8,369	19,690	7,894	9,119
\$40,000 to \$49,999	13,876	8,685	20,431	7,821	9,326
\$50,000 to \$69,999	23,465	19,649	43,158	19,526	19,842
\$70,000 to \$99,999	36,352	28,018	67,680	25,143	27,290
\$100,000 to \$149,999	49,084	38,463	94,078	29,583	38,402
\$150,000 to \$199,999	40,946	32,247	73,970	18,268	24,329
\$200,000 or more	136,983	107,668	291,173	29,005	42,092
Total Households	371,841	266,249	672,426	160,415	193,185
Median Income	\$139,801	\$160,733	\$168,154	\$94,930	\$107,274

Source: ERG, based on U.S. Census Bureau, 2026a.

Note: Median income for the Bay Area is a computed average using the combined household counts for the nine Bay Area counties.

Table 4. Percentage of Households by Income Bracket for Bay Area Region and Counties, 2024

Income Bracket	Bay Area	Alameda	Contra Costa	Marin	Napa
Less than \$15,000	6.1%	7.1%	5.0%	5.3%	3.6%
\$15,000 to \$29,999	5.6%	6.4%	5.8%	5.6%	6.5%
\$30,000 to \$39,999	3.7%	3.7%	4.1%	4.2%	4.3%
\$40,000 to \$49,999	3.8%	4.1%	4.0%	3.9%	3.8%
\$50,000 to \$69,999	7.9%	8.2%	8.8%	7.5%	9.7%
\$70,000 to \$99,999	11.3%	11.4%	12.2%	10.8%	13.0%
\$100,000 to \$149,999	15.5%	15.7%	17.0%	13.6%	18.1%
\$150,000 to \$199,999	11.7%	11.8%	13.4%	9.7%	13.2%
\$200,000 or more	34.4%	31.7%	29.7%	39.3%	27.7%
Income Bracket	San Francisco	San Mateo	Santa Clara	Solano	Sonoma
Less than \$15,000	9.3%	4.7%	4.9%	6.8%	5.9%
\$15,000 to \$29,999	6.3%	4.0%	4.4%	7.7%	5.9%
\$30,000 to \$39,999	3.6%	3.1%	2.9%	4.9%	4.7%
\$40,000 to \$49,999	3.7%	3.3%	3.0%	4.9%	4.8%
\$50,000 to \$69,999	6.3%	7.4%	6.4%	12.2%	10.3%
\$70,000 to \$99,999	9.8%	10.5%	10.1%	15.7%	14.1%
\$100,000 to \$149,999	13.2%	14.4%	14.0%	18.4%	19.9%
\$150,000 to \$199,999	11.0%	12.1%	11.0%	11.4%	12.6%
\$200,000 or more	36.8%	40.4%	43.3%	18.1%	21.8%

Source: ERG, based on U.S. Census Bureau, 2026a.

On the other end of the income distribution, about 11.7 percent of households in the region have an annual household income below \$30,000. The highest concentration of lower income households is in San Francisco County (15.6 percent), while San Mateo (8.7 percent) has the lowest concentration of these households.

ERG estimated the median household income across the Bay Area by taking a weighted average of median household income in each county using household counts from the U.S. Census Bureau's American Community Survey (ACS). This analysis resulted in a household income estimate of \$139,540 for the region. Santa Clara (\$168,200) and San Mateo (\$160,700) counties had the highest median incomes, while Solano (\$94,900) and Sonoma (\$107,300) had the lowest (U.S. Census Bureau, 2026a).

As shown in Table 5, income levels have increased significantly since 2010. Using the same methodology as described above, ERG estimated median income for all Bay Area households at \$74,200 in 2010 and \$116,100 in 2019. The compound annual growth rate (CAGR) was 4.6 percent from 2010 to 2024, and 3.7 percent from 2019 to 2024. The median income for renter households grew at a faster rate than for homeowners over the entire period presented, although homeowner incomes have grown faster in more recent years.

Table 5. Bay Area Household Income Growth by Housing Tenure

Housing Tenure	2010	2019	2024	10-19 CAGR	19-24 CAGR	10-24 CAGR
Owner-Occupied	\$99,321	\$144,121	\$178,033	4.2%	4.3%	4.3%
Renter-Occupied	\$49,922	\$87,086	\$101,215	6.4%	3.1%	5.2%
Total Households	\$74,227	\$116,124	\$139,540	5.1%	3.7%	4.6%

Source: ERG, based on U.S. Census Bureau, 2026a.

Note: Median income for the Bay Area is a computed average using the combined household counts for the nine Bay Area counties.

The District, in new amendments to Rule 9-6, is exempting low-income qualified property owners, which are defined as those making less than 80 percent of the Area Median Income. ERG accessed income limit designations from the U.S. Department of Housing and Urban Development (HUD) for each county to determine the thresholds for qualifying households for this analysis. These thresholds are based on the percentage of the median household income for a particular geographic region and are adjusted based on regional housing costs and other factors.

For the nine-county Bay Area region, there are six different metro areas as shown below.²

- Napa, CA MSA (Napa County)
- Oakland-Fremont, CA HUD Metro FMR Area (Alameda and Contra Costa)
- San Francisco, CA HUD Metro FMR Area (San Francisco, San Mateo, and Marin)
- San Jose-Sunnyvale-Santa Clara, CA HUD Metro FMR Area (Santa Clara County)
- Santa Rosa, CA MSA (Sonoma County)
- Vallejo-Fairfield CA MSA (Solano County)

Table 6 presents the thresholds for meeting low-income (80 percent of Area Median Income), very low income (50 percent), and extremely low income (30 percent) for four-person households in each county. For this analysis, ERG used the 2024 thresholds presented here and applied them to the rest of the 2024 demographic data available at the time of this report.

² The metropolitan statistical area (MSA) definitions are maintained by the Office of Management and Budget (OMB). However, HUD will use a custom geographic area for purposes of calculating the fair market rent used to adjust the income group definitions.

Table 6. Income Designations by County, 2024 and 2026

County	2026 Low Income (80%)	2026 Very Low Income (50%)	2026 Extremely Low Income (30%)	2024 Low Income (80%)	2024 Very Low Income (50%)	2024 Extremely Low Income (30%)
Alameda	\$135,750	\$84,850	\$50,900	\$120,800	\$77,850	\$46,700
Contra Costa	\$135,750	\$84,850	\$50,900	\$120,800	\$77,850	\$46,700
Marin	\$168,100	\$105,050	\$63,050	\$156,650	\$97,900	\$58,750
Napa	\$140,950	\$88,150	\$52,900	\$117,350	\$73,400	\$44,050
San Francisco	\$168,100	\$105,050	\$63,050	\$156,650	\$97,900	\$58,750
San Mateo	\$168,100	\$105,050	\$63,050	\$156,650	\$97,900	\$58,750
Santa Clara	\$162,400	\$102,750	\$61,650	\$146,100	\$92,150	\$55,300
Solano	\$104,500	\$65,300	\$39,200	\$100,650	\$62,900	\$37,750
Sonoma	\$131,850	\$82,400	\$49,450	\$110,700	\$69,150	\$41,500

Source: ERG, based on HUD, 2024 & 2026.

Table 7 shows the varying federal poverty thresholds based on the size of the household. In 2024, these thresholds ranged from \$15,060 for a single-resident household to \$52,720 for those households with eight residents. These income levels increased in 2026 (\$15,960 and \$55,720, respectively). The poverty line for a family of four in 2024 was \$31,200.

Table 7. Federal Poverty Levels by Number of Persons in Family or Household, 2024 and 2026

Size of Household	2026 Federal Poverty Level	2024 Federal Poverty Level
1	\$15,960	\$15,060
2	\$21,640	\$20,440
3	\$27,320	\$25,820
4	\$33,000	\$31,200
5	\$38,680	\$36,580
6	\$44,360	\$41,960
7	\$50,040	\$47,340
8	\$55,720	\$52,720

Source: ERG, based on HHS, 2024 & 2026.

The Bay Area had a combined 92,900 families living in poverty in 2024, representing 5.1 percent of all family households in the region (see Table 8). While this represents a decrease in the poverty rate across the Bay Area compared to 2010 (7.4 percent), this has increased compared to pre-pandemic levels (4.4 percent in 2019).

Table 8. Bay Area Families with Income Below Poverty Level, 2024

County	Families	Income Below Poverty Level	Percent Below Poverty Level
Alameda	392,920	21,218	5.4%
Contra Costa	301,302	18,982	6.3%
Marin	62,466	3,186	5.1%
Napa	31,626	917	2.9%
San Francisco	163,134	9,136	5.6%
San Mateo	181,139	7,064	3.9%
Santa Clara	464,170	19,495	4.2%
Solano	108,035	7,779	7.2%
Sonoma	122,282	5,136	4.2%
Bay Area	1,827,074	92,912	5.1%

Source: ERG, based on U.S. Census Bureau, 2026b.

Housing Tenure

Renters represent about 44 percent of all households (U.S. Census Bureau, 2026a). Sonoma County has the lowest share of renting households at 35.1 percent, while San Francisco County is the only county in the Bay Area that has renters representing a majority of all households (63.3 percent). Table 9 provides a breakdown of households by housing tenure for each county, along with differences in household income between homeowners and renters. For both homeowners and renters, median income was highest in Santa Clara County (\$213,900 for homeowners and \$124,350 for renters) and lowest in Solano County (\$118,000 and \$67,400, respectively).

Table 9. Bay Area Households by Housing Tenure, 2024

County	Total Households	Owner-Occupied	Renter-Occupied	Renters / Renter Income as % of Total
Number of Households				
Alameda	612,675	333,939	278,736	45.5%
Contra Costa	417,686	285,951	131,735	31.5%
Marin	101,974	66,358	35,616	34.9%
Napa	49,477	31,872	17,605	35.6%
San Francisco	371,841	136,566	235,275	63.3%
San Mateo	266,249	151,933	114,316	42.9%
Santa Clara	672,426	364,497	307,929	45.8%
Solano	160,415	98,720	61,695	38.5%
Sonoma	193,185	125,301	67,884	35.1%
Bay Area	2,845,928	1,595,137	1,250,791	44.0%
Median Income				
Alameda	\$129,130	\$174,216	\$85,775	66.4%
Contra Costa	\$127,221	\$157,517	\$78,542	61.7%
Marin	\$147,017	\$193,432	\$83,354	56.7%
Napa	\$122,754	\$143,996	\$100,347	81.7%
San Francisco	\$139,801	\$198,701	\$111,044	79.4%
San Mateo	\$160,733	\$198,977	\$119,963	74.6%
Santa Clara	\$168,154	\$213,926	\$124,350	74.0%
Solano	\$94,930	\$118,006	\$67,387	71.0%
Sonoma	\$107,274	\$130,491	\$78,375	73.1%
Bay Area	\$139,540	\$178,033	\$101,215	72.5%

Source: ERG, based on U.S. Census Bureau, 2026a.

Table 10 summarizes housing costs and household income by county as of 2024. For renters, median monthly housing costs ranged from about \$2,200 in Solano County to \$2,800 in Santa Clara County. For homeowners, costs did not differ in Solano County compared to their fellow residents renting in the county. The highest median monthly housing bill was incurred in Marin County (\$3,500).

Considering the requirements under Rule 9-6 that would lead to additional housing costs for Bay Area residents, it is important to account for cost-burdened households (defined as dedicating 30 percent or more of income towards housing). Looking at the data available in Table 10, representative median renters in Alameda, Contra Costa, Marin, Napa, Solano, and Sonoma counties are already considered cost-burdened by this definition.

Table 10. Housing Costs as Percentage of Income for Bay Area Counties, 2024

County	Total Households			Owner-Occupied			Renter-Occupied		
	Median Monthly Income	Median Monthly Costs	Costs as % of Income	Median Monthly Income	Median Monthly Costs	Costs as % of Income	Median Monthly Income	Median Monthly Costs	Costs as % of Income
Alameda	\$10,761	\$2,534	23.5%	\$14,518	\$2,918	20.1%	\$7,148	\$2,312	32.3%
Contra Costa	\$10,602	\$2,598	24.5%	\$13,126	\$2,843	21.7%	\$6,545	\$2,340	35.8%
Marin	\$12,251	\$3,000	24.5%	\$16,119	\$3,535	21.9%	\$6,946	\$2,624	37.8%
Napa	\$10,230	\$2,524	24.7%	\$12,000	\$2,459	20.5%	\$8,362	\$2,642	31.6%
San Francisco	\$11,650	\$2,646	22.7%	\$16,558	\$3,336	20.1%	\$9,254	\$2,448	26.5%
San Mateo	\$13,394	\$2,981	22.3%	\$16,581	\$3,336	20.1%	\$9,997	\$2,832	28.3%
Santa Clara	\$14,013	\$2,961	21.1%	\$17,827	\$3,216	18.0%	\$10,363	\$2,841	27.4%
Solano	\$7,911	\$2,222	28.1%	\$9,834	\$2,221	22.6%	\$5,616	\$2,223	39.6%
Sonoma	\$8,940	\$2,272	25.4%	\$10,874	\$2,322	21.4%	\$6,531	\$2,229	34.1%

Source: ERG, based on U.S. Census Bureau, 2026a

Home Fuel Sources

Finally, in terms of heating fuel, approximately 62 percent of Bay Area households use utility-provided gas (see Table 11). Utility gas use is much more common among homeowners (72.5 percent) than in rental units (just under 48 percent). Meanwhile, nearly 45 percent of rental units utilize electricity for heating compared to 21.6 percent in owner-occupied households.

Table 11. Source of Heating Fuel for Bay Area Households, 2024

Heating Fuel Source	Bay Area Households	Percent of Total
Owner-Occupied Housing Units		
Utility Gas	1,146,684	72.5%
Electricity	342,120	21.6%
Solar Energy	25,353	1.6%
No Fuel Used	13,460	0.9%
All Other Heating Fuels	53,554	3.4%
Total Units	1,581,171	100.0%
Renter-Occupied Housing Units		
Utility Gas	584,593	47.9%
Electricity	544,662	44.6%
Solar Energy	3,777	0.3%
No Fuel Used	49,957	4.1%
All Other Heating Fuels	37,536	3.1%
Total Units	1,220,525	100.0%
Total Households		
Utility Gas	1,731,277	61.8%
Electricity	886,782	31.7%
Solar Energy	29,130	1.0%
No Fuel Used	63,417	2.3%
All Other Heating Fuels	91,090	3.3%
Total Units	2,801,696	100.0%

Source: ERG, based on U.S. Census Bureau, 2026c.

Economic Impact Analysis

In this section, ERG describes the methodological approach to estimating economic impacts of the proposed rule amendments. To provide a conservative estimate of potential compliance costs, this analysis assumes that, given current technology availability, compliance with the proposed rule amendments will occur primarily through the replacement of existing broken gas-fired water heaters with electric alternatives. As the proposed amendments do not mandate retrofitting existing appliances, compliance costs would be incurred only upon appliance replacement at the end of its service life or through voluntary consumer upgrades.

Households that already have electric appliances for water heating are not impacted by this proposed standard. The cost of compliance used in the analysis represents the difference between purchasing and installing a natural gas-powered appliance and an electrical one. The analysis does not make any assumptions about future zero-NOx appliance cost reductions or rebate program availability.

In addition to the direct costs to consumers to purchase and install new equipment, there are a number of indirect cost and revenue impacts from the proposed rule amendments.

- Heat pump water heaters are cheaper to operate in terms of monthly household energy bills. This analysis assumes similar utility usage for the new appliance compared to the replaced equipment.
- Despite the potential energy cost savings, the net cost to consumers may result in changes in spending patterns among Bay Area households, with potential job losses in retail goods and services industries stemming from these spending changes.
- PG&E will likely need to invest in increased electricity generation, transmission and distribution to meet the increased demand for electricity from new appliances, potentially resulting in higher electricity rates for consumers.

In the discussion below, the direct consumer costs and the effects of the first two bullet points above are addressed quantitatively for households at various income levels and also in aggregate across the Bay Area region.

Cost of Compliance

While the cost of an electric water heater is highly variable, District staff determined that the average incremental cost (i.e., the additional cost above the cost of a new natural gas-fired unit) to install a heat pump water heater for a standard installation is approximately \$3,500. The incremental retail cost of the heat pump water heater itself, compared to a new natural-gas fired unit, ranges from \$600 to \$1,600, with the remaining cost difference coming from additional labor costs to install the unit.³ ERG uses estimates as presented in a study previously prepared for the District (Rincon Consultants, 2024). See Table 12 for water heater cost estimates used in this analysis.

³ See District documentation, “Updated Regulatory Overview: Rule 9-6 Draft Flexibility Amendments,” available here: https://www.baaqmd.gov/~/_media/dotgov/files/rules/reg-9-rule-4-nitrogen-oxides-from-fan-type-residential-central-furnaces/2021-amendments/documents/20260713_rule_9_6_regulatory_overview_updated_july_draft_amendment_package-pdf?rev=f4c5f70f25674a2787eed4d39abc97ab&sc_lang=en

Table 12. Comparison of Project Costs for Water Heaters by Type

Water Heater Type	Project Cost
Electric Heat Pump Water Heater	\$7,071
Natural Gas-Fired Tanked Water Heater	\$3,575

Source: Rincon Consultants, 2024.

Using a discount rate of 7.7 percent and a useful life of 13 years for water heaters generally, the annualized costs incurred by households are as follows in Table 13. The costs presented in this table do not account for potential savings associated with funding or financing programs, which are growing in availability and accessibility to Bay Area consumers.

Table 13. Average Annualized Installed Costs for Water Heaters

Item	Upfront Installation Cost	Lifespan	Discount Rate	Annualized Cost
Electric Heat Pump Water Heater	\$7,071	13	7.7%	\$880
Natural Gas-Fired Tanked Water Heater	\$3,575	13	7.7%	\$445
<i>Incremental Water Heater Cost</i>	<i>\$3,496</i>	<i>13</i>	<i>7.7%</i>	<i>\$435</i>

Source: ERG.

Shifting from utility gas-powered appliances to an all-electric power source will likely result in significant utility cost savings, according to E3's study. E3 indicated that retrofitting a heat pump water heater into a home that currently uses a gas-fired tank water heater would generate utility cost savings of about \$50 annually for single family homes and \$40 for multi-family units. Inflating these estimates using the CPI for electricity generation in the San Francisco area results in revised estimates of approximately \$51 and \$41, respectively. Given these utility savings, ERG uses an aggregate annualized cost of \$310 for single family households and \$321 for multi-family units.

Representative Consumer Impacts

Based on data from the Bureau of Labor Statistics' (BLS) Consumer Expenditure Survey (CES), lower income households spend above their household income levels to subsist (BLS, 2026a). Households that earn less than \$15,000 annually exemplify this statement, as they spend over \$32,000 annually despite an average annual income of \$7,600 nationally. This includes housing, food, transportation, and all other expenditure types. Some of these expenditures are potentially covered by public assistance or other non-income sources, such as debt or family support. At the same time, households earning between \$150,000 and \$199,999 spend on average \$117,000 annually, a substantially higher level of expenditure than the lowest income bracket but still lower than their income level.

Table 14 also captures annual expenditures on major appliances and miscellaneous household equipment, which would capture spending on a new water heater. Spending on items in this category range from \$540 for households earning less than \$15,000 (7 percent of household income) to \$3,200 for households earning more than \$200,000 (1 percent of household income). However, when looking at major appliance and miscellaneous household equipment spending as a percentage of the total household expenditures, spending levels are very similar between income groups, with this category of expenditures ranging from 1.5 to 2.1 percent of total annual household expenditures.

Table 14. Total Household Expenditures and Appliance/Household Equipment Expenditure by Income Bracket, 2024

Income Bracket	Bay Area Percent of Total Households	Average Household Income	Annual Household Expenditure	Appliance & Household Equipment Expenditure	Appliance and Household Equipment % of Income	Appliance and Household Equipment % of Expenditure
Less than \$15,000	6.1%	\$7,637	\$32,118	\$537	7.0%	1.7%
\$15,000 to \$29,999	5.6%	\$22,443	\$36,368	\$699	3.1%	1.9%
\$30,000 to \$39,999	3.7%	\$34,984	\$46,246	\$696	2.0%	1.5%
\$40,000 to \$49,999	3.8%	\$44,824	\$50,375	\$773	1.7%	1.5%
\$50,000 to \$69,999	7.9%	\$59,582	\$59,378	\$1,111	1.9%	1.9%
\$70,000 to \$99,999	11.3%	\$83,888	\$71,369	\$1,270	1.5%	1.8%
\$100,000 to \$149,999	15.5%	\$121,852	\$89,727	\$1,919	1.6%	2.1%
\$150,000 to \$199,999	11.7%	\$171,847	\$117,378	\$2,196	1.3%	1.9%
\$200,000 or more	34.4%	\$322,142	\$170,722	\$3,187	1.0%	1.9%
Total	2,845,928					

Source: ERG, based on U.S. Census Bureau, 2026a; BLS, 2026a.

As shown in Table 15, under the proposed Rule 9-6 amendments, the weighted average annualized cost difference of \$315 to convert a natural gas-fired water heater to a zero-NOx appliance would increase appliance expenditures for the lowest income households by about 72 percent and represent 5.1 percent of total income.⁴ For households making between \$100,000 and \$150,000 (the income bracket that captures the estimated median income for the Bay Area), the compliance cost would increase appliance expenditures by about 16 percent and represent 0.3 percent of annual income.

Table 15. Incremental Costs for Gas-to-Electric Heating Appliance Conversion as Percentage of Annual Income and Expenditures

Income Bracket	Annualized Incremental Cost for Gas-to-Electric Water Heater Conversion		
	% of Appliance Expenditures	% of Income	% of Expenditures
Less than \$15,000	72.4%	5.1%	1.2%
\$15,000 to \$29,999	55.7%	1.7%	1.1%
\$30,000 to \$39,999	55.9%	1.1%	0.8%
\$40,000 to \$49,999	50.3%	0.9%	0.8%
\$50,000 to \$69,999	35.0%	0.7%	0.7%
\$70,000 to \$99,999	30.6%	0.5%	0.5%
\$100,000 to \$149,999	20.3%	0.3%	0.4%
\$150,000 to \$199,999	17.7%	0.2%	0.3%
\$200,000 or more	12.2%	0.1%	0.2%

Source: ERG, based on BLS, 2026a; Rincon Consultants, 2024.

The costs to comply with Rule 9-6 requirements are potentially different between homeowners and renters, with at least some of the costs toward renters coming in the form of rent increases (as opposed to direct upgrade costs likely incurred by their landlords). CES data show that homeowners spend more of their income on appliance and other household equipment expenditures compared to renters (see Table 16). These expenditures also make up a greater share of homeowners' total annual spending (2.1 percent) than renters (1.3 percent).

Table 16. Total Household Expenditures and Appliance/Household Equipment Expenditure by Housing Tenure, 2024

Housing Tenure	Bay Area Median Income	Annual Household Exp.	Appliance & Household Equip. Exp.	Appliance & Household Equip. % of Income	Appliance & Household Equip. % of Exp.
Owner Occupied	\$178,033	\$90,117	\$1,860	1.0%	2.1%
Renter Occupied	\$101,215	\$57,108	\$761	0.8%	1.3%
All Housing Units	\$139,540	\$78,535	\$1,474	1.1%	1.9%

Source: ERG, based on U.S. Census Bureau, 2026a; BLS, 2026a.

Table 17 shows the total annualized cost to convert to electric-powered heating (accounting for both the appliance installation and electric panel upgrade, as well as utility cost savings) differentiated between homeowners and renters. An estimated \$384 in annualized costs for homeowners represents 0.2 percent

⁴ Roughly 56 percent of all households are single family households, with a slightly lower compliance cost of \$310 compared to \$321 in annualized compliance costs for multi-family housing units.

of income and 0.4 percent of expenditures, while \$395 captures 0.4 percent of Bay Area renters' annual income and 0.7 percent of their expenditures.

Table 17. Incremental Costs for Gas-to-Electric Heating Appliance Conversion as Percentage of Annual Income and Expenditures

Housing Tenure	Annualized Cost Increase	% of Income	% of Expenditure
Owner Occupied	\$384	0.2%	0.4%
Renter Occupied	\$395	0.4%	0.7%
All Housing Units	\$389	0.3%	0.5%

Source: ERG, based on BLS, 2026a; Rincon Consultants, 2024.

As mentioned earlier, renters are likely to cover a portion of water appliance installation costs increases in their rent. ERG obtained ACS data on median monthly rents paid in each of the nine Bay Area counties to compare costs incurred under Rule 9-6. The monthly cost figure presented in Table 18 below (\$32.88) reflects the annualized cost to renters of approximately \$395 divided by 12 months. ERG estimates that gas-to-electric water heater conversion will cost roughly 1.2 to 1.5 percent of median monthly rent.

Table 18. Incremental Costs for Gas-to-Electric Heating Appliance Conversion as Percentage of Monthly Median Rents by County

County	Median Household Income	Median Monthly Rent	Monthly Rule 9-6 Costs	% of Monthly Rent
Alameda	\$129,130	\$2,312	\$32.88	1.4%
Contra Costa	\$127,221	\$2,340	\$32.88	1.4%
Marin	\$147,017	\$2,624	\$32.88	1.3%
Napa	\$122,754	\$2,642	\$32.88	1.2%
San Francisco	\$139,801	\$2,448	\$32.88	1.3%
San Mateo	\$160,733	\$2,832	\$32.88	1.2%
Santa Clara	\$168,154	\$2,841	\$32.88	1.2%
Solano	\$94,930	\$2,223	\$32.88	1.5%
Sonoma	\$107,274	\$2,229	\$32.88	1.5%

Source: ERG, based on U.S. Census Bureau, 2026a & 2026e.

Next, ERG compared expenditures to income of families with incomes below the federal poverty line. As shown in Table 8 above, 92,900 families in the Bay Area were below the poverty line as of 2024. While the federal poverty line scales depending on the size of the household, ERG used a household size of four as representative for this analysis. A representative family of four with an annual household income at the 2024 poverty level threshold earned \$31,200. Using a renter's average expenditure levels in this income bracket as estimated from the CES, appliance and household equipment spending comprises 2.2 percent of annual income and 1.8 percent of annual expenditures (see Table 19). Table 20 separately indicates that the cost of electric conversion under Rule 9-6 requirements would represent 1.3 percent of income and 1.0 percent of expenditures for this representative family of four.

Table 19. Expenditures and Appliance/Household Equipment Expenditure for Families at Poverty Level, 2024

Household	Poverty Level Income	Annual Expenditure	Appliance and Household Equipment Expenditure	Appliance and Household Equipment % of Income	Appliance and Household Equipment % of Expenditure
Federal Poverty Level, Family of Four	\$31,200	\$38,882	\$699	2.2%	1.8%

Source: ERG, based on BLS, 2026a; HHS, 2024.

Table 20. Incremental Costs for Gas-to-Electric Heating Appliance Conversion as Percentage of Annual Income and Expenditures for Families at Poverty Level

Household	Annualized Cost Increase	% of Income	% of Expenditure
Federal Poverty Level, Family of Four	\$395	1.3%	1.0%

Source: ERG, based on BLS, 2026a; HHS, 2024; Rincon Consultants, 2024.

Total Consumer Impacts

To calculate total impacts on Bay Area households, ERG conducted a multi-regional analysis of changes in household spending as a result of the proposed rule amendments. ERG conducted this analysis in IMPLAN, an Input-Output (I-O) modeling software. The primary purpose of IMPLAN is to show how a change in the economy (e.g., a change in consumer spending, a new infrastructure project, the loss of a major business or entity) will impact industries in that economy within a selected geographic area based on established business relationships that describe how money ripples through the economy between industries. Some key terms related to IMPLAN include:

- **Employment** refers to the number of individuals hired for a salary or compensation to work within a sector. IMPLAN follows job definitions from the Bureau of Economic Analysis (BEA), which include full-time, part-time, and seasonal positions. IMPLAN jobs are not Full-time Equivalent (FTE) positions.
- **Labor income** represents the total value of income from employment.
- **Value added** is the increase in a product or service's market value at each stage of production.
- **Economic output** refers to the total value of all goods and services produced in an economy.
- **Direct effects** from IMPLAN show the immediate impact of a change on its own sector.
- **Indirect effects** describe the effect of direct impacts to a sector on the economic sectors that support that sector (e.g., if consumers spend more money on appliances, appliance suppliers will in turn spend more money on goods and services that support their business, such as wholesale purchases).
- **Induced effects** show how changes in labor income due to direct and indirect effects result in additional economic impacts (e.g., if consumers spend more money on appliances, those businesses spend more money on labor to keep up with increased demand and their employees spend their additional wages on things like housing and retail purchases).

ERG included each of the nine counties regulated by the District in our model; all estimated costs are allocated to their respective county. The model assumes that households will decrease discretionary

household spending as a result of increased net costs due to the proposed rule amendments. To model the impacts of changes in consumer spending, ERG used IMPLAN modeling to allocate costs⁵ across the following income groups in the included geographic areas:

- Households with income lower than \$15 thousand
- Households with income between \$15-\$30 thousand
- Households with income between \$30-\$40 thousand
- Households with income between \$40-\$50 thousand
- Households with income between \$50-\$70 thousand
- Households with income between \$70-\$100 thousand
- Households with income between \$100-\$150 thousand
- Households with income between \$150-\$200 thousand
- Households with income of \$200 thousand or greater

Lower household expenditures on retail products and services outside of water heaters and HVAC systems will lead to reduced job growth from industry sectors like food service, housing, education, recreation and amusement, and more. The following section describes the underlying estimates of total affected households and related compliance cost net expenditures used to inform our IMPLAN model.

Household Cost Impacts

For this analysis, ERG maintained ADE's assumption that all households, once their current water heater burns out, would need to replace their water heaters with electric models to comply with Rule 9-6. This assumption likely overstates the actual costs to comply with amendments to Rule 9-6.

To reduce the burden to more vulnerable Bay Area populations while maintaining the District's air quality, public health, and emissions reduction objectives, the District recently proposed amendments to the scope of Rule 9-6, making the following exemptions:

- Challenging installations due to space constraints (one-time exemption)
- Existing electrical system or panel upgrades (one-time exemption)
- Low-income qualified property owners
- Water heaters with a capacity of less than 30 gallons
- Hydronic water heating systems (delay until 2031)
- Multifamily and deed-restricted affordable housing installations (delay until 2033)
- Businesses with high-heat demand (Examples: restaurants, healthcare, dry cleaners, etc.)
- Temporary emergency gas water heater installed by licensed contractors

For this analysis of households, ERG focused on how the low-income exemption will affect consumer expenditures as a result of the rule. The District defines low-income households as those making less than

⁵ IMPLAN describes this allocation of decreased household spending as "institutional spending events."

80 percent of the Area Median Income or for those with mortgage costs and tax burdens amounting to over 28 percent of household income. These exemptions apply specifically to homeowners, so ERG did not apply scope adjustments to estimates of impacted renters. See Table 21 for the income thresholds used for this analysis that qualify a household for this exemption.

Table 21. Qualifying Household Income for Rule 9-6 Exemption

County	80% of Area Median Income
Alameda	\$120,800
Contra Costa	\$120,800
Marin	\$156,650
Napa	\$117,350
San Francisco	\$156,650
San Mateo	\$156,650
Santa Clara	\$146,100
Solano	\$100,650
Sonoma	\$110,700

Source: ERG, based on HUD, 2024.

Table 22 reproduces data from Table 9 on the distribution of owner- and renter-occupied housing across Bay Area counties. Nearly 600,000 households have annual household income levels below the thresholds outlined in Table 21 above and therefore could be eligible for a low-income exemption from Rule 9-6. Additional exemptions are available through the proposed amendments to Rule 9-6 but it is too speculative to consider where these exemptions may be located throughout the Bay Area based on housing cost burden or those households that may claim an exemption due to project specific conditions such as space and electrical constraints. Additionally, the space and electrical constraint exemptions are limited to one time use so those installations will occur at a future date. Therefore, the analysis in this report is limited to the exclusion of households under 80 percent Area Median Income to provide a high-end estimate of the potential costs of the rule, and low-end estimate of the potential savings from the amendments, within the region.

Appendix A to this report has been drafted by Bay Area Air District Staff in order to provide additional details aligned with their recently adopted Policy for Socioeconomic Impact Analysis on the impacts of the proposed amendments across race and ethnicity across counties based on the thresholds presented in Table 21 above.

Table 22. Distribution of Households in the Bay Area by County and Housing Tenure, 2024

County	Total Households	Households (Owner-Occupied)	Households (Renter-Occupied)
Total Households			
Alameda	612,675	333,939	278,736
Contra Costa	417,686	285,951	131,735
Marin	101,974	66,358	35,616
Napa	49,477	31,872	17,605
San Francisco	371,841	136,566	235,275
San Mateo	266,249	151,933	114,316
Santa Clara	672,426	364,497	307,929
Solano	160,415	98,720	61,695
Sonoma	193,185	125,301	67,884
Bay Area	2,845,928	1,595,137	1,250,791
Exempt Households (Low Income)			
Alameda	113,161	113,161	0
Contra Costa	107,643	107,643	0
Marin	27,834	27,834	0
Napa	13,336	13,336	0
San Francisco	55,067	55,067	0
San Mateo	61,354	61,354	0
Santa Clara	127,699	127,699	0
Solano	41,347	41,347	0
Sonoma	51,684	51,684	0
Bay Area	599,123	599,123	0
In-Scope Households			
Alameda	499,514	220,778	278,736
Contra Costa	310,043	178,308	131,735
Marin	74,140	38,524	35,616
Napa	36,141	18,536	17,605
San Francisco	316,774	81,499	235,275
San Mateo	204,895	90,579	114,316
Santa Clara	544,727	236,798	307,929
Solano	119,068	57,373	61,695
Sonoma	141,501	73,617	67,884
Bay Area	2,246,805	996,014	1,250,791

Source: ERG, based on U.S. Census Bureau, 2026a.

As noted previously, ERG assumed that all households that do not meet this exemption criteria will need to convert their existing water heaters to electric models. Based on an assumed water heater useful life of 13 years in combination with evaluations that the Air District has made about the number of existing zero-NOx water heaters installed and changeouts performed under incentive programs, the modeling estimates that approximately 120,000 households would undergo this conversion each year. For each household, these conversion costs are incurred on a one-time basis, meaning that the full conversion cost to comply with the requirements under Rule 9-6 are borne immediately upon a householder's current water heater breaking down.

Households that replace gas-fired appliances with electric alternatives may realize reductions in their monthly utility costs for water heating. In the first year after requirements under Rule 9-6 are in effect, the modeling estimates that roughly 120,000 households will recognize a reduction of approximately \$40 to \$50 in their annual utility costs. Unlike the water heater conversion costs, these utility cost savings are expected each year after conversion over the expected life of the new hot water heater. Given that households continue to realize utility cost savings after converting to electric water heater systems, ERG estimates that total costs incurred by households across the Bay Area will decrease each year. Table 23 summarizes the estimated compliance costs and utility bill savings from household water heater conversions for each year after Rule 9-6 requirements are in effect. The exemption amendments proposed by the District are anticipated to save Bay Area households \$97.9 million in annualized costs overall.

Table 23. Total Net Costs by Year

Year	All Households [a]			In-Scope Households		
	Water Heater Conversion	Utility Savings	Net Costs (Savings)	Water Heater Conversion	Utility Savings	Net Costs (Savings)
Year 1	531,483,135	7,024,498	524,458,637	419,595,607	5,403,191	414,192,416
Year 2	531,483,135	14,048,996	517,434,139	419,595,607	10,806,383	408,789,224
Year 3	531,483,135	21,073,495	510,409,640	419,595,607	16,209,574	403,386,033
Year 4	531,483,135	28,097,993	503,385,142	419,595,607	21,612,765	397,982,842
Year 5	531,483,135	35,122,491	496,360,644	419,595,607	27,015,956	392,579,650
Year 6	531,483,135	42,146,989	489,336,146	419,595,607	32,419,148	387,176,459
Year 7	531,483,135	49,171,487	482,311,648	419,595,607	37,822,339	381,773,268
Year 8	531,483,135	56,195,985	475,287,150	419,595,607	43,225,530	376,370,077
Year 9	531,483,135	63,220,484	468,262,651	419,595,607	48,628,722	370,966,885
Year 10	531,483,135	70,244,982	461,238,153	419,595,607	54,031,913	365,563,694
Year 11	531,483,135	77,269,480	454,213,655	419,595,607	59,435,104	360,160,503
Year 12	531,483,135	84,293,978	447,189,157	419,595,607	64,838,295	354,757,311
Year 13	531,483,135	91,318,476	440,164,659	419,595,607	70,241,487	349,354,120
Year 14	-	84,293,978	(84,293,978)	-	64,838,295	(64,838,295)
Year 15	-	77,269,480	(77,269,480)	-	59,435,104	(59,435,104)
Year 16	-	70,244,982	(70,244,982)	-	54,031,913	(54,031,913)
Year 17	-	63,220,484	(63,220,484)	-	48,628,722	(48,628,722)
Year 18	-	56,195,985	(56,195,985)	-	43,225,530	(43,225,530)

Year 19	-	49,171,487	(49,171,487)	-	37,822,339	(37,822,339)
Year 20	-	42,146,989	(42,146,989)	-	32,419,148	(32,419,148)
Year 21	-	35,122,491	(35,122,491)	-	27,015,956	(27,015,956)
Year 22	-	28,097,993	(28,097,993)	-	21,612,765	(21,612,765)
Year 23	-	21,073,495	(21,073,495)	-	16,209,574	(16,209,574)
Year 24	-	14,048,996	(14,048,996)	-	10,806,383	(10,806,383)
Year 25	-	7,024,498	(7,024,498)	-	5,403,191	(5,403,191)
Net Present Value	4,270,931,421	488,536,737	3,782,394,684	3,371,817,360	375,778,792	2,996,038,568
Annualized Costs [b]	531,483,135	60,794,476	470,688,659	419,595,607	46,762,655	372,832,952

Source: ERG.

[a] "All households" refers to the total number of households that would incur compliance costs if the proposed exemption amendments to Rule 9-6 were not implemented.

[b] Costs are annualized using a discount rate of 7.7% over the 13-year implementation period. The 25-year time horizon captures utility savings that continue after the implementation period.

Table 24 aggregates the estimated annual compliance costs and utility bill savings associated with the proposed requirements. The cost estimates shown here represent annualized costs within each county over the 13-year lifespan for water heaters. ERG entered annual cost figures by county and household income bracket into IMPLAN as household spending reductions. Overall, annual cost impacts are estimated at \$372.8 million, with a reduction of \$97.9 million due to the scope exemptions for low-income households.

Table 24. Total Net Annual Costs

County	Total Households	In-Scope Households	Cost Savings from Exemptions
Alameda	\$101,374,784	\$82,891,955	\$18,482,829
Contra Costa	\$68,838,360	\$51,256,898	\$17,581,463
Marin	\$16,822,400	\$12,276,251	\$4,546,149
Napa	\$8,163,619	\$5,985,491	\$2,178,128
San Francisco	\$61,835,420	\$52,841,310	\$8,994,110
San Mateo	\$44,022,329	\$34,001,318	\$10,021,011
Santa Clara	\$111,270,751	\$90,413,507	\$20,857,243
Solano	\$26,489,816	\$19,736,623	\$6,753,193
Sonoma	\$31,871,180	\$23,429,600	\$8,441,581
Bay Area	\$470,688,659	\$372,832,952	\$97,855,707

Source: ERG.

District Employment Impacts

The estimated \$372.8 million in annual compliance costs presented in Table 24 are assumed to result in an equivalent reduction in annual discretionary spending across the District. Given this level of decreased discretionary spending, approximately 1,300 jobs could be lost across the Bay Area economy (see Table 25). Total employment losses, when including indirect and induced impacts, may total 2,100 jobs. However, compared to the current regulatory environment under Rule 9-6 as passed in March of 2023, the proposed amendments are estimated to save approximately 425 jobs in total. These estimates of jobs represent the average number of jobs lost in any one year and will vary year to year.

As shown in Table 2, the Bay Area supported nearly 4.0 million jobs in 2024, with over 1.5 million jobs in the trade and service sectors that are the most likely to be influenced by shifts in consumer expenditures related to Rule 9-6 requirements. Relative to employment in these sectors, the projected job impacts shown in Table 25 represent less than 0.02 percent of all trade and service sector employment.

Table 25. Comparison of Jobs Under Current and Proposed Rule 9-6

County	Direct	Indirect	Induced	Total
Total Households				
Alameda	-290	-87	-80	-457
Contra Costa	-188	-65	-67	-320
Marin	-44	-25	-14	-83
Napa	-23	-14	-6	-42
San Francisco	-146	-106	-32	-284
San Mateo	-113	-62	-25	-200
Santa Clara	-296	-77	-55	-429
Solano	-70	-19	-15	-104
Sonoma	-99	-31	-30	-159
Bay Area	-1,268	-487	-324	-2,079
In-Scope Households				
Alameda	-238	-71	-65	-374
Contra Costa	-141	-50	-52	-243
Marin	-33	-19	-11	-63
Napa	-17	-10	-4	-31
San Francisco	-125	-85	-27	-237
San Mateo	-88	-51	-20	-159
Santa Clara	-243	-62	-45	-350
Solano	-52	-14	-12	-78
Sonoma	-73	-23	-22	-119
Bay Area	-1,010	-386	-258	-1,654
Jobs Saved Because of Exemptions				
Alameda	51	17	15	83
Contra Costa	47	15	15	77
Marin	12	6	3	20
Napa	6	3	1	11
San Francisco	20	21	6	47
San Mateo	25	12	5	41
Santa Clara	54	15	10	79
Solano	18	5	4	26
Sonoma	25	8	8	41
Bay Area	258	101	66	425

Source: ERG, based on data from IMPLAN input-output model.

In summary, the proposed exemptions to Rule 9-6 would provide cost savings to households across the Bay Area. For households with annual incomes between \$100,000 and \$200,000, they may avoid appliance expenditures equivalent to 17 to 20 percent of their typical household appliance spending. Comparative savings would be much more substantial for households on the lowest end of the income distribution, who could expect to avoid an over 72 percent increase in typical household appliance expenditures. For households with annual earnings in the lowest income bracket, ERG estimates these avoided costs represent approximately 5 percent of their annual household income and approximately 1.2 percent aggregate household spending.

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Appendix A: Analysis of Proposed Amendments to Rule 9-6 by Race, Ethnicity, and County

Introduction

This appendix to the Socioeconomic Impact Analysis evaluates the distributional effects of the proposed amendments to Bay Area Air District Rule 9-6 across racial and ethnic populations in the Bay Area. Households with incomes below 80 percent of Area Median Income are assumed to be exempt from potential compliance obligations associated with the proposed amendments. As a result, these households would not incur any direct costs associated with the rule.

Because eligibility for the exemption is based on household income rather than race, ethnicity, or geography, the extent to which individual demographic groups benefit from the exemption depends on the distribution of income within those populations.

This appendix includes an evaluation of the following data:

- Total households and exempt households by race and ethnicity within the Bay Area;
- The percentage of households within each racial or ethnic group that qualify for the exemption; and
- County-level variation in exemption rates across demographic groups.

Bay Area Regional Results

Across the nine-county Bay Area, close to 600,000 households are estimated to qualify for the exemption, representing approximately slightly less than 20 percent of all households in the region.

Table A-1. Exempt Households by Race and Ethnicity, Bay Area Region

<i>Race/Ethnicity</i>	<i>Exempt Households</i>	<i>Total Households</i>	<i>Percent Exempt</i>
<i>American Indian / Native Alaskan</i>	4,696	22,005	21.3%
<i>White</i>	237,935	1,045,811	22.8%
<i>Asian / Asian American</i>	142,574	765,477	18.6%
<i>Two or More Races</i>	33,690	307,139	11.0%
<i>Black / African American</i>	28,953	167,463	17.3%
<i>Other</i>	20,514	245,524	8.4%
<i>Native Hawaiian / Pacific Islander</i>	1,569	10,884	14.4%
<i>Hispanic / Latino/a</i>	79,757	237,393	33.6%

Overall, the proposed exemption would benefit substantial numbers of households across all racial and ethnic groups. Differences in the number of exempt households across racial and ethnic groups reflect both differences in population size and differences in income distributions among demographic groups. Smaller percentages of exempt households,

such as for Black or African American households also likely represent a large renter population within that group as the 80% Area Median Income exemption in the proposed amendments to Rule 9-6 is specific to property owners.

Regionwide, Hispanic or Latino/a households exhibit the highest exemption rate (33.6 percent). Households that identify as "Two or More Races" or "Other" exhibit the lowest exemption rate, although a meaningful number of households within that population would still qualify for the exemption. While exemption rates differ among racial and ethnic groups, each population includes households that would be protected from potential compliance costs under the proposed amendments.

County-Level Distribution of Exempt Households

The number of exempt households varies significantly among Bay Area counties, largely reflecting differences in population size and housing stock between counties.

Table A-2. Exempt Households by County

<i>County</i>	<i>Exempt Households</i>	<i>Share of Regional Exempt Households</i>
<i>Alameda</i>	110,834	20.2%
<i>Contra Costa</i>	109,551	19.9%
<i>Marin</i>	19,351	3.5%
<i>Napa</i>	15,049	2.7%
<i>San Francisco</i>	48,556	8.8%
<i>San Mateo</i>	37,783	6.9%
<i>Santa Clara</i>	118,816	21.6%
<i>Solano</i>	49,220	8.9%
<i>Sonoma</i>	40,760	7.4%

Approximately 62 percent of all exempt households are located in Santa Clara, Alameda, and Contra Costa Counties. These counties contain the largest populations in the region and therefore account for the greatest number of households eligible for the exemption. Smaller counties, including Marin, Napa, Sonoma, and Solano, contain fewer exempt households in absolute terms but nevertheless include substantial populations that would receive the benefits of the exemption.

County-Level Exemption Rates by Race and Ethnicity

The proposed exemption for households earning less than 80 percent of Area Median Income is based solely on income eligibility but exemption rates vary among racial and ethnic groups and across counties because of differences in local income characteristics. Table A-3, below, breaks down how exempt households are distributed throughout the region, by race and ethnicity.

Table A-3. Exemption Rates by County and Race/Ethnicity

Percent of households within each racial or ethnic group that qualify for the exemption.

County	White	Black/ African American	American Indian/ Native Alaskan	Asian/ Asian American	Native Hawaiian/ Pacific Islander	Other	Two or More Races	Hispanic/ Latino/a
<i>Alameda</i>	19.9%	18.0%	14.6%	18.2%	22.3%	9.9%	8.0%	43.8%
<i>Contra Costa</i>	28.7%	22.8%	18.6%	25.2%	15.0%	11.6%	14.8%	55.3%
<i>Marin</i>	32.3%	9.9%	12.7%	26.4%	- *	2.2%	11.7%	9.2%
<i>Napa</i>	21.3%	8.6%	26.7%	16.7%	- *	10.7%	5.3%	33.9%
<i>San Francisco</i>	13.2%	13.9%	97.2%	21.6%	13.2%	2.3%	11.0%	18.7%
<i>San Mateo</i>	25.6%	24.0%	9.5%	21.2%	13.6%	8.8%	11.1%	40.2%
<i>Santa Clara</i>	24.6%	11.6%	15.5%	15.2%	6.9%	9.0%	11.9%	29.6%
<i>Solano</i>	15.5%	12.6%	13.1%	14.7%	9.1%	5.4%	7.4%	33.4%
<i>Sonoma</i>	23.1%	6.7%	10.5%	19.5%	9.2%	4.7%	11.3%	18.6%

**Data excluded, less than 10 households*

As seen above, benefits of the exemption are broadly distributed across racial and ethnic groups throughout the Bay Area, although the proportion of households qualifying for the exemption varies by location. However, for most counties, Hispanic or Latino/a households represent the highest concentration of exempt households.

The differences observed across counties are largely attributable to variation in household income distributions among demographic groups rather than differences in rule applicability. Because eligibility is determined solely by income, the exemption functions consistently throughout the region, providing protection to lower-income households regardless of race, ethnicity, or county of residence.

Conclusion

The primary purpose of the exemption is to reduce economic impacts on lower-income households that may otherwise bear a disproportionate burden from regulatory compliance requirements. The analysis indicates that the exemption reaches households across all major racial and ethnic groups and in every Bay Area county.

Close to 600,000 households regionwide would be exempt from potential compliance obligations due to the 80 percent Area Median Income exemption, including substantial numbers of households in communities that have historically faced economic and environmental burdens. Hispanic or Latino/a households represent the highest

concentration of exempt households in most counties through the region. However, the broad distribution of exempt households among the remaining racial and ethnic groups suggests that the benefits of the exemption are felt by all groups throughout the region in some capacity.

Although exemption rates vary among demographic groups and counties, the proposed amendments are not expected to create disproportionately adverse socioeconomic effects for any particular racial or ethnic population.

The introduction of the low-income exemption is intended to reduce potential impacts on lower-income households across the Bay Area and serves as an important measure to advance equity objectives while implementing the proposed amendments to Rule 9-6. As noted in the Staff Report associated with the proposed amendments to Rule 9-6, health and air quality benefits associated with emission reductions resulting from non-exempt households replacing NO_x-emitting equipment are expected to accrue regionally. Water heaters and furnaces vent to the outdoors and staff expects that any household that claims an exemption under the proposed amendments will also benefit from these regional air quality improvements. That being said, if adopted, staff plans to continue to direct residents to available incentive programs, particularly those that are targeted at low-income households, in order to take advantage of programs offered by a variety of regional administrators. Other exemptions present in the proposed amendments to Rule 9-6, such as the temporary loaner installation program, are intended to allow residents to participate in these incentive programs without experiencing interruptions to their residential water heating service.

**Addendum to the Environmental Impact Report for Regulation 9: Inorganic
Gaseous Pollutants, Rule 6: Nitrogen Oxides Emissions from Natural Gas-
Fired Boilers and Water Heaters**

October 2026
State Clearinghouse No. 2022050430
[March 2023 EIR]

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SECTION 1 – INTRODUCTION

The Bay Area Air Quality Management District ("Air District") is proposing amendments to Regulation 9, Rule 6: Nitrogen Oxides Emissions from Natural Gas-Fired Boilers and Water Heaters ("Rule 9-6"). These amendments build upon the Rule 9-6 amendments adopted by the Board of Directors in March 2023 and are intended to support successful implementation of the rule's long-term emissions-reduction objectives while addressing implementation barriers identified through subsequent implementation planning and stakeholder engagement efforts.

Natural gas-fired water heaters and furnaces are a significant source of nitrogen oxide (NO_x) emissions from buildings in the Bay Area. NO_x contributes to the formation of ozone and fine particulate matter (PM_{2.5}), air pollutants that are associated with adverse respiratory and cardiovascular health effects and disproportionately impact communities already burdened by air pollution. To address these emissions and advance regional air-quality goals, the Air District adopted amendments to Rules 9-4 and 9-6 in 2023 establishing future zero-NO_x standards for covered furnaces and water heaters.

A. PROPOSED AMENDMENTS

Since adoption of the 2023 amendments, Air District staff has conducted extensive implementation-review activities, including operation of the Building Appliances Implementation Working Group (IWG), contractor and distributor outreach, market assessments, and affordability analyses. The implementation review demonstrated that several challenges remain. In particular, affordability concerns, installation constraints, electrical-infrastructure limitations, multifamily housing considerations, affordable-housing impacts, and emergency replacement situations continue to present barriers for certain consumers, property owners, and businesses. As a result, the Air District's implementation review concluded that the primary implementation questions associated with Rule 9-6 have shifted from technology availability toward affordability, accessibility, and equitable implementation of the rule amendments. The proposal includes four principal categories of amendments as described below.

Revised Compliance Dates

The proposed amendments revise the implementation schedule for Rule 9-6's zero-NO_x requirements. Covered water heaters and boilers with heat input ratings less than or equal to 75,000 BTU per hour would be subject to the zero-NO_x standard beginning January 1, 2028, rather than January 1, 2027. Another option is to delay the compliance dates for water heaters less than 75,000 BTU/hr from January 1, 2027 to January 1, 2029. Covered water heaters and boilers with heat input ratings greater than 75,000 BTU per hour and less than or equal to 2,000,000 BTU per hour would be subject to the zero-NO_x standard beginning January 1, 2033, rather than January 1, 2031.

These revisions are intended to improve affordability outcomes, support equitable implementation, allow additional preparation time for consumers and contractors, and facilitate implementation of the exemption framework established by the proposed amendments.

Exemption Framework

A central element of the proposal is the creation of a structured exemption framework intended to provide targeted flexibility in situations where compliance may present significant economic, structural, electrical, operational, or timing-related challenges.

The exemption framework includes pathways for:

- ▶ Low-income qualified property owners;
- ▶ Housing cost-burdened property owners;
- ▶ Certain high-hot-water-demand businesses
- ▶ Space-constrained installations;
- ▶ Electrical-constrained installations;
- ▶ Hydronic water-heater applications;
- ▶ Multifamily housing;
- ▶ Deed-restricted affordable housing;
- ▶ Temporary emergency replacement loaners; and
- ▶ Certain wholesale transactions.

The exemptions are intended to be simple, predictable, and consumer-friendly. In most cases, eligibility is established through self-attestation and limited supporting documentation rather than extensive discretionary review. The Air District intends for the exemption process to avoid unnecessary delays in equipment purchase or installation, particularly in emergency replacement situations.

Administrative and Implementation Provisions

The amendments establish new exemption-certificate procedures, notice requirements, reporting provisions, and recordkeeping obligations intended to support implementation of the exemption framework. New provisions include:

- ▶ Exemption certificate administration;
- ▶ Contractor reporting requirements for temporary loaner equipment;
- ▶ Point-of-sale notices for exempt equipment;
- ▶ Enhanced seller recordkeeping; and
- ▶ Enhanced contractor recordkeeping.

The amendments also simplify certain certification and interim-reporting provisions adopted as part of the 2023 rulemaking.

Clarifying Amendments

The proposal includes several technical and administrative revisions intended to improve clarity, consistency, and enforceability of Rule 9-6. New definitions are added for terms associated with the exemption framework and implementation process, including Distributor, Exemption Certificate, Hydronic Water Heater, Licensed Contractor, Low-Income Program, Mobile Home, and Retailer.

The amendments are expected to improve implementation outcomes while preserving the long-term public-health and air-quality objectives of Rule 9-6. The modified proposal remains in

alignment and consistent with Air District's most recent air quality plan, the 2017 Clean Air Plan: Spare the Air – Cool the Climate.

SECTION 2 – CALIFORNIA ENVIRONMENTAL QUALITY ACT AND BASIS FOR DECISION TO PREPARE AN ADDENDUM

The Air District's review and approval of the currently proposed modifications to Rule 9-6 is a discretionary action subject to CEQA. When amendments to Rule 9-6 were originally proposed, the Air District, as lead agency, prepared an environmental impact report (EIR) for the proposed amendments to Regulation 9: Inorganic Gaseous Pollutants, Rule 4: Nitrogen Oxides from Fan Type Residential Central Furnaces and Regulation 9: Inorganic Gaseous Pollutants, Rule 6: Nitrogen Oxides Emissions from Natural Gas-Fired Boilers and Water Heaters. The document consisted of the December 2022 Draft EIR and the March 2023 Final EIR (State Clearinghouse No. 2022050430) (collectively referred to as the EIR). The EIR for the Project presents an assessment of the reasonably foreseeable and potentially significant adverse environmental effects that may occur from implementing the Project. These findings were prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000 et seq.) and its implementing guidelines (CEQA Guidelines) (California Code of Regulations [CCR] Title 14, Section 15000 et seq.). The Air District Board of Directors (Board) is the lead agency under CEQA and is the decision-making authority for the Project. The Air District Board of Directors adopted these findings and a Statement of Overriding Considerations in that capacity in March 2023. The [Final Environmental Impact Report for Proposed Amendments to Rule 9-4 and Rule 9-6](#) from 2023 is linked above as well as available on the Air District's Building Appliance Webpage at www.baaqmd.gov/building-appliances.

The currently proposed modifications to Rule 9-6 are also subject to CEQA. CEQA requires evaluation of the potential adverse environmental impacts of proposed projects and identification of feasible methods to reduce or avoid significant adverse environmental impacts of those projects. However, CEQA Guidelines Section 15164(a) allows the preparation of an Addendum to a previously certified EIR if some changes or additions are necessary but none of the following conditions as described in CEQA Guidelines Section 15162 occur:

- ▶ Substantial changes which will require major revisions of the previous CEQA document due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- ▶ Substantial changes, with respect to the circumstances under which the project is undertaken, which will require major revisions of the previous CEQA document due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or,
- ▶ New information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence at the time the previous CEQA document was certified as complete, shows any of the following:
 - o The project will have one or more significant effects not discussed in the previous CEQA document;

- o Significant effects previously examined will be substantially more severe than shown in the previous CEQA document;
- o Identification of mitigation measures or alternatives previously found not to be feasible, but would in fact be feasible, and would substantially reduce one or more significant effects, but the project proponent declines to adopt the mitigation measure or alternatives; or
- o Identification of mitigation measures or alternatives which are considerably different from those analyzed in the previous CEQA document would substantially reduce one or more significant effects on the environment, but the project proponent declines to adopt the mitigation measure or alternative.

To determine whether the conditions described in CEQA Guidelines Section 15162 have occurred, the effects of the proposed modifications to Rule 9-6 were compared to the baseline or the existing setting of the environmental impacts described in the original EIR. As concluded in Sections 5 and 6 of this Addendum, the currently proposed modifications to Rule 9-6 do not change the conclusions reached in the EIR. Further, the Air District is also not aware of any other occurrence, such as a change in circumstances or the existence of new information, that would warrant additional environmental review under CEQA Guidelines Section 15162.

The analysis in Sections 5 and 6 of this Addendum supports the conclusion that the currently proposed revisions to Rule 9-6 are not expected to trigger any conditions identified in CEQA Guidelines Section 15162 that would require the preparation of a subsequent EIR. Therefore, when considering the effects of the Modified Project, the Air District has determined that an Addendum is the appropriate type of CEQA document to be prepared for evaluating potential environmental impacts.

The previous paragraphs and the impact analyses in Sections 5 and 6 of this Addendum provide the rationale to comply with CEQA Guidelines Section 15164(e) which requires a brief explanation supported by substantial evidence to be included in the Addendum about the reasoning behind the decision to not prepare a subsequent EIR or supplemental EIR under Guidelines Sections 15162 and 15163, respectively. Although CEQA contains a presumption of finality after an EIR is certified, because there are proposed changes to the Approved Project that require discretionary action by the Air District, this Addendum is appropriate. Finally, pursuant to CEQA Guidelines Section 15164(c), “an addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.” The Air District published a draft of this Addendum for review and comment to ensure the public and regulated entities had an opportunity to provide input prior to finalization.

SECTION 3 – ENVIRONMENTAL REVIEW PROCESS

The Air District issued a notice of preparation (NOP) and Initial Study on May 19, 2022, to inform agencies and the general public that an EIR was being prepared and to invite comments on the scope and content of the document. The NOP and Initial Study were submitted to the State Clearinghouse, which then distributed the NOP to potential responsible and trustee agencies; posted on the Air District’s website (<https://www.baaqmd.gov/>); posted with the applicable County Clerks; and made available at the Air District’s office. In addition,

the NOP was distributed directly to public agencies. The NOP was circulated for a 34-day review period, with comments accepted through June 21, 2022. In accordance with CCR Section 15082(c), a noticed scoping meeting for the EIR was held virtually on June 9, 2022, from 6:00 p.m. to 8:00 p.m. The NOP, Initial Study, and all comments received on the NOP are presented in Appendix A of the Draft EIR.

The Air District published the Draft EIR for public and agency review on December 20, 2022. A 48-day public review period was provided, ending on February 6, 2023. The Draft EIR was submitted to the State Clearinghouse for distribution to reviewing agencies (State Clearinghouse No. 2022050430); posted online (<https://www.baaqmd.gov/>); and was made available at the Air District's office during normal business hours. A notice of availability (NOA) of the Draft EIR was published in the San Francisco Chronicle, East Bay Times and the Mercury News on December 20, 2022 and distributed to a project-specific mailing list. A public meeting for the Draft EIR was not conducted.

As a result of these notification efforts, written and verbal comments were received from 3 comment letters from state and local agencies, 22 letters from organizations, and more than 500 letters from individuals. Those comments relevant to CEQA were addressed in compliance with the State CEQA Guidelines (Sections 15088, 15132). While 3 comment letters were received from public agencies, none of these comments presented issues related to the Draft EIR or CEQA compliance; rather, these comments were related to policy considerations regarding the proposed amendments. A public hearing was conducted on March 15, 2023, and the Final EIR was released in advance of the hearing.

The Final EIR includes comments received on the Draft EIR and responses to these comments. The Draft and Final EIR were made available for public review online (<https://www.baaqmd.gov/>).

SECTION 4 – MODIFIED PROJECT DESCRIPTION

A. PROJECT LOCATION

The proposed amendments to Rules 9-4 and 9-6 would apply to building appliances within the Air District's jurisdiction, which encompasses 5,600 square miles. The area of the Air District's jurisdiction includes all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. 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.

B. BACKGROUND AND NEED FOR THE PROJECT

Rule 9-6 aims to reduce nitrogen oxides emissions from natural gas-fired water heaters, a substantial source of these emissions throughout the Bay Area. NO_x is a precursor to both ground-level ozone and fine particulate matter. The District has identified natural gas appliances in buildings as a major contributor to region's residential NO_x emissions, with

furnaces and water heaters accounting for approximately 89 percent of residential NOx emissions.

Rule 9-6 requires the replacement of natural gas-fired water heaters as they reach the end of their useful life with zero-NOx alternatives. The rule does not require the premature replacement of functioning equipment. Instead, it establishes progressively cleaner point-of-purchase standards, culminating in a zero-NOx emission requirement for new replacement water heaters. By targeting equipment turnover, the rule achieves emissions reductions over time while avoiding immediate retrofit requirements.

The proposed amendments to Rule 9-6 are necessary to continue achieving the air quality and public health objectives that formed the basis for the Board's 2023 adoption of zero-NOx standards, while also addressing implementation challenges identified through the District's Implementation Working Group process. Staff's technical analyses demonstrated that emissions from water heaters contribute to regional ozone formation and secondary PM_{2.5} formation, resulting in widespread population exposure to harmful air pollution. Because these pollutants disperse across the region, reducing emissions from water heaters provides broad community-wide benefits rather than benefits limited to individual properties.

Reducing exposure to PM_{2.5} and ozone precursors is a critical public health objective. Exposure to fine particulate matter is associated with increased risks of respiratory disease, cardiovascular disease, hospitalizations, and premature mortality. The District estimated that implementation of the 2023 zero-NOx appliance standards under Rules 9-4 and 9-6 could prevent up to 85 premature deaths annually and generate as much as \$890 million per year in avoided health impacts (i.e., reduced illness, hospital visits, and mortality). As older gas-fired water heaters are replaced with zero-NOx technologies, emissions reductions are expected to improve outdoor air quality throughout the region and reduce cumulative public health burdens.

Rule 9-6 is also necessary to help meet applicable state and federal air quality requirements. The Bay Area remains subject to planning and attainment obligations for ozone and particulate matter standards under the federal Clean Air Act and California clean air statutes. NOx reductions from stationary sources, including building appliances, are an important component of the District's broader strategy for attaining and maintaining ambient air quality standards. The 2017 Clean Air Plan identified reductions in emissions from residential and commercial combustion sources as an important measure for achieving long-term air quality goals. Continued implementation of Rule 9-6 supports these obligations by securing enforceable, long-term reductions in NOx emissions from a major category of emission sources.

The proposed amendments further support implementation of the zero-NOx standard by addressing documented barriers related to installation costs, electrical upgrades, space constraints, multifamily housing, hydronic systems, and low-income households. Through stakeholder engagement and technical evaluation, the District determined that limited flexibility mechanisms are necessary to ensure that implementation remains practical, equitable, and enforceable. The amendments maintain the fundamental objective of eliminating NOx emissions from covered water heaters while providing pathways to address circumstances where immediate compliance may be infeasible.

In addition to air quality and public health benefits, Rule 9-6 provides climate co-benefits. Because currently available zero-NOx water heater equipment are electric, compliance with the rule is expected to reduce greenhouse gas emissions relative to conventional natural gas-

fired equipment. While the primary purpose of Rule 9-6 is the reduction of NOx emissions and associated health impacts, these greenhouse gas reductions contribute to California's broader climate goals and support long-term decarbonization efforts in the building sector.

C. PROJECT OBJECTIVES

The objective of the proposed amendments are to support successful implementation of the Rule 9-6 zero-NOx standards adopted by the Board in 2023. Information gathered through the Air District's implementation review process, the Implementation Working Group, market assessments, contractor outreach, affordability analyses, socioeconomic research, and stakeholder engagement demonstrated that the principal implementation challenges associated with Rule 9-6 are now concentrated around affordability, installation constraints, electrical limitations, multifamily housing considerations, affordable-housing impacts, and emergency replacement situations.

The amendments address these issues through revised compliance timelines, a structured exemption framework, streamlined administrative procedures, and targeted implementation flexibility while preserving the long-term emissions-reduction objectives established by the Board of Directors. The amendments are therefore necessary to promote practical, equitable, and successful implementation of Rule 9-6 throughout the Air District.

SECTION 5 – IMPACT ANALYSIS

The following sections present a summary of the impact analyses contained in the EIR for Rule 9-6, as well as additional analysis of the impacts of the proposed amendments to Rule 9-6. As required by CEQA Guidelines Section 15125, the EIR included a description of the physical environmental conditions, also referred to as the existing setting or baseline, within the Bay Area as they existed at the time the environmental analysis commenced

This Addendum includes an evaluation of the same 19 environmental topic areas evaluated in the March 2023 EIR. The four environmental topic areas fully evaluated in the EIR for which there were less than significant or significant and unavoidable impacts are evaluated in subsections. The remaining environmental topic areas that were determined to have no significant or less than significant impacts in the EIR are examined in Section 6 of this Addendum. The below analyses support the Air District's conclusion that the proposed amendments to Rule 9-6 are not expected to trigger any conditions identified in CEQA Guidelines Section 15162 that would require the preparation of a subsequent EIR. Thus, a subsequent EIR or a supplement to the EIR as reflected in Guidelines Sections 15162 and 15163, respectively, are not appropriate.

Because this Addendum is associated with modifications to Rule 9-6, the Addendum focuses primarily on whether the modifications to Rule 9-6 constitute changes to the project warranting additional environmental review. The Air District is also not aware of any other changes to the project, changes in circumstances, or new information that would warrant additional environmental review under CEQA Guidelines Section 15162.

A. AIR QUALITY

The EIR determined that the 2023 amendments to Rule 9-6 would result in a reduction in NOx emissions generated by natural gas-fired space- and water-heating appliances. This would be achieved through the replacement of these appliances with ultra-low and zero-NOx natural gas appliances or electric appliances. Operation of ultra-low and zero-NOx natural gas appliances would inherently result in a reduction in NOx emissions within the Air District. Moreover, any turnover to electric appliances would eliminate emissions of all criteria air pollutants from on-site natural gas combustion and associated emissions from this activity. For these reasons, the 2023 amendments were determined have a less-than-significant (beneficial) impact to regional air quality.

Thresholds of Significance

The significance criteria used to evaluate impacts on air quality under CEQA are based on Appendix G of the State CEQA Guidelines and thresholds of significance adopted by the Air District. According to State CEQA Guidelines Appendix G, an air quality impact would be significant if implementation of the Project would:

- ▶ conflict with or obstruct implementation of the applicable air quality plan,
- ▶ violate any air quality standard or contribute substantially to an existing or projected air quality violation,
- ▶ result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors),
- ▶ expose sensitive receptors to substantial pollutant concentrations, or
- ▶ create objectionable odors affecting a substantial number of people.

As stated above, the 2023 amendments did not find a significant impact to regional air quality based on these thresholds.

Impacts of Modifications to the Project

The compliance dates established in the 2023 amendments to Rule 9-6 as evaluated in the EIR have not yet taken effect. Therefore, emissions reductions anticipated under the original rule have not yet been realized, associated implementation activities have not yet occurred to a meaningful extent; and the environmental changes evaluated in the original EIR have not yet been triggered.

Consequently, the proposed amendments do not reverse environmental benefits that have already occurred, nor do they eliminate emissions reductions that have already been achieved. Instead, the amendments primarily affect the timing and implementation pathway associated with future compliance.

The certified 2023 EIR concluded that implementation of Rule 9-6 would produce beneficial air quality impacts through reductions in combustion-related emissions at both the compliance schedule intended in 2023 as well as with a 2035 compliance date as analyzed in the alternatives analysis.

Alternative 3, as evaluated in the 2023 EIR, would establish a zero-NOx standard with a compliance date of January 1, 2035, which is approximately six years later than the compliance date for the Project (phased in between 2027 and 2031). Except for the compliance date, Alternative 3 would meet most of the project objectives. Alternative 3, however, would not achieve the same rate of reduction in NOx emissions until six years after the Project could achieve the same rate of reduction (2052 as compared with 2046) and would achieve fewer NOx reductions overall due to the later implementation date. The scope of the proposed amendments to Rule 9-6 in 2026, while not exactly the same as those reviewed in Alternative 3 to the 2023 EIR, cover a similar scope of delay.

The proposed amendments include a delay of the 2027 compliance date to 2028 (or 2029) and the 2031 compliance date to 2033 with additional categories of equipment proposed to be applicable to the 2033 date. The proposed amendments also include one-time exemptions for project specific constraints as well as potentially ongoing exemptions for low-income residents of the Bay Area.

The proposed exemptions and delays, as described in the Staff Report for the proposed rule amendments, are expected to result in delayed emissions reductions, as analyzed in Alternative 3 to the 2023 EIR.

There may also be continuing forgone emissions reductions as compared to the initial 2023 amendments and analysis due to the low-income exemption in the proposed amendments but as stated above, these changes do not impact the environment as defined by CEQA as they do not reverse environmental benefits that have already occurred, nor do they eliminate emissions reductions that have already been achieved as the compliance dates as amended in 2023 have not yet occurred. The proposed amendments with the exemptions and delayed compliance dates continue to result in a less than significant (beneficial) impact to regional air quality. Should the Air District Board of Directors direct Staff to further delay compliance dates in the proposed rule amendments through 2035 as analyzed in Alternative 3, the analysis of this Addendum and the 2023 EIR remains intact, inclusive of the proposed exemptions.

B. GREENHOUSE GASES

The 2023 amendments to Rule 9-6 would result in a decrease in greenhouse gas (GHG) emissions over the next 24 years. This decrease exceeds the net zero threshold of significance and would assist the state in meeting its long-term GHG reduction goals extending to 2045. Therefore, the proposed amendments would not have a cumulatively considerable contribution to climate change. This impact would be less than significant (beneficial).

Thresholds of Significance

The issue of global climate change is inherently a cumulative issue because the GHG emissions of individual projects cannot be shown to have any material effect on global climate. Thus, the proposed amendments' impact on climate change is addressed only as a cumulative

impact. State CEQA Guidelines Section 15064 and relevant portions of Appendix G recommend that a lead agency consider a project's consistency with relevant, adopted plans and discuss any inconsistencies with applicable regional plans, including plans to reduce GHG emissions. Under Appendix G of the State CEQA Guidelines, implementing a project would result in a cumulatively considerable contribution to climate change if it would:

- ▶ generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- ▶ conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

As stated above, the 2023 amendments did not find a significant impact to greenhouse gases based on these thresholds.

Impacts of Modifications to the Project

The analysis of impacts of modifications to Rule 9-6 for greenhouse gas emissions follows the same logic presented above under the impacts to Air Quality. As stated, the compliance dates established in the 2023 amendments to Rule 9-6 as evaluated in the EIR have not yet taken effect. Therefore, emissions reductions anticipated under the original rule have not yet been realized, associated implementation activities have not yet occurred to a meaningful extent; and the environmental changes evaluated in the original EIR have not yet been triggered.

Consequently, the proposed amendments do not reverse environmental benefits that have already occurred, nor do they eliminate emissions reductions that have already been achieved. Instead, the amendments primarily affect the timing and implementation pathway associated with future compliance.

The certified 2023 EIR concluded that implementation of Rule 9-6 would result in beneficial impact to greenhouse gases through reductions in combustion-related emissions at both the compliance schedule intended in 2023 as well as with a 2035 compliance date as analyzed in the alternatives analysis.

Alternative 3, as evaluated in the 2023 EIR, would establish a zero-NO_x standard with a compliance date of January 1, 2035, which is approximately six years later than the compliance date for the Project (phased in between 2027 and 2031). Except for the compliance date, Alternative 3 would meet most of the project objectives. Alternative 3, however, would not achieve the same rate of reduction in GHG emissions until six years after the Project could achieve the same rate of reduction (2052 as compared with 2046) and would achieve fewer GHG reductions overall due to the later implementation date. The scope of the proposed amendments to Rule 9-6 in 2026, while not exactly the same as those reviewed in Alternative 3 to the 2023 EIR, cover a similar scope of delay.

The proposed amendments include a delay of the 2027 compliance date to 2028 (or 2029) and the 2031 compliance date to 2033 with additional categories of equipment proposed to be applicable to the 2033 date. The proposed amendments also include one-time exemptions for project specific constraints as well as potentially ongoing exemptions for low-income residents of the Bay Area.

The proposed exemptions, as described in the Staff Report for the proposed rule amendments, are expected to result in delayed greenhouse gas emissions reductions, as analyzed in Alternative 3 to the 2023 EIR. There may also be continuing forgone emissions reductions as compared to the initial 2023 amendments and analysis due to the low-income exemption in the proposed amendments to Rule 9-6 but as stated above, these changes do not impact the environment as defined by CEQA as they do not reverse environmental benefits that have already occurred, nor do they eliminate emissions reductions that have already been achieved as the compliance dates as amended in 2023 have not yet occurred.

The proposed amendments continue to result in a less than significant (beneficial) impact to climate change. Should the Air District Board of Directors direct Staff to further delay compliance dates in the proposed rule amendments through 2035 as analyzed in Alternative 3, the analysis of this Addendum and the 2023 EIR remains intact, inclusive of the proposed exemptions.

C. UTILITY AND SERVICE SYSTEMS (ENERGY RESOURCES)

Assuming that heat pumps are used to replace existing natural gas-fired space and water heating appliances, the 2023 amendments to Rule 9-6 were determined, over the long term, to have the potential to result in increased energy demand beyond the planned electric grid capacity growth represented. At the time of the 2023 amendments, Air District commissioned analysis estimated that the proposed zero-NOx standards could result in 6.2 terrawatt-hours per year of additional electric load growth by 2050, which would represent 2.2 percent of the total statewide electrical load by 2020 standards. This analysis estimated that this level of demand could be met by the development of approximately 2,180 MW of incremental utility-scale solar capacity, corresponding to 19,500 acres of direct land use impacts, under the “worst case” Low Policy Reference Scenario. For context, this represents 0.6 to 1.2 percent of the State’s total projected land needed for the State to meet its stated climate goals, which is estimated to be between 1.6 and 3.1 million acres for solar and wind projects (not including off-shore wind and other energy sources). Almost all of this energy production is anticipated to occur outside of the Bay Area, and a portion of it will likely be developed outside California. The potential construction and operational impacts associated with these energy facilities could be potentially significant, and may include substantial changes to visual character; obstruction of views; increased light and glare; conversion of farmland and other impacts to agricultural resources and operations; construction-related air pollution, GHG emissions, and noise; archaeological resources; tribal cultural resources; adverse effects to wildlife species and habitat; adverse effects to other natural resources and waterways; impacts related to geology and paleontological resources; operational noise; conflicts with air traffic; transportation and storage of hazards and hazardous materials; and wildfire and associated environmental effects. Mitigation measures are likely available to minimize these impacts to a less-than-significant level for many of the environmental issue areas; however, it is likely that some would remain significant and unavoidable. Therefore, the 2023 EIR determined that the amendments to Rule 9-4 and 9-6 would result in a substantial contribution to a significant cumulative impact, and this impact would be potentially significant.

Thresholds of Significance

According to State CEQA Guidelines Appendix G, a utilities and service systems impact would be significant if implementation of the Project would:

- ▶ require or result in the relocation or construction of new or expanded electric power facilities, the construction or relocation of which could cause significant environmental effects.

As stated above, the 2023 EIR found that amendments to Rule 9-4 and 9-6 would have a potentially significant cumulative impact based on this threshold of significance.

Impacts of Modifications to the Project

As described in Section 4 of this Addendum, the proposed amendments to Rule 9-6 are focused on providing exemptions to the requirements of the Rule in order to alleviate concerns about accessibility and affordability of installing zero-NOx appliances. Therefore, the proposed amendments may result in up to 50% of installations being eligible for an extension or exemption under the proposed amendments. The proposed amendments would decrease the impact to utility and service systems and energy resources as potentially less electrical appliances would be installed in the Bay Area. Additionally, as described above, the utility and service systems impacts analyzed in the EIR are based on Air District commissioned analysis that compares the rate of electric appliance adoption from Rules 9-4 and 9-6 to the expected rate in California based on other regulations and policies. This analysis found that Rules 9-4 and 9-6 did not necessarily increase electricity demand in the future but may accelerate the rate of electric appliance adoption. As a result, the delayed compliance dates and allowance of exemptions for affordability and accessibility concerns decrease the likelihood of accelerated electrification as a result of the Rules.

In addition, the 2023 EIR evaluated Alternative 3 which would establish a zero-NOx standard with a compliance date of January 1, 2035. Alternative 3 was shown to result in similar air quality, GHG, noise, and aesthetic impacts compared to the Project. However, under Alternative 3, a significant and unavoidable impact of the Project could be slightly reduced (although not eliminated) because the compliance date would be delayed six years, thereby requiring a slightly smaller amount of new solar, new batteries, new transmission capacity, and distribution capacity compared with the Project. Therefore, in accordance with CEQA, the EIR concluded that because Alternative 3 would result in a slight reduction to the Project's substantial contribution to a significant cumulative impact related to the construction of new or expanded grid capacity, Alternative 3 was considered the environmentally superior alternative.

As a result, the proposed amendments are not expected to meaningfully alter the utility and service systems impacts as evaluated under the 2023 EIR and the relevant thresholds of significance. However, any potential changes to this area or compliance delays associated with the proposed amendments to Rule 9-6, through the evaluated period of 2035, are expected to reduce impact as compared to the analysis in the 2023 EIR.

D. NOISE

The EIR determined that the 2023 amendments to Rules 9-4 and 9-6 would include installation of stationary sources such as heat pump units, which would be installed inside and outside of existing buildings. The potential operational noise impacts associated with this equipment could be potentially significant depending on the existing ambient noise environment, noise levels associated with the units, and the noise standards of the jurisdiction in which the units would be installed. Mitigation measures are likely available to minimize these impacts to a

less-than-significant level; however, it is likely that noise from some units would remain significant and unavoidable, especially because the Air District does not have jurisdiction to monitor or enforce any of these mitigation measures. Therefore, the EIR determined that the 2023 amendments would result in a substantial long-term operational noise impact, and this impact would be potentially significant.

Thresholds of Significance

According to State CEQA Guidelines Appendix G, a noise impact would be significant if implementation of the Project would:

- ▶ generate 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 in other applicable local, state, or federal standards;
- ▶ generate excessive ground borne vibration or ground borne noise levels; or
- ▶ 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, would the project expose people residing or working in the project area to excessive noise levels.

As stated above, the 2023 EIR found that amendments to Rule 9-4 and 9-6 would have a potentially significant long-term operational noise impact based on these thresholds of significance.

Impacts of Modifications to the Project

As described in Section 4 of this Addendum, the proposed amendments to Rule 9-6 are focused on providing exemptions to the requirements of the Rule in order to alleviate concerns about accessibility and affordability of installing zero-NOx appliances. Therefore, the proposed amendments may result in up to 50% of installations being eligible for an extension or exemption under the proposed amendments. The evaluation of a delayed compliance date in Alternative 3 to the 2023 EIR found that the potential operational noise impacts associated with these units could remain potentially significant depending on the existing ambient noise environment, noise levels associated with the units, and the noise standards of the jurisdiction in which the units would be installed. Mitigation measures are likely available to minimize these impacts to a less-than-significant level; however, it is likely that noise from some units would remain significant and unavoidable. Therefore, Alternative 3 was expected to result in similar impacts related to long-term operational noise compared to the 2023 amendments to Rules 9-4 and 9-6.

As a result, the proposed amendments including the exemptions and any additional compliance delays through the evaluated period of 2035 are not expected to meaningfully alter noise impacts as evaluated under the 2023 EIR and the relevant thresholds of significance.

SECTION 6 – POTENTIAL ENVIRONMENTAL IMPACTS FOUND TO BE NOT SIGNIFICANT

This section discusses the remaining environmental topic areas found not to be significantly affected by implementation of the Rule 9-6 March 2023 EIR, and as a result of the currently proposed modifications to Rule 9-6. The EIR found that the following topics would have no impact or less than significant or no impacts. The proposed amendments to Rule 9-6 would have similar or reduced impacts as compared to the currently approved Rule 9-6 for these resources, as discussed below. The currently proposed modifications to Rule 9-6 are not expected to create new significant impacts or worsen the potential less than significant impacts for the environmental topic areas discussed in this section.

Aesthetics

According to State CEQA Guidelines Appendix G, an aesthetic impact would be significant if implementation of the Project would:

- ▶ have a substantial adverse effect on a scenic vista;
- ▶ substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- ▶ 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 publicly accessible vantage points); in urbanized areas, conflict with applicable zoning and other regulations governing scenic quality; or
- ▶ create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

The 2023 EIR found that the amendments to Rules 9-4 and 9-6 would have a less than significant impact to aesthetics as follows:

- ▶ The proposed Project—specifically proposed Rule 9-4, which imposes NO_x limitations on residential and commercial central furnaces—could result in replacement of existing furnaces located entirely within a building’s interior with a heat pump unit that includes exterior equipment (similar in size and appearance to an air conditioner). Even the largest of these units would not likely be large enough to substantially adversely affect a scenic vista, especially given that the outdoor units would be mounted on or next to structures that would be much larger and more noticeable than the equipment. For these reasons, the Project would result in a less-than-significant impact related to scenic vistas.
- ▶ Proposed amendments to Rule 9-4, which impose NO_x limitations on residential and commercial central furnaces, could result in replacement of existing furnaces located entirely within a building’s interior with a heat pump unit that includes exterior equipment (similar in size and appearance to an air conditioner). Implementation of this rule change would not affect trees, rock outcroppings, or other natural scenic resources. Although furnace replacement in existing historic buildings may include exterior heat pumps where no pumps currently exist, any such equipment to be placed on the exterior of historic

structures is typically regulated by local municipalities. Even if such regulations did not apply, HVAC and air conditioning units are commonplace on historic structures, and the addition of this equipment to the exterior of a historic structure would not be considered “substantial damage” to the historic building itself or to a scenic resource as viewed from a State Scenic Highway. The Project would therefore result in a less-than-significant impact.

- ▶ In rural areas, replacement of furnaces that would place exterior equipment on existing buildings where no such equipment currently exists would not substantially degrade the visual character of the site because, by definition, an existing building would already exist in these circumstances, and addition of a small piece of external equipment on an existing building would not change the visual character of the site or adversely affect public views. In urbanized areas, exterior equipment is commonplace and the addition of outdoor heat pump units as a result of the Project would not likely conflict with any existing zoning or other regulations governing scenic quality. If such regulations exist, the entity replacing the equipment would be required to comply. For these reasons, the Project would not substantially degrade the existing visual character or quality of public views of the Bay Area or conflict with applicable zoning or other regulations governing scenic quality, and this impact would be less than significant.
- ▶ Outdoor heat pump units do not include bright lights and are not made of reflective materials (i.e., polished metal or mirrored glass). The proposed rule amendments would not require new lighting fixtures. Therefore, the Project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. No impact would occur.

The proposed amendments to Rule 9-6 would not result in changes to impacts to aesthetics as they are mainly focused on the delay of compliance dates and exemptions for equitable implementation of the Rule. Therefore, the proposed amendments are not expected to meaningfully alter aesthetic impact as evaluated under the 2023 EIR and the relevant thresholds of significance. Less than significant impacts identified above for Rule 9-4 are not relevant to this Addendum or altered by the proposed amendments to Rule 9-6.

Agriculture and Forest Resources

The proposed amendments to Rules 9-4 and 9-6 as evaluated in the 2023 EIR and the proposed amendments to Rule 9-6 evaluated in this addendum would result in changes to the types of new furnaces and water heaters that would be allowed for sale and installation within the Bay Area. These appliances would be installed at existing and new buildings in residential and commercial areas. The proposed rule amendments would also not result in foreseeable changes in equipment manufacturing that would require construction of new or expanded facilities. Existing agricultural and forest land resources within the Air District’s jurisdiction would not be affected. The Project would not convert farmland to non-agricultural use, conflict with zoning for agricultural use or a Williamson Act contract, conflict with zoning of forest land, or convert forest land to non-forest use.

For the reasons above, the Project would result in no impacts related to agriculture and forest resources, as defined by the relevant impact thresholds and the proposed amendments do not result in a change to this analysis as presented in the 2023 EIR.

Biological Resources

The proposed amendments to Rules 9-4 and 9-6 as evaluated in the 2023 EIR and the proposed amendments to Rule 9-6 evaluated in this addendum would result in changes to the types of new furnaces and water heaters that would be allowed for sale and installation within the Bay Area. These appliances would be installed at existing and new buildings in residential and commercial areas. The proposed rule amendments would also not result in foreseeable changes in equipment manufacturing that would require construction of new or expanded facilities. Regardless of the Project, Bay Area consumers would continue to purchase and install new furnaces and water heaters over the coming decades. Installation activities (which would include minimal truck trips for delivery/installation, spread out across the nine counties of the Bay Area, and occurring over several decades as consumers replace their existing furnaces and water heaters) would occur with or without the Project. While outdoor installations are expected, the Project would not involve construction, including the use of heavy-duty construction equipment and vehicles, substantial ground disturbance, or conversion of land. Therefore, the Project would also not result in habitat conversion or vegetation removal. Existing biological resources, including special-status species, habitats, and wildlife corridors, within the Air District's jurisdiction would not be affected. Therefore, the Project would not have a substantial adverse effect on a candidate, sensitive, or special-status species; riparian habitat or other sensitive natural community; or state or federally protected wetlands. Additionally, the Project would not interfere 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.

Existing biological resources, including special-status species, habitats, and wildlife corridors, within the Air District's jurisdiction would not be affected. Therefore, the Project would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Similarly, the Project would not conflict with a habitat conservation plan or natural community conservation plan.

For the reasons above, the Project would result in no impacts related to biological resources, as defined by the relevant impact thresholds and the proposed amendments do not result in a change to this analysis as presented in the 2023 EIR.

Cultural Resources

The proposed amendments to Rules 9-4 and 9-6 as evaluated in the 2023 EIR and the proposed amendments to Rule 9-6 evaluated in this addendum would result in changes to the types of new furnaces and water heaters that would be allowed for sale and installation within the Bay Area. These appliances would be installed at existing and new residential and commercial buildings and would not require any excavation that may disturb historical or archaeological resources or human remains or structure modification that would cause a substantial adverse change to the significance of historic structures. The proposed rule amendments would also not result in foreseeable changes in equipment manufacturing that would require construction of new or expanded facilities that may disturb historical or archaeological resources or human remains. Therefore, the Project would not adversely affect historical or archaeological resources or disturb human remains, including those interred outside of formal cemeteries.

For the reasons above, the Project would result in no impacts related to cultural resources, as defined by the relevant impact thresholds and the proposed amendments do not result in a change to this analysis as presented in the 2023 EIR.

Energy

The proposed amendments to Rules 9-4 and 9-6 as evaluated in the 2023 EIR and the proposed amendments to Rule 9-6 evaluated in this addendum would result in changes to the types of new furnaces and water heaters that would be allowed for sale and installation within the Bay Area. These appliances would be installed at existing and new residential and commercial buildings and would not require any grading or other ground disturbance. The proposed rule amendments would also not result in foreseeable changes in equipment manufacturing that would require construction of new or expanded facilities. Regardless of the Project, Bay Area consumers would continue to purchase and install new furnaces and water heaters over the coming decades. Installation activities (which would include minimal truck trips for delivery/installation, spread out across the nine counties of the Bay Area, and occurring over several decades as consumers replace their existing furnaces and water heaters) would occur with or without the Project. While outdoor installations are expected, implementation of the proposed rule amendments would not require the use of any heavy-duty equipment or other construction-related vehicles and thus, would not result in consumption of energy resources. Regarding operations, the proposed rule amendments would allow for any heating appliance that meets the proposed emissions standards. If natural gas-fired appliances are developed that meet the proposed emissions standards, there will be no change from the current consumption of energy resources, and no environmental impact would occur. If, on the other hand and based on currently available technology, natural gas-fired appliances are replaced with electric solutions, this would also not lead to an adverse environmental impact. According to the California Air Resources Board, electrification supports the wise and efficient use of energy resulting in beneficial long-term operation impacts on energy demand. Replacement of older equipment typically results in increased energy efficiency. In addition, as discussed in the Initial Study (Appendix A), approximately 85 percent of the electricity Pacific Gas and Electric Company supplied in 2020 was greenhouse gas free with more than 35 percent being delivered from Renewable Portfolio Standard -eligible sources, including solar, wind, geothermal, small hydroelectric, and various forms of bioenergy (PG&E 2021). Thus, implementation of the proposed rule amendments would not result in wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation, or conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

For the reasons above, the Project would not result in significant impacts related to energy as defined by the relevant impact thresholds and the proposed amendments do not result in a change to this analysis as presented in the 2023 EIR.

Geology and Soils

The proposed amendments to Rules 9-4 and 9-6 as evaluated in the 2023 EIR and the proposed amendments to Rule 9-6 evaluated in this addendum would result in changes to the types of new furnaces and water heaters that would be allowed for sale and installation within the Bay Area. These appliances would be installed at existing and new residential and commercial buildings and would not require any grading or other ground disturbance. The proposed rule amendments would also not result in foreseeable changes in equipment

manufacturing that would require construction of new or expanded facilities. Regardless of the Project, Bay Area consumers would continue to purchase and install new furnaces and water heaters over the coming decades. Installation activities (which would include minimal truck trips for delivery/installation, spread out across the nine counties of the Bay Area, and occurring over several decades as consumers replace their existing furnaces and water heaters) would occur with or without the Project. While outdoor installations are expected under Rule 9-4, the Project would not involve construction activities that would result in substantial ground disturbance, excavation, or building construction. Therefore, the Project would not expose people or structures to substantial adverse effects related to rupture of a known earthquake fault, strong seismic ground shaking, strong ground failure or liquefaction, or landslides.

The proposed rule amendments would not result in substantial soil erosion or the loss of topsoil because the appliances would be installed at existing and new residential and commercial buildings and would not require any grading or other ground disturbance.

Geologic hazards are not expected because no construction activities would occur that would result in substantial ground disturbance, excavation, or building construction. The Project would not 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 on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. Further, the Project would not be located on expansive soils.

Septic tanks or other similar alternative wastewater disposal systems are typically associated with small residential projects in remote areas. Residential and commercial consumers affected by the proposed rule amendments would already be connected to appropriate wastewater treatment facilities in the Bay Area and would not 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 affected by the Project.

While outdoor installations are expected under Rule 9-4, the Project would not involve construction activities that would result in substantial ground disturbance, grading, or excavation. Thus, the Project would not destroy unique paleontological resources or sites or unique geologic features. For the reasons above, the Project would result in no impacts related to geology and soils, as defined by the relevant impact thresholds and the proposed amendments do not result in a change to this analysis as presented in the 2023 EIR.

Hazards and Hazardous Materials

The proposed amendments to Rules 9-4 and 9-6 as evaluated in the 2023 EIR and the proposed amendments to Rule 9-6 evaluated in this addendum would result in changes to the types of new furnaces and water heaters that would be allowed for sale and installation within the Bay Area. These appliances would be installed at existing and new residential and commercial buildings and would not require the transport, use, or disposal of hazardous materials. The proposed rule amendments would also not result in foreseeable changes in equipment manufacturing that would require construction of new or expanded facilities. Regardless of the Project, Bay Area consumers would continue to purchase and install new furnaces and water heaters over the coming decades. Installation activities (which would include minimal truck trips for delivery/installation, spread out across the nine counties of the Bay Area, and occurring over several decades as consumers replace their existing furnaces

and water heaters) would occur with or without the Project. While outdoor installations are expected, the Project would not involve construction activities that include the transport, use, or disposal of hazardous materials or the accidental release of hazardous materials. Therefore, the proposed amendments would not create a significant hazard to the public or environment related to the transport, use, or disposal of hazardous materials or the accidental release of hazardous materials.

Schools may be located within a quarter mile of residential and commercial buildings affected by the proposed rule amendments. The proposed amendments to Rules 9-4 and 9-6 would not 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. Compliant furnaces and water heaters are not considered sources of toxic air contaminants. Therefore, no increase in hazardous emissions is expected due to implementation of the proposed amendments to Rule 9-4 and 9-6.

Government Code Section 65962.5 requires the creation of lists of facilities that may be subject to Resource Conservation and Recovery Act (RCRA) permits or site cleanup activities. Because the Project area includes nine counties, it is not known if the affected residential and commercial buildings are located on the hazardous materials sites list pursuant to Government Code Section 65962.5. However, the proposed rule amendments would not interfere with site cleanup activities or create additional site contamination and would not create a significant hazard to the public or environment.

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 9-4 and 9-6 because new appliances would be installed inside of residential and commercial buildings.

While outdoor installations are expected under Rule 9-4, the Project would not involve construction activities, the use of heavy-duty construction equipment and vehicles, or interfere with existing transportation routes or access. Therefore, the proposed rule amendments would not interfere with an adopted emergency response plan or emergency evacuation plan or require street closures that could affect emergency response or evacuation activities. The proposed rule amendments would result in changes to the types of new furnaces and water heaters that would be allowed for sale and installation within the Bay Area. These appliances would be installed inside of residential and commercial buildings and would not generate additional development that would place people or structures closer to wildland areas. The proposed rule amendments would not increase the existing risk of fire hazards, nor would it increase fire risk by increasing the use of flammable materials.

The proposed rule amendments would not expose people or structures to wildfires. For the reasons above, the Project would result in no impacts related to hazards and hazardous materials, as defined by the relevant impact thresholds and the proposed amendments do not result in a change to this analysis as presented in the 2023 EIR.

Hydrology and Water Quality

The proposed amendments to Rules 9-4 and 9-6 as evaluated in the 2023 EIR and the proposed amendments to Rule 9-6 evaluated in this addendum would result in changes to the

types of new furnaces and water heaters that would be allowed for sale and installation within the Bay Area. These appliances would be installed at existing and new residential and commercial buildings. The proposed rule amendments would also not result in foreseeable changes in equipment manufacturing that would require construction of new or expanded facilities. The proposed rule amendments would not result in an increase in water runoff or wastewater discharge, would not result in water quality impacts, and would not result in the degradation of surface water or groundwater. The proposed rule amendments are not expected to result in any modifications to National Pollutant Discharge Elimination System (NPDES) permits or result in violation of NPDES permits. No grading or site preparation would be involved and, therefore, no water would be used during these activities. Additionally, the proposed rule amendments would not 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. Further, the proposed rule amendments would not result in an increase in wastewater that requires treatment and would not affect any wastewater treatment facility, storm water runoff, or existing drainage patterns. Additionally, the proposed rule amendments 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. Because no development of new structures or associated construction activities are involved, the proposed rule amendments would not 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.

For the reasons above, the Project would result in no impacts related to hydrology and water quality, as defined by the relevant impact thresholds and the proposed amendments do not result in a change to this analysis as presented in the 2023 EIR.

Land Use and Planning

The proposed amendments to Rules 9-4 and 9-6 as evaluated in the 2023 EIR and the proposed amendments to Rule 9-6 evaluated in this addendum would result in changes to the types of new furnaces and water heaters that would be allowed for sale and installation within the Bay Area. These appliances would be installed at existing and new residential and commercial buildings and would not affect land use or planning. The proposed rule amendments would also not result in foreseeable changes in equipment manufacturing that would require construction of new or expanded facilities. Because no development of structures or associated construction activities would occur, the proposed rule amendments would not physically divide an established community. As noted above, the proposed rule amendments would apply to residential and commercial areas; the Project would not conflict with land use plans, policies, or regulations.

For the reasons above, the Project would result in no impacts related to land use and planning, as defined by the relevant impact thresholds and the proposed amendments do not result in a change to this analysis as presented in the 2023 EIR.

Mineral Resources

The proposed amendments to Rules 9-4 and 9-6 as evaluated in the 2023 EIR and the proposed amendments to Rule 9-6 evaluated in this addendum would result in changes to the

types of new furnaces and water heaters that would be allowed for sale and installation within the Bay Area. These appliances would be installed at existing and new residential and commercial buildings and would not require any grading or other ground disturbance. The proposed rule amendments would also not result in foreseeable changes in equipment manufacturing that would require construction of new or expanded facilities. Because no grading or subsurface excavation would occur, the proposed amendments would not 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 a locally important mineral resource recovery site. Thus, no impacts to mineral resources would occur, as defined by the relevant impact thresholds and the proposed amendments do not result in a change to this analysis as presented in the 2023 EIR.

Population and Housing

The proposed amendments to Rules 9-4 and 9-6 as evaluated in the 2023 EIR and the proposed amendments to Rule 9-6 evaluated in this addendum would result in changes to the types of new furnaces and water heaters that would be allowed for sale and installation within the Bay Area. These appliances would be installed at existing and new residential and commercial buildings. No new residential or commercial buildings would be constructed. The proposed rule amendments would also not result in foreseeable changes in equipment manufacturing that would require construction of new or expanded facilities. The Project would not change the number of equipment installations only the specific type of appliances being installed. Therefore, the Project is not expected to result in an expansion of the labor pool. It is expected that the existing labor pool in the Bay Area would accommodate installation activities necessary for appliance installation. As such, implementing the proposed amendments to Rules 9-4 and 9-6 would not induce substantial population growth. The proposed rule amendments would not displace people or housing or require the construction of replacement housing. Thus, no impacts to population and housing would occur, as defined by the relevant impact thresholds and the proposed amendments do not result in a change to this analysis as presented in the 2023 EIR.

Public Services

The proposed amendments to Rules 9-4 and 9-6 as evaluated in the 2023 EIR and the proposed amendments to Rule 9-6 evaluated in this addendum would result in changes to the types of new furnaces and water heaters that would be allowed for sale and installation within the Bay Area. These appliances would be installed at existing and new residential and commercial buildings that are currently provided with applicable public services; the Project would not increase the demand for these services. The proposed rule amendments would also not result in foreseeable changes in equipment manufacturing that would require construction of new or expanded facilities. 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 above under, "Population and Housing," implementation of the proposed rule amendments would not induce population growth because the existing labor pool in the Bay Area is expected to accommodate the activities necessary for appliance installation. As such, the proposed rule amendments would not increase the demand for public services nor generate the need for new or physically altered governmental facilities. Thus, no impacts to public services would occur as defined by the relevant impact thresholds and the proposed amendments do not result in a change to this analysis as presented in the 2023 EIR.

Recreation

The proposed amendments to Rules 9-4 and 9-6 as evaluated in the 2023 EIR and the proposed amendments to Rule 9-6 evaluated in this addendum would result in changes to the types of new furnaces and water heaters that would be allowed for sale and installation within the Bay Area. These appliances would be installed at existing and new residential and commercial buildings. The proposed rule amendments would also not result in foreseeable changes in equipment manufacturing that would require construction of new or expanded facilities. No new residential or commercial buildings would be constructed, and the existing labor pool in the Bay Area is expected to accommodate the activities necessary for appliance installation. Because the proposed amendments to 9-4 and 9-6 would not increase or redistribute population, the proposed amendments 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. Thus, no impacts to recreation would occur as defined by the relevant impact thresholds and the proposed amendments do not result in a change to this analysis as presented in the 2023 EIR.

Transportation

The proposed amendments to Rules 9-4 and 9-6 as evaluated in the 2023 EIR and the proposed amendments to Rule 9-6 evaluated in this addendum would result in changes to the types of new furnaces and water heaters that would be allowed for sale and installation within the Bay Area. These appliances would be installed at existing and new buildings in residential and commercial areas. The proposed rule amendments would also not result in foreseeable changes in equipment manufacturing that would require construction of new or expanded equipment manufacturing facilities or notable changes to equipment distribution patterns that could increase vehicle miles traveled.

The proposed rule amendments would regulate the type of equipment that would be installed, not whether it would be installed. Regardless of the Project, Bay Area consumers would continue to purchase and install new furnaces and water heaters over the coming decades. Installation activities (which would include minimal truck trips for delivery/installation, spread out across the nine counties of the Bay Area, and occurring over several decades as consumers replace their existing furnaces and water heaters) would occur with or without the Project. Similarly, maintenance or repair activities (should they be needed), would occur regardless of the Project. It is expected that the existing labor pool in the Bay Area would accommodate the very minor installation and (should they be needed) maintenance and repair activities.

As discussed above under “Population and Housing,” no new residential or commercial buildings would be constructed and the existing labor pool in the Bay Area is expected to accommodate the activities necessary for appliance installation. Thus, no increase in permanent worker or truck traffic would occur. The proposed amendments to Rules 9-4 and 9-6 would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Further, the proposed rule amendments would not conflict with or be inconsistent with CEQA Guidelines Section 15064.3 subdivision(b), as no substantial increase in traffic would occur.

The proposed rule amendments would not increase traffic hazards or create incompatible uses. The Project does not involve construction of any roadways or other transportation design

features; therefore, no changes to current roadway designs that would increase traffic hazards would occur. Because the proposed rule amendments would not change the roadway system, would not involve construction, and would not generate substantial truck trips, no impacts to emergency access would occur.

Thus, no impacts to transportation would occur as defined by the relevant impact thresholds and the proposed amendments do not result in a change to this analysis as presented in the 2023 EIR.

Tribal Cultural Resources

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 Air District's jurisdiction. However, the proposed amendments to Rules 9-4 and 9-6 as evaluated in the 2023 EIR and well as the proposed amendments to Rule 9-6 evaluated in this addendum would not involve ground disturbance and would result in the installation of new furnaces and water heaters at existing and new residential and commercial buildings. The proposed rule amendments would also not result in foreseeable changes in equipment manufacturing that would require construction of new or expanded facilities that may disturb tribal cultural resources. No California Native American tribes have requested to be informed of projects by the Air District; therefore, there is no trigger to begin consultation under Assembly Bill 52, resulting in no resources identified as tribal cultural resources under Public Resources Code Section 21074. Therefore, such resources would not be adversely affected by the proposed rule amendments. Thus, the Project would result in no impacts related tribal cultural resources as defined by the relevant impact thresholds and the proposed amendments do not result in a change to this analysis as presented in the 2023 EIR.

Wildfire

The proposed amendments to Rules 9-4 and 9-6 as evaluated in the 2023 EIR as well as in the proposed amendments to Rule 9-6 evaluated in this addendum would result in changes to the types of new furnaces and water heaters that would be allowed for sale and installation within the Bay Area. These appliances would be installed at existing and new residential and commercial buildings, which are subject to state and local building and fire codes that take wildfire hazard zones and fire protection into consideration. Installation and operation of these appliances would not change existing wildfire risks in the Bay Area. Therefore, the proposed rule amendments would not impair an adopted emergency response plan or emergency evacuation plan, would not expose people to pollutants from a wildfire or the uncontrolled spread of a wildfire, would not require the installation of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk, and would not exposure people or structures to flooding or landslides as a result of post-fire slope or drainage changes. Thus, no impacts related to wildfire and the relevant impact thresholds would occur and the proposed amendments do not result in a change to this analysis as presented in the 2023 EIR.

SECTION 7 – CONCLUSION

As explained in Sections 5 and 6 of this Addendum, the analysis of the currently proposed amendments to Rule 9-6 indicate that no new significant adverse impacts would be created for any environmental areas analyzed in the EIR, nor would the modifications make substantially more severe any existing significant adverse impacts. Further, none of the other triggers for additional environmental review in CEQA Guidelines Section 15162 are met. Based on the environmental analysis prepared for the currently proposed modifications to Rule 9-6, the Air District has quantitatively and qualitatively demonstrated that the currently proposed modifications to Rule 9-6 qualify for an Addendum to the previously certified EIR.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chair Lynda Hopkins and Members of the Board of Directors
From: Philip M. Fine, Executive Officer/APCO
Date: October 28, 2026
Re: Informational Update: Small Water Heater Incremental and Total Upfront Costs, 2024 Report Compared with More Recent Research

BACKGROUND

The Air District's zero nitrogen oxides (NO_x) standard for small water heaters (less than 75,000 Btu/hr) in Regulation 9, Rule 6 (Rule 9-6) was adopted in 2023 and is currently proposed to take effect January 1, 2028. In most scenarios, the most energy and cost-efficient option for a compliant unit will be a heat pump water heater (HPWH). The cost difference between buying and installing a HPWH compared to replacing a failed NO_x-emitting unit with a new gas water heater (referred to as "incremental cost"), informs implementation planning of Rule 9-6 as well as market development efforts and incentive program design.

The Air District's 2024 installation cost analysis¹ is the basis for the \$3,496 HPWH incremental cost figure staff has used since first shared at the December 2024 Board of Directors meeting, and more recently at the November 2026 Stationary Source Committee meeting. At that meeting, Directors asked about the difference between incremental and total installed cost, the representativeness of underlying data for the Air District's 2024 cost report (i.e. if using incentive program data results in a "self-selection bias" and thus under-estimates the proportion of higher-cost projects in the overall Bay Area building stock), and whether other estimation methods could lead to different or similar results.

In response to the questions, staff reviewed data and findings from two other HPWH programs that use completely different approaches to arrive at total upfront cost and incremental cost figures (TECH Clean California Gas Baseline Incremental Cost Study, Phases 2 and 3, and San Francisco Climate Equity Hub) to see whether they show any differences in costs or trends. Staff also reviewed California Air Resources Board (CARB) analyses of building stock modeling data and potential retrofit levels needed to install zero-emission appliances to check the Air District's assumptions about the potential for high-cost (high retrofit-level) projects in the overall Bay Area building stock that would qualify for exemptions under the proposed November 2026 amendments. This memo summarizes the findings from staff's review of those analyses.

Key definitions:

- **Total upfront cost**—the full installed cost of a heat pump water heater before incentives, including equipment, labor, permits, and any associated electrical or other work.

¹ Rincon and E3. *Installation Costs for Zero-NO_x Space and Water Heating Appliances*. January 2024. https://www.baaqmd.gov/~media/files/community-health/building-appliance-implementation/task1_electrificationcosts-pdf.pdf?rev=3cb66a09f3094f94b35fa7fc90cfd4ec&sc_lang=en

- **Incremental cost**—the difference between the upfront cost of a HPWH compared to replacing the failed gas water heater with a new (“like-for-like”) gas water heater.

DISCUSSION

The Air District’s 2024 report²

Total upfront and incremental cost

The analysis in the 2024 report – based on over four thousand completed HPWH projects in the Bay Area from incentive programs (including BayREN, TECH Clean California, and community choice aggregators) between 2019-2023 – found an average total upfront cost of **\$7,071** for a HPWH.

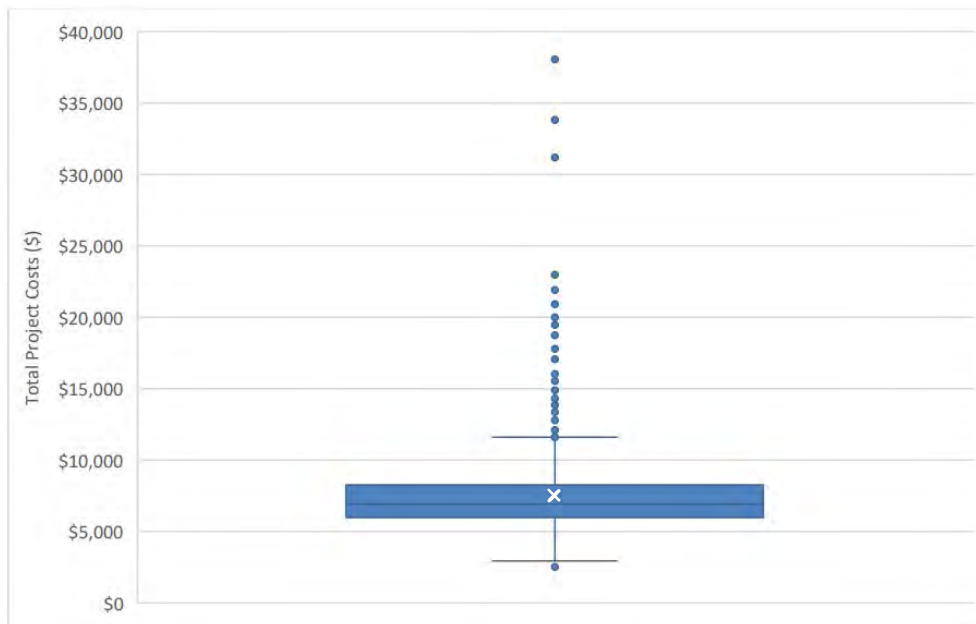
The same analysis found that average incremental costs for a zero-NOx tanked HPWH compared to a tanked gas water heater was **\$3,496**. Since tanked gas water heaters are much more prevalent in Bay Area housing, this figure is most frequently referenced by the Air District.

Cost distribution

Some of the incentive programs analyzed in the 2024 report did not provide individual project costs and instead provided project counts and averages, which allowed the calculation of a weighted average leading to the \$7,071 total upfront cost figure. However, one of the largest datasets was through the TECH Clean CA program (n = 1,127) which did provide detailed total upfront project cost data. The plotted cost distribution of this dataset in Figure 1 (below) shows the middle 50% of projects (ranging from \$6,000 to \$8,500) in the blue box; the upper quartile (or most expensive 25% of projects) starting at only slightly above the average (noted by white “X”); and the upper boundary line at approximately \$11,500, excluding outliers, shown as the blue dots on the vertical line and which account for less than two dozen projects (.01%), with the highest at about \$38,000.

² Rincon and E3. *Installation Costs for Zero-NOx Space and Water Heating Appliances*. January 2024. https://www.baaqmd.gov/~media/files/community-health/building-appliance-implementation/task1_electrificationcosts-pdf.pdf?rev=3cb66a09f3094f94b35fa7fc90cfd4ec&sc_lang=en

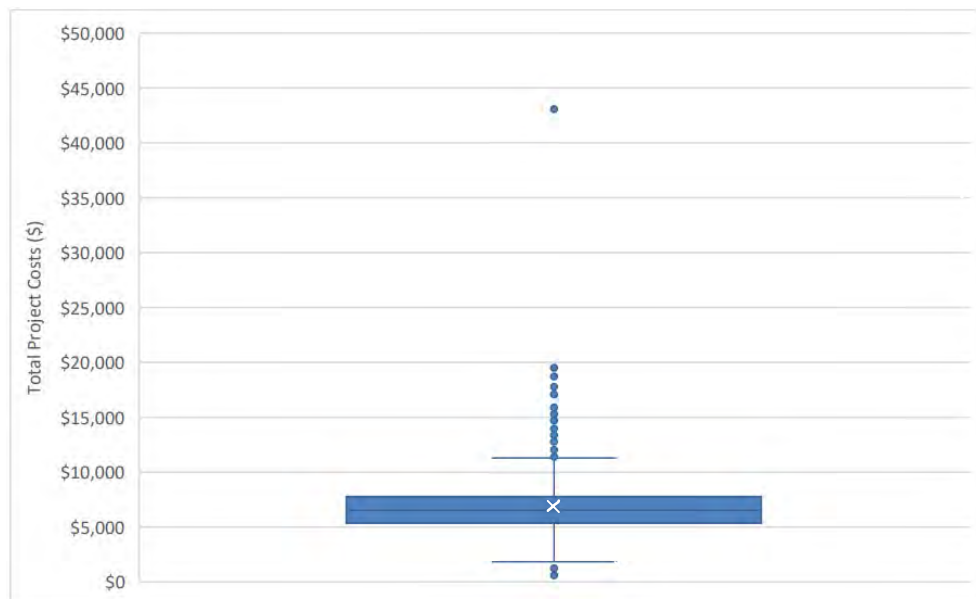
Figure 1. TECH Clean CA HPWH Cost Distribution



(Figure 16 of 2024 Air District report)

The other large dataset from BayREN/CLEAResult (n=2,254) shows a similar pattern (Figure 2). The middle 50% of projects (as signified by the blue box) have costs ranging from \$5,500 to \$7,500; the median and average (as signified by the mid-line and the white “X”) overlap; the upper boundary line is around \$11,500; and about 1% of projects are outliers above that line with all except one under \$20,000.

Figure 2. BayREN/CLEAResult HPWH Cost Distribution



(Figure 15 of 2024 Air District report)

Air District review of other data sources

1. *Non-incentive program upfront and incremental costs*

TECH Clean California Gas Baseline Incremental Cost Study, Phases 2 and 3³: In 2025, TECH Clean California published findings from a study (Phase 2) conducted by collecting contractor bids for ten (10) different homes located in various parts of the state. These bids were solicited from homeowners (“mystery shoppers”), who as participants in the study, requested multiple bids for a like-for-like gas tanked units and HPWHs. The number of contractor bids collected was twenty (20) for gas tanked and thirty-one (31) for HPWHs. In 2025, additional bids were collected through an online contractor survey (Phase 3), which yielded 14 gas tanked water heater and 17 HPWH bids. Summary results are shown in Table 1, below.

The TECH Phase 2 and 3 studies did not calculate incremental costs as the difference between the program-wide HPWH upfront cost average and baseline gas tanked water heater average. Instead, these costs are statistical estimates of the average differences between HPWH and gas tanked water heater replacements, on a per-home basis using multiple quotes from multiple contractors for each home which compared and “normalized” bids given inconsistent quoted work or line items (e.g. electrical panel work, additional retrofits needed, etc.).

Table 1. Cost comparisons with TECH Phase 2 and 3 studies

Source	HPWH total upfront cost (average)	HPWH total upfront cost (median)	Incremental cost (HPWH over gas)
2024 Air District report	\$7,071	N/A	\$3,496
TECH study, Phase 2 (2024 contractor bids)	\$8,549	\$7,846	\$3,990
TECH study, Phase 3 (2025 contractor bids)	\$9,821	\$8,447	\$3,174

While the TECH Phase 2 and 3 studies reported higher total upfront HPWH costs than the 2024 Air District report, they also found higher costs for gas tanked water heater replacements (\$4,264 in 2024, \$4,300 in 2025). Since HPWH *and* gas unit costs increased by similar proportions, staff consider the Air District’s 2024 incremental cost figure for HPWHs to be generally aligned with the TECH Phase 2 and 3 studies.

San Francisco Climate Equity Hub (CEH): In this program, the San Francisco Environment Department installs HPWHs at no cost to income-qualified households (defined as at or below 80% of area median income) in one- to four-unit homes

³ Opinion Dynamics. *TECH Clean California Gas Baseline Incremental Cost Study*. September 2025.
https://pda.energydataweb.com/api/view/4255/TECH%20Incremental%20Cost%20Study%20Draft%20Report%20for%20PDA_12.11.25.pdf

primarily located in Bayview Hunters Point. The 2026 report⁴ on 115 installations completed to date includes data on total upfront costs, but not incremental costs. For the standard scope⁵ of work (i.e. no extra construction or electrical work needed), typical installed costs were about \$8,362, including permit and project advisor fees⁶. Total costs for all 115 projects ranged from \$7,000 to \$14,552. Higher costs were driven by non-standard scope of work measures such as safety improvements (e.g. grounding or replacing unsafe electric panels); deferred maintenance (e.g. repairs to vents, sewer line replacement); and relocating the water heater. All 115 units were installed with the home's existing electric service capacity, with no service upsizing needed. Summary results are shown in Table 2, below.

Table 2. Cost comparisons with SF CEH program

Source	HPWH total upfront cost (<i>average</i>)	HPWH total upfront cost (<i>median</i>)	Incremental cost (HPWH over gas)
2024 Air District report	\$7,071	N/A	\$3,496
SF CEH, <i>standard scope*</i> (36 out of 115 total installations)	Not reported	\$8,362 (\$7,662 if subtracting the Advisor Fee)	Not reported
SF CEH, <i>with added site work</i> ⁷ (79 out of 115 total installations)	Not reported	\$9,786	Not reported

SF CEH data shows that total upfront HPWH costs for “standard scope” projects (which include a \$700 “Project Advisor” fee) were higher than the 2024 Air District total upfront cost (\$7,071) but typically took place in older homes that experience more deferred maintenance and other physical constraints (a stipulated goal of the program design).

2. Range of retrofits needed to install zero-emission water heating informed by building stock modeling

As part of the process to develop statewide zero-GHG emission standards for space and water heaters, the California Air Resources Board (CARB) assessed the potential need for residential building retrofits – with a focus on potential space and electrical constraints – to install zero-emission space and water heating equipment in existing buildings, and

⁴ San Francisco Environment Department. *San Francisco Climate Equity Hub – Learnings from the first 115 projects*. October 2026. <https://www.sfenvironment.org/campaigns/welcome-climate-equity-hub>

⁵ SF CEH “standard scope” includes: remove gas water heater; cut and cap exposed flue piping and gas line; haul debris and gas tank; extend hot & cold supply lines as needed; install: water heater, shutoff valve, condensate line, thermal mixing valve, expansion tank & valve, seismic strap; insulate hot water piping; Install 240V 30A circuit with safety switch including wiring to panel and 30A 2-pole breaker; permit and inspection; and pre-construction review by CEH Project Advisor (\$700 fee).

⁶ For a flat program fee of \$700, CEH Advisors coach the contractor on best practice technologies and construction techniques for each site. The contractor prepares a quote; the advisor flags costs or scope that may exceed norms and suggests alternatives.

⁷ These scopes are currently proposed to be exempted per November 2026 Rule 9-6 amendments.

published their methodology and findings report in October 2026.⁸ It is assumed that zero-GHG emission water heaters will also be zero-NOx.

CARB staff's estimates show about 13% of all Bay Area homes would need an "extensive space" retrofit to address a space constraint (Table 3, below), some of which may also qualify for proposed ongoing low-income exemptions. They also estimated that approximately 3% of buildings, including those with covered gas water heaters, would need an "extensive electrical" retrofit due to lower amperage panels. These conclusions generally align with the Air District's assessment of the quantity of exemptions that would be offered due to "high cost" installations (20%) – which typically would be caused by space and/or electrical constraints and that align with the "extensive" category per CARB.

Space constraints

To understand the potential range of space constraint-driven retrofit needs, CARB staff used 2024 U.S. Department of Energy ResStock⁹ data, which combines large public and private data sources¹⁰ (e.g. U.S. Census Bureau American Housing Survey data; DOE Residential Energy Consumption Survey data) with statistical sampling to generate representative sets of housing unit models across the country. These models include specific attributes such as water heater location (e.g., conditioned living space, unconditioned basement, crawlspace, exterior closet, or garage), garage presence and size, and building architectural style. CARB staff grouped each home's existing water heater into a simplified baseline category: tanked, tankless, centralized, or already zero-emission (i.e. HPWH or electric resistance).

For a Bay Area scenario that accounted for Rule 9-6 implementation, only in-unit tanked water heaters were considered, and then assigned zero-emission replacements, with adoption rates based on input from public experts and market assumptions. Residential gas tanked and tankless water heaters were assumed to be replaced primarily with 240-volt HPWHs, with a smaller share of 120-volt, split-system HPWHs, and solar thermal replacements.

Because HPWHs usually need more space than gas units, "decision trees" were developed for each building type (e.g. single-family detached, single-family attached, multifamily) and then matched existing water heater locations with the "best fit" replacement technology to result in a retrofit action and consequent retrofit level. "Basic" retrofits covered a direct swap in the same location; "moderate" retrofits covered adding ventilation e.g. ducting or a louvered door; and "extensive" retrofits covered significant

⁸ CARB Zero-Emission Appliance [Building Retrofit Analysis Methods](#)

⁹ <https://resstock.nlr.gov/>

¹⁰ Full list of ResStock housing data sources https://resstock.readthedocs.io/en/latest/workflow_inputs/index.html

renovations or relocation. Retrofit levels as applied to the entire Bay Area residential building stock is shown below.

Table 3. Modeled retrofit level for HPWH installations, by space constraints

	Space constraint retrofit-level required					
	Already zero-emission	Basic	Moderate	Extensive	Out of Scope	Total
<i>Description</i>	<i>Electric HPWH or electric resistance</i>	<i>No retrofit needed, direct swap</i>	<i>Adding ventilation (ducts or louvered door)</i>	<i>Significant renovation or relocation</i>	<i>Propane or oil, or in manufactured or mobile homes</i>	
<i># and (%) of household units per category</i>	404,400 (19%)	955,700 (44%)	404,400 (19%)	278,800 (13%)	93,400 (4%)	2,136,700 ¹¹ (100%)

Electrical constraints

To understand electrical constraint retrofit level needs, CARB staff referenced modeling recently completed by researchers at UCLA,¹² which estimated residential building panel capacity at time of construction based on historical National Electrical Code (NEC) requirements and parcel vintages, then accounted for later panel upsizing based on permit data pulled across the state, which included panel upsizing projects, rooftop solar, EV charging and heat pump installations.

Resulting panel capacity levels were categorized into retrofit levels based on the estimated size of the panel as follows: “basic” (i.e. panel has enough amperage to install zero-emission equipment) was applied to single-family buildings (SF) with at least 200 amps or multifamily (MF) buildings with in-unit sub-panels of at least 90; “moderate” (i.e. panel optimization would be necessary, e.g. by using smart breakers, a smart panel, circuit pausers/circuit sharing devices) was applied to buildings with 100 to 199-amp panels for SF and 60-amp sub-panels for MF; and “extensive” (i.e. panel upsizing would be required) was applied to SF buildings with panels under 100 amps and MF buildings with subpanels under 60 amps¹³.

According to the analyses, 56% of Bay Area residential buildings would fall under “basic” for electrical retrofits; 41% under “moderate” and 3% under “extensive.” For the 14% and 3% of buildings that are expected to fall under “extensive” retrofit levels for space and electrical respectively, there is likely some overlap with the same buildings experiencing

¹¹ Includes HPWHs in single family homes and “in-unit” HPWHs in multifamily housing.

¹² *Quantifying the electric service panel capacities of California’s residential buildings*. June 2024. <https://www.ioes.ucla.edu/wp-content/uploads/2024/06/2024-Quantifying-the-electric-service-panel-capacities-of-Californias-residential-properties.pdf>

¹³ These “extensive electrical retrofits are currently proposed to be exempted per November 2026 Rule 9-6 amendments.

both constraints at extensive levels; however, for a more conservative estimate, percentages may also be aggregated.

Table 4. Modeled retrofit level for HPWH installations, by electrical constraints

	Electrical constraint retrofit-level required			
	Basic	Moderate	Extensive	Total
<i>Description</i>	<i>no panel upsizing needed</i>	<i>panel optimization necessary</i>	<i>panel upsizing required</i>	
% of buildings per category	56%*	41%*	3%*	100%

*Air District scaled down CARB's statewide percentages to the Bay Area's buildings.

CONCLUSIONS

Upfront and incremental and costs

Air District staff analysis of non-incentive HPWH program cost data finds results that are similar to the upfront and incremental costs described in the Air District's 2024 cost report. The \$3,496 incremental cost referenced in the rulemaking process is aligned the TECH study's 2024-25 estimates, and the SF CEH "standard scope" HPWH upfront costs are close to the Air District 2024 cost report, especially when accounting for the \$700 CEH Advisor fee included as part of that program.

Frequency of potential high-cost installations due to space and electrical constraints

Air District staff analysis of CARB-sponsored research of Bay Area and statewide residential building data finds that approximately 17% of projects may require extensive retrofit-level projects (space and electrical constraints taken together), less than the Air District's current estimate of 20% that may qualify for a high-cost, project-level space or electrical constraint exemption.

The CARB-sponsored research was an analysis of the overall building population rather than looking at actual projects from incentive programs. CARB's analysis is consistent with the Air District's in that it indicates that projects which would be particularly expensive would fall within the project-specific exemptions in the proposed amendments to Rule 9-6.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Amy Dao
Reviewed by: Richard Chien

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

RESOLUTION NO. 2026 -

**A Resolution of the Board of Directors of the Bay Area Air District
Amending Regulation 9, Rule 6: Nitrogen Oxides Emissions from Natural
Gas-Fired Boilers and Water Heaters**

RECITALS

WHEREAS, the Board of Directors of the Bay Area Air Quality Management District (Air District) has the authority and responsibility to adopt, amend, and repeal rules and regulations necessary and appropriate to control air pollution from stationary sources within the San Francisco Bay Area pursuant to California Health and Safety Code sections 40000, 40001, and 40702; and

WHEREAS, Regulation 9, Rule 6, Nitrogen Oxides Emissions from Natural Gas-Fired Boilers and Water Heaters (Rule 9-6), regulates emissions of nitrogen oxides (NOx) from natural gas-fired water heaters and boilers sold and installed within the Air District; and

WHEREAS, on March 15, 2023, the Board of Directors adopted amendments to Rule 9-6 establishing future zero-NOx standards for natural-gas fired space and water heating appliances (2023 amendments); and

WHEREAS, Air District staff prepared an Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA) to evaluate the environmental impacts of the 2023 amendments, which found that the amendments would provide substantial air quality and public health benefits through significant reductions in NOx emissions; and

WHEREAS, the EIR also found that the amendments would have the potential to create significant and unavoidable adverse impacts on utility resources and noise that cannot be mitigated to a level that is less than significant, but these impacts are outweighed by the substantial air quality and public health benefits from the amendments; and

WHEREAS, the Board of Directors certified the EIR pursuant to CEQA, made findings required by CEQA Guidelines Section 15091, and adopted a statement of overriding considerations pursuant to CEQA Guidelines Section 15093 finding that the significant adverse effects as identified in the EIR are acceptable in light of the substantial air quality and public health benefits that would result from the 2023 amendments; and

WHEREAS, when the Board of Directors adopted the Rule 9-6 amendments, it directed Air District staff to evaluate implementation readiness, market conditions, technology availability, consumer affordability, and potential barriers to compliance, and to return with recommendations if modifications were warranted; and

WHEREAS, the Air District staff have conducted an extensive implementation review process, including formation of a diverse Implementation Working Group comprised of environmental organizations, environmental justice advocates, manufacturers, contractors, utilities, local governments, housing representatives, labor organizations, and technical experts; development of implementation-readiness assessments and stakeholder recommendations; preparation of a socioeconomic analysis; release of a December 2024 implementation assessment report and subsequent concept paper evaluating potential amendments; multiple Board and committee discussions regarding implementation challenges and potential solutions; and additional public outreach and stakeholder engagement; and

WHEREAS, based on the findings of this implementation review process, the Board of Directors has determined that a need exists to amend Rule 9-6 to address identified affordability, installation, infrastructure, and implementation barriers, thereby reducing implementation burdens while preserving the majority of the anticipated emissions reductions; and

WHEREAS, on October 24, 2025, Air District staff released a document entitled “Concepts for Rule 9-6 Amendments: Affordability and Availability Considerations for Zero-NOx Small Water Heaters” (Concepts Paper) for public review and comment, evaluating potential amendments related to affordability, installation constraints, and customer access; and

WHEREAS, on December 10, 2025, Air District staff presented a summary of comments received on the Concepts Paper to the Stationary Source Committee; and

WHEREAS, on February 11, 2026, Air District staff presented information regarding low-income qualification approaches and additional flexibility concepts to the Stationary Source Committee; and

WHEREAS, on May 6 and May 13, 2026, Air District staff presented a Regulatory Overview and potential Rule 9-6 flexibility amendments to the Board of Directors and received comments from the Board of Directors; and

WHEREAS, on July 14, 2026, Air District staff released draft Rule 9-6 amendments, draft regulatory language and an Updated Regulatory Overview report for flexibility amendments to Rule 9-6 for public review and comment, and accepted written comments; and

WHEREAS, in September 2026, Air District staff released a Draft Staff Report and proposed Rule 9-6 amendments language; and

WHEREAS, Air District staff published the proposed regulatory language and Preliminary Staff Report for the Rule 9-6 amendments on October 2, 2026, and accepted public comment on the rule until November 1, 2026; and

WHEREAS, based on comments and input received from members of the public and agency representatives, Air District staff developed the final version of the proposed amendments for consideration by the Board of Directors, which are set forth in Attachment A and referred to herein as the “proposed amendments”; and

WHEREAS, the Board of Directors has determined that the need exists to adopt the proposed amendments to reduce implementation barriers and compliance costs while maintaining substantial long-term air quality benefits; and

WHEREAS, the Board of Directors has determined, based on a review of the text of the proposed amendments and the rulemaking materials prepared by Air District staff, including the Final Staff Report, that the proposed amendments are written and displayed so that their meaning can be easily understood by the persons directly affected by the proposed amendments, and by the public at large; and

WHEREAS, the Board of Directors 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; and

WHEREAS, the Board of Directors has determined that the proposed amendments do not impose the same requirements as any existing state or federal regulation, and are necessary and proper to execute the power and duties granted to and imposed upon the Air District under California Health & Safety Code 40702; and

WHEREAS, the Board of Directors has identified and determined that the proposed amendments will implement, interpret and/or make specific the provisions of Sections 40000, 40001, and 40702 of the California Health & Safety Code; and

WHEREAS, the proposed amendments include revised compliance dates, a structured exemption framework, and clarifying amendments designed to improve implementation of Rule 9-6; and

WHEREAS, the proposed amendments would revise compliance dates such that covered water heaters and boilers with rated heat input capacities of 75,000 BTU per hour or less would become subject to the zero-NOx standard beginning January 1, 2028; and

WHEREAS, the proposed amendments would also revise the compliance dates such that covered water heaters and boilers with rated heat input capacities greater than 75,000 BTU per hour and less than or equal to 2,000,000 BTU per hour would become subject to the zero-NOx standard beginning January 1, 2033; and

WHEREAS, the proposed amendments would also extend compliance for multifamily housing, affordable housing developments, and qualifying businesses with high hot water demand to January 1, 2033; and

WHEREAS, the proposed amendments would allow continued sales and installation of water heaters smaller than 30 gallons; and

WHEREAS, the proposed amendments would provide a one-time limited exemption for space and electrical constraints as well as an ongoing exemption for low-income and housing cost burdened property owners; and

WHEREAS, the socioeconomic analysis concluded that the proposed amendments would reduce annualized household compliance costs by approximately \$137.5 million compared to implementation of the currently adopted rule and preserve approximately 600 jobs compared to implementation of the 2023 rule requirements without modification; and

WHEREAS, the Air District prepared an Addendum to the previously certified 2023 Environmental Impact Report pursuant to CEQA Guidelines section 15164; and

WHEREAS, the Addendum concludes that the proposed amendments would not create new significant environmental impacts and would not substantially increase the severity of previously identified environmental impacts, and do not require preparation of a subsequent or supplemental EIR.

RESOLUTION

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors finds that, pursuant to its direction following the 2023 adoption of amendments to Rule 9-6, Air District staff conducted an extensive implementation review process that included stakeholder engagement, implementation-readiness assessments, socioeconomic analysis, public outreach, and several Board and committee discussions regarding technology availability, affordability, and implementation challenges.

BE IT FURTHER RESOLVED that, based on the above recitals, which are true and correct and are incorporated herein by reference, and on all of the information provided in the rulemaking record for the proposed amendments, including the findings of Air District Staff's Rule 9-6 implementation review process, the Board of Directors does hereby adopt the proposed amendments as set forth in Attachment A, as discussed in the Final Staff Report and all other documents in the record, pursuant to the authority granted by law, with instructions to staff to correct any typographical or formatting errors before final publication.

BE IT FURTHER RESOLVED that the Board of Directors hereby finds, based on all the reasons contained in the Final Staff Report and summarized in the Recitals above, that the proposed amendments are necessary; the Air District has the authority to adopt the proposed amendments; the proposed amendments are clearly written and displayed; the proposed amendments are consistent with other legal requirements; the proposed amendments are not impermissibly duplicative of existing regulatory requirements; and the proposed amendments will implement specific provisions of law as referenced and identified.

BE IT FURTHER RESOLVED that the Board of Directors has reviewed and considered the previously certified 2023 Environmental Impact Report and 2026 Addendum prior to adopting the proposed amendments, including the discussion of environmental impacts and the associated findings regarding significant impacts and statement of overriding considerations, as well as the subsequent evaluation of the effects of the proposed amendments. The Board of Directors concurs that no subsequent or supplemental EIR is required under CEQA Section 21166 and related CEQA Guidelines provisions.

BE IT FURTHER RESOLVED that the Board of Directors directs Air District staff to continue engagement with affordable housing providers and multifamily housing owners and operators, including meetings with individual stakeholders and groups, as well as with stakeholder representatives regarding implementation of Rule 9-6.

BE IT FURTHER RESOLVED that the Board of Directors directs Air District staff to evaluate and report to the Board of Directors no later than December 31, 2030, regarding the readiness of affordable housing and multifamily housing properties to comply with the requirements of Rule 9-6. The evaluation and report shall include assessment of infrastructure readiness associated with rule compliance; costs of compliance, including consideration of available subsidies, financing options, and cost recovery information associated with utility allowance schedules; and impacts on the availability of affordable housing.

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 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 and adopted at a public meeting of the Board of Directors of the Bay Area Air District on the Motion of Director _____, seconded by Director _____, on the ____ day of _____, 2026 by the following vote of the Board:

AYES:

NOES:

ABSENT:

Lynda Hopkins
Chairperson of the Board of Directors

ATTEST:

Marcy Hiratzka
Clerk of the Boards

DRAFT



Adoption of Proposed Amendments to Regulation 9, Rule 6

Board of Directors Meeting

November 4, 2026

Gregory H. Nudd
Deputy Executive Officer
Policy

Presentation Outline

- I. Rule 9-6 Background and Overview
- II. Proposed Amendments
- III. Exemption Framework and Implementation Process
- IV. Socioeconomic and Environmental Impacts
- V. Public Comment
- VI. Resolution and Recommendation

Recommended Action

Staff recommends that the Board adopt the Resolution, which includes:

- Proposed Amendments to Regulation 9, Rule 6; and
- Findings of necessity, authority, clarity, consistency, non-duplication, and reference.

Abbreviations

AMI: Area median income

BTU/hr: British thermal units per hour;
measure of heat energy

CARE: California Alternate Rates for
Energy

CEC: California Energy Commission

CEQA: California Environmental Quality
Act

CPUC: California Public Utilities
Commission

EIR: Environmental Impact Report

FERA: Family Electric Rate Assistance
Program

GHG: Greenhouse gas

HPWH: Heat pump water heater

IWG: Implementation working group

NOx: Nitrogen Oxides

PG&E: Pacific Gas and Electric

PM: Particulate matter

PM_{2.5}: Fine particulate matter

WIC: Women, Infants and Children
(supplemental nutrition program)

Part I. Rule 9-6

Background and Overview

Current Requirements

- Zero NOx standards adopted in 2023 apply to natural gas fired water heaters (Rule 9-6) and furnaces (Rule 9-4)
- If the Board does not approve the proposed amendments today, current requirements remain in place, these do not include exemptions for affordability installation costs or implementation challenges
- Requirements **phase in over time**: all *new* sales or installations of units manufactured after compliance dates
- Requirements only apply to natural gas-fired water heaters and furnaces

1/1/2027	Water heaters less than 75,000 BTU/hour
1/1/2029	All applicable natural gas-fired furnaces (e.g., residential and commercial; including direct-vent units)
1/1/2031	Water heaters 75,000 to 2 million BTU/hour

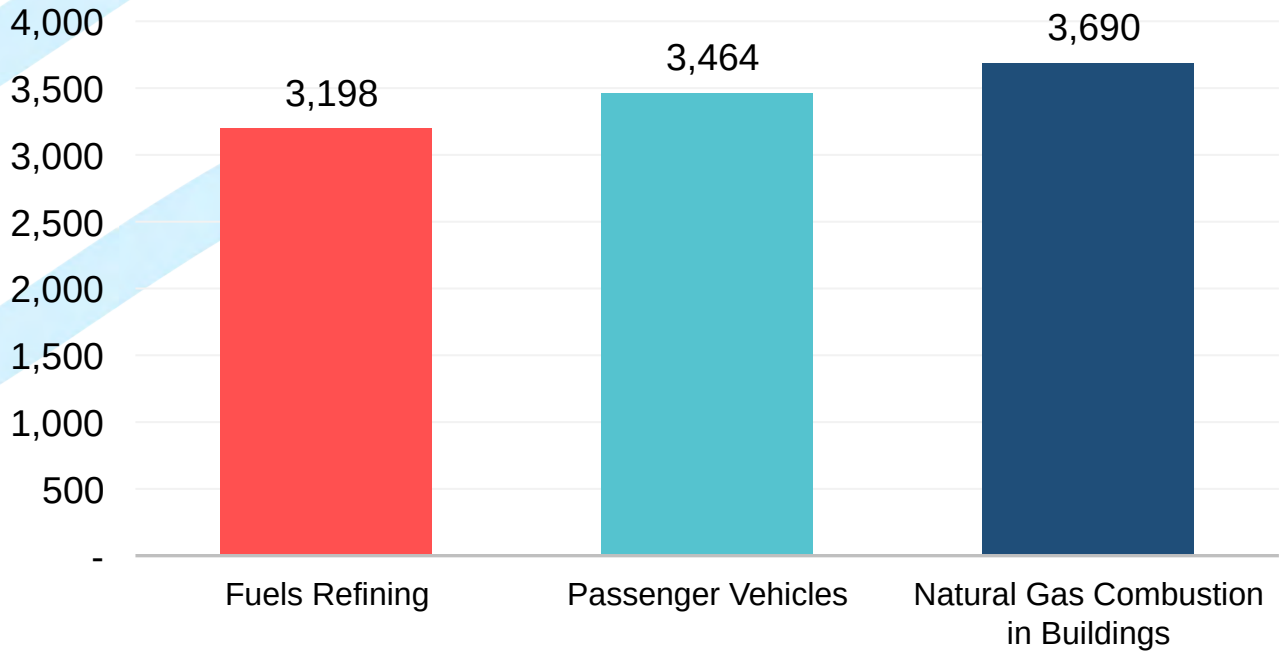
Decision Before the Board

THE PROPOSED AMENDMENTS WOULD:

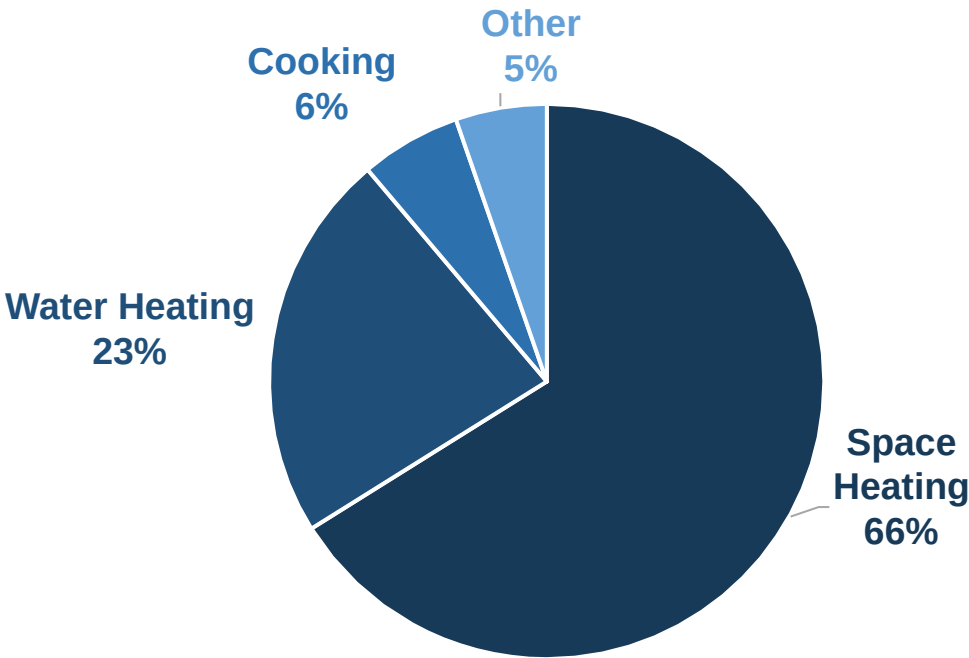
- Allow for continued sales of small-capacity natural gas water heaters
- Establish targeted exemptions for space, electrical, and affordability barriers
- Extend compliance dates for certain water heaters and properties
- Provide additional time for implementation and public outreach

NOx Emissions from Buildings

2019 Air District NOx Emissions (tons)



Air District Residential Natural Gas Combustion NOx Emissions (2019)



Major Health Benefits from Rules 9-4 and 9-6

These appliance rules help improve regional air quality by reducing pollution from furnaces and water heaters.

Cleaner outdoor air

Less NO_x and PM_{2.5} from venting



Lower pollution means lower exposure to fine particles (PM_{2.5}).

Cleaner Bay Area communities

Biggest PM_{2.5} reductions in communities of color and overburdened neighborhoods



Reducing PM_{2.5} and NO_x exposure can prevent dozens of early deaths every year in the Bay Area.

Up to 85 early deaths avoided
each year from cleaner air



Health improvements from cleaner air avert unnecessary costs from health impacts.

Up to \$1.1B

Annual health benefits saved in avoided illnesses, hospital visits, and early deaths

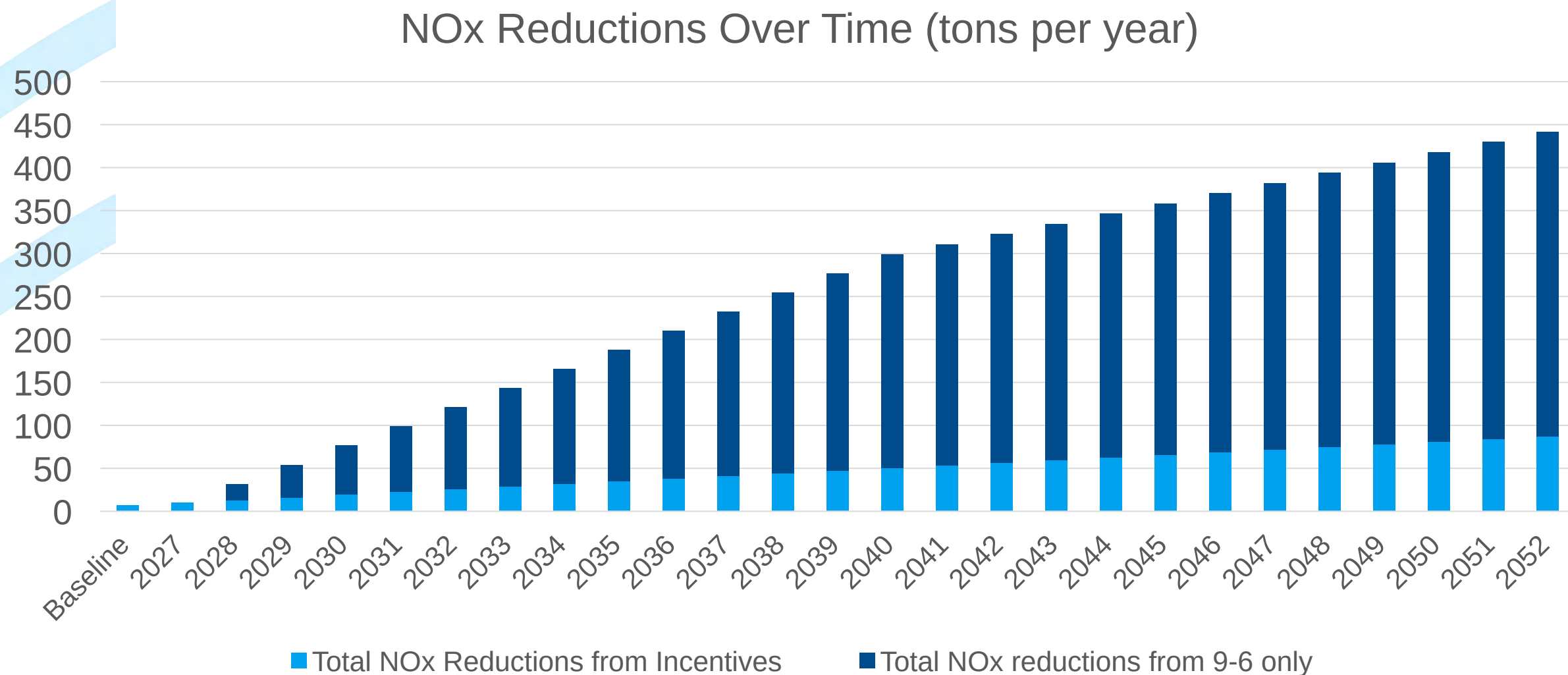


Health Benefits Not on the Balance Sheet

- Avoiding suffering: respiratory distress
- Brain conditions: Dementia/Alzheimer's and Parkinson's
 - More than the cost of the 1st hospitalization
- Stroke: caregiving costs, impact on family members
- Sub-clinical benefits: chronic inflammation, oxidative stress, metabolic impacts
- Climate change mitigation benefits and potential indoor air exposure

Benefits Accumulate Over Time

NOx Reductions from Incentives and Rule 9-6



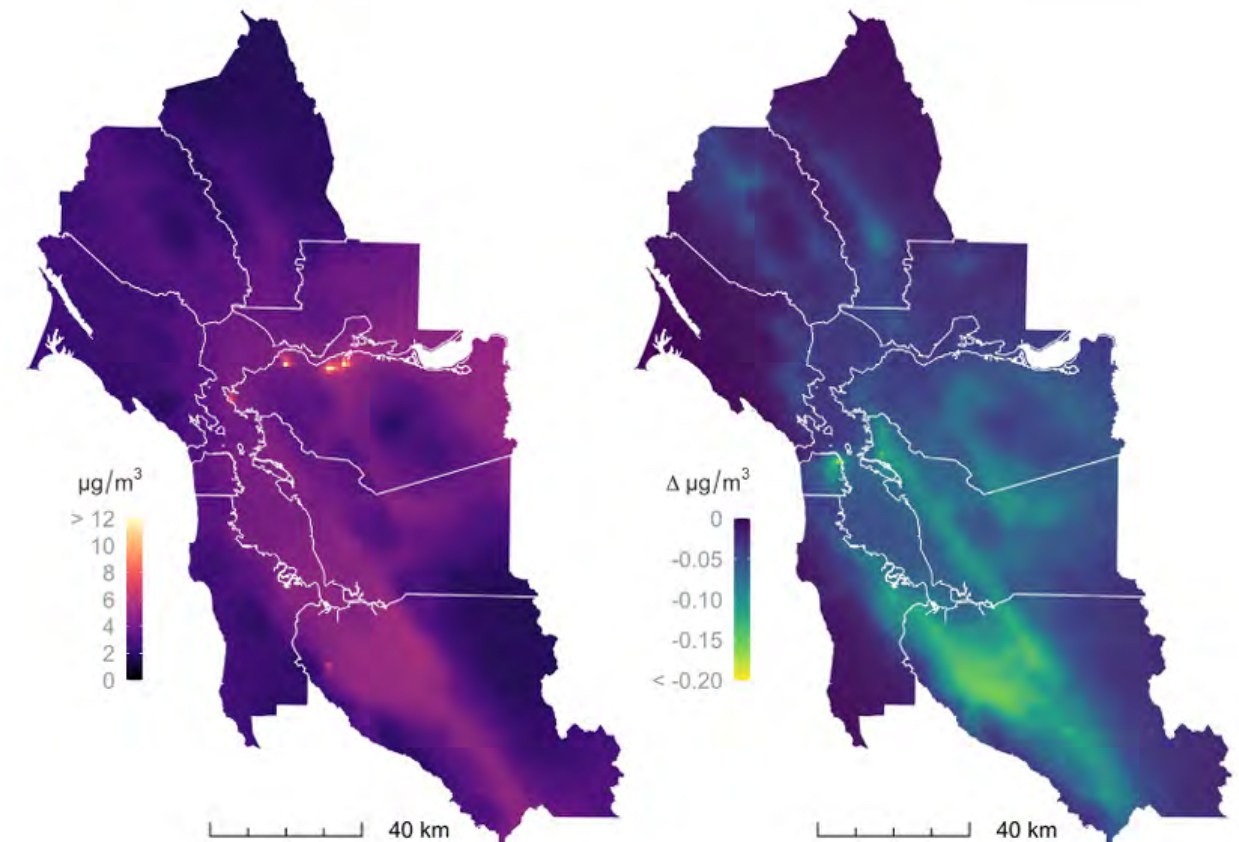
Long-Term Benefits of Rule 9-6 with Proposed Amendments

	Premature Mortality ^{1,2}	Asthma Onset ¹	Overall Valuation ^{1,2,3}
Annual Projected	16 avoided/yr	21 avoided/yr	\$90 million/yr
Cumulative benefits 2028–2058	300 avoided	400 avoided	\$2 billion

1. Incorporating regional population growth forecast by Plan Bay Area 2050+.
2. Upper ends of estimated ranges.
3. Present valuations expressed in 2024 dollars, including a 3% real discount rate.

Public Health Benefits: Who? Where?

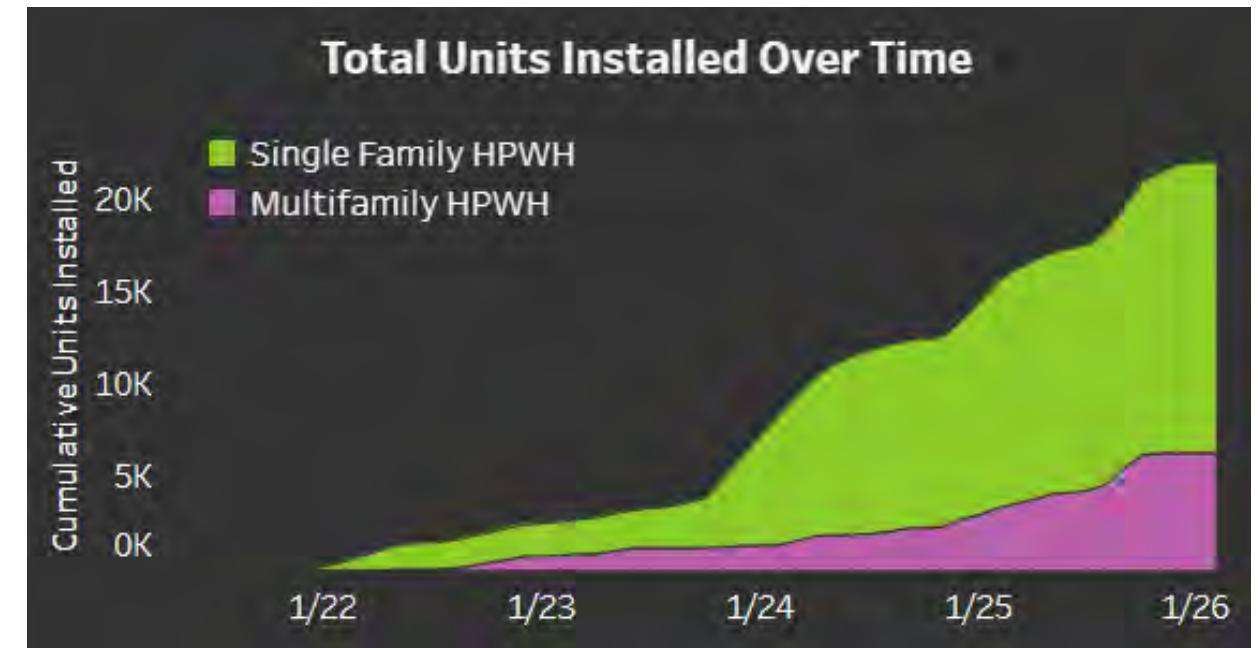
- Benefits are less in your home, they're for neighbors and the region.
- Emissions reductions will take longer to achieve due to exemptions
- Maintains regional benefit due to the reduction in secondary PM_{2.5}



Baseline concentrations (left) and reductions (right) for secondary PM_{2.5} (Source: 2023 Rule 9-6 Staff Report)

Zero NOx Water Heater Technology is Widely Available

- Diverse technology options available for installation
- 20,000+ units installed in California and growing



Source: [TECH Public Reporting Heat Pump Data Visuals](#)

Implementation Working Group Phase 1 Small Water Heaters



**Technical
Readiness**



**Equitable
Transition**

40+ members

Environmental
Justice and
Community-
Based
Organizations

Subject Matter
Experts on
Energy,
Buildings, and
Technology

Regional/Local
Government
and State
Agencies

Labor and
Trade
Organizations

Utilities and
Community
Choice
Aggregators

20+ Meetings

6 Public
Plenary

5 Steering
Committee

5 Technical
Subcommittee

5 Equity
Subcommittee

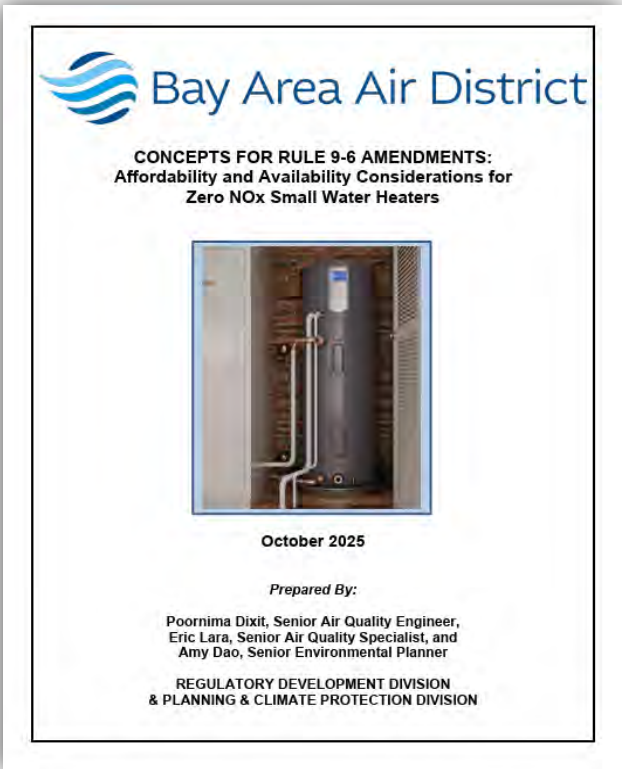
Board and Committee Timeline

Date	Venue	Summary
March 15, 2023	Board of Directors	Adoption of zero NOx amendments to Rules 9-4 & 9-6 Board directed staff to come back with a Rule 9-6 implementation report in 2024
December 4, 2024	Board of Directors	Informational report on staff's research and a summary of IWG findings for Rule 9-6 implementation
October 24, 2025	Public Comment Period	Public Release of Rule 9-6 Concepts Paper (flexibility options) informed by Phase I of the IWG
December 10, 2025	Stationary Source Committee	Presentation on potential flexibility amendments based on affordability and availability issues for Rule 9-6 Committee directed staff to come back with information on possible exemptions for low-income property owners
February 11, 2026	Stationary Source Committee	Presentation on the definition of "low-income" including considerations for housing cost burden and how much it costs to help low-income households switch to zero NOx water heaters.
May 6 and 13, 2026	Stationary Source Committee	Staff to returned with a full set of proposed changes so the full Board can give clear directions on how to proceed with the rule

Continuous Public Reporting



DECEMBER 2024



OCTOBER 2025



APRIL 2026



JULY 2026

During this time, staff has received and responded to over 5000 public comments, as well as engaged with many stakeholder groups

Part II. Proposed Amendments

Proposed Amendments

➡ IMPLEMENTATION CHALLENGE 1:

- *Additional time needed to establish the exemption process and conduct public outreach*

☑ PROPOSED SOLUTION:

- **Extend Compliance Date to January 1, 2028**
-

➡ IMPLEMENTATION CHALLENGE 2:

- *Limited availability of small capacity Zero NOx water heaters*

☑ PROPOSED SOLUTION:

- **Continued Sales of Small Capacity Units (< 30 gallons)**

Proposed Amendments (cont.)

➡ IMPLEMENTATION CHALLENGE 3:

- *Certain water heater installations require additional long-term planning to address technical or infrastructure challenges*

☑ PROPOSED SOLUTION:

- **Extend Compliance Dates to January 1, 2033 for:**
 - Multi-family buildings (5 units+), Deed-restricted affordable housing, Non-Profit Mutual Housing Cooperative
 - Larger capacity units (>75,001 Btu/hour)
 - Hydronic systems
 - Qualifying Businesses with specialized applications and high hot water demand

Proposed Amendments (cont.)

➡ IMPLEMENTATION CHALLENGE 4:

- *Emergency water heater replacements may not allow for sufficient time to install compliant equipment*

☑ PROPOSED SOLUTION:

- **Allow for Temporary Emergency Replacements**
 - **Require Removal Within 12 Months or Obtain an Exemption Certificate**
-

➡ ADDITIONAL APPLICABILITY PROVISIONS:

- Wholesale sales: Clarify the applicability of requirements to wholesale transactions
- Mobile home water heaters: Clarify the existing exemption for natural gas-fired mobile home water heaters

Proposed Amendments (cont.)

➡ IMPLEMENTATION CHALLENGE 5:

- *Some installations may require more costly space modifications or electrical upgrades*

☑ PROPOSED SOLUTION:

- **Establish One-Time Limited Exemptions for Qualifying Projects with:**
 - *Insufficient space for heat pump water heaters*
 - *Electrical infrastructure limitations*
-

➡ IMPLEMENTATION CHALLENGE 6:

- *Some property owners may be unable to afford equipment replacement costs*

☑ PROPOSED SOLUTION:

- **Establish a Low-Income Qualified Property Owner Exemption**
- **Eligibility Based on Qualifying Assistance Programs or Household Income**

One-Time Exemptions: Space and Electrical Constraints

5: Electrical Constraints

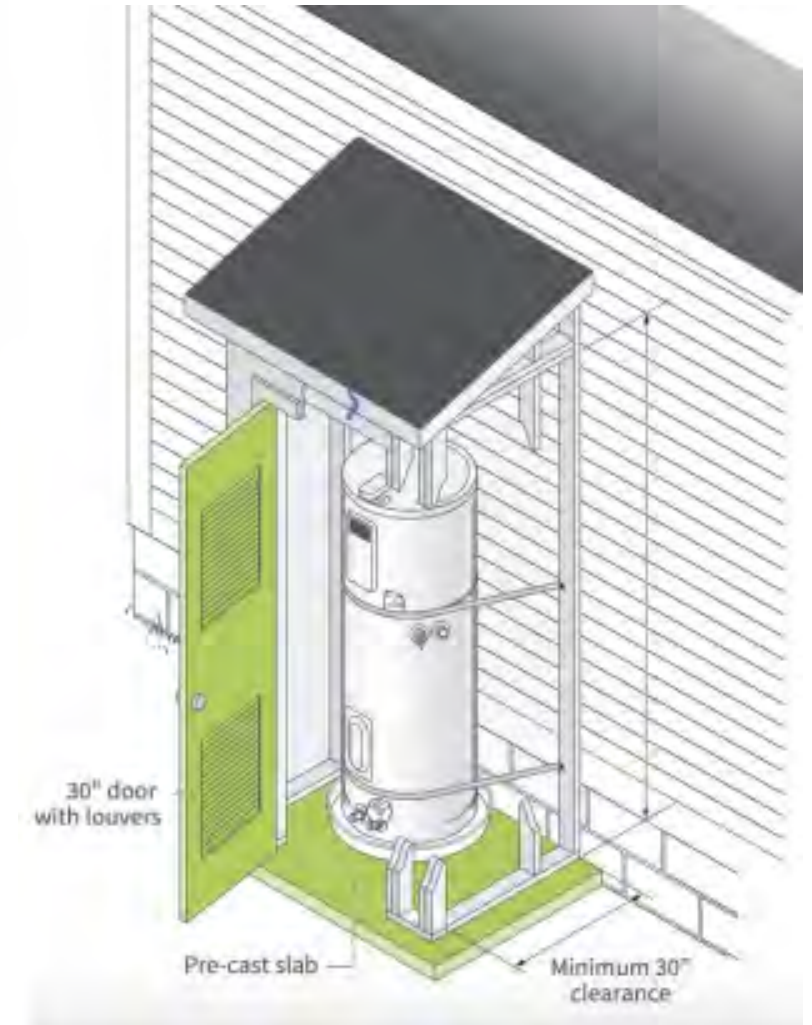
- <100 amp for single-family; <60 amps per multi-family home
- No open breaker space
- Knob and tube wiring
- >50 feet of 240v conduit required

Space Constraint

- <700 cubic feet of space available
- Cannot be fitted with a louvered door, transfer grille or air duct
- Does not meet minimum height required
- Space constraint issues would result in relocation, adding an external closet (shown in figure)



Source: Granger.com



Low-Income Qualified Property Owner

6: Defined as:

- Property owners that are either low-income program participants OR $\leq 80\%$ Area Median Income (AMI)
- Housing cost burdened (annual mortgage and property taxes $\geq 28\%$ of gross income)

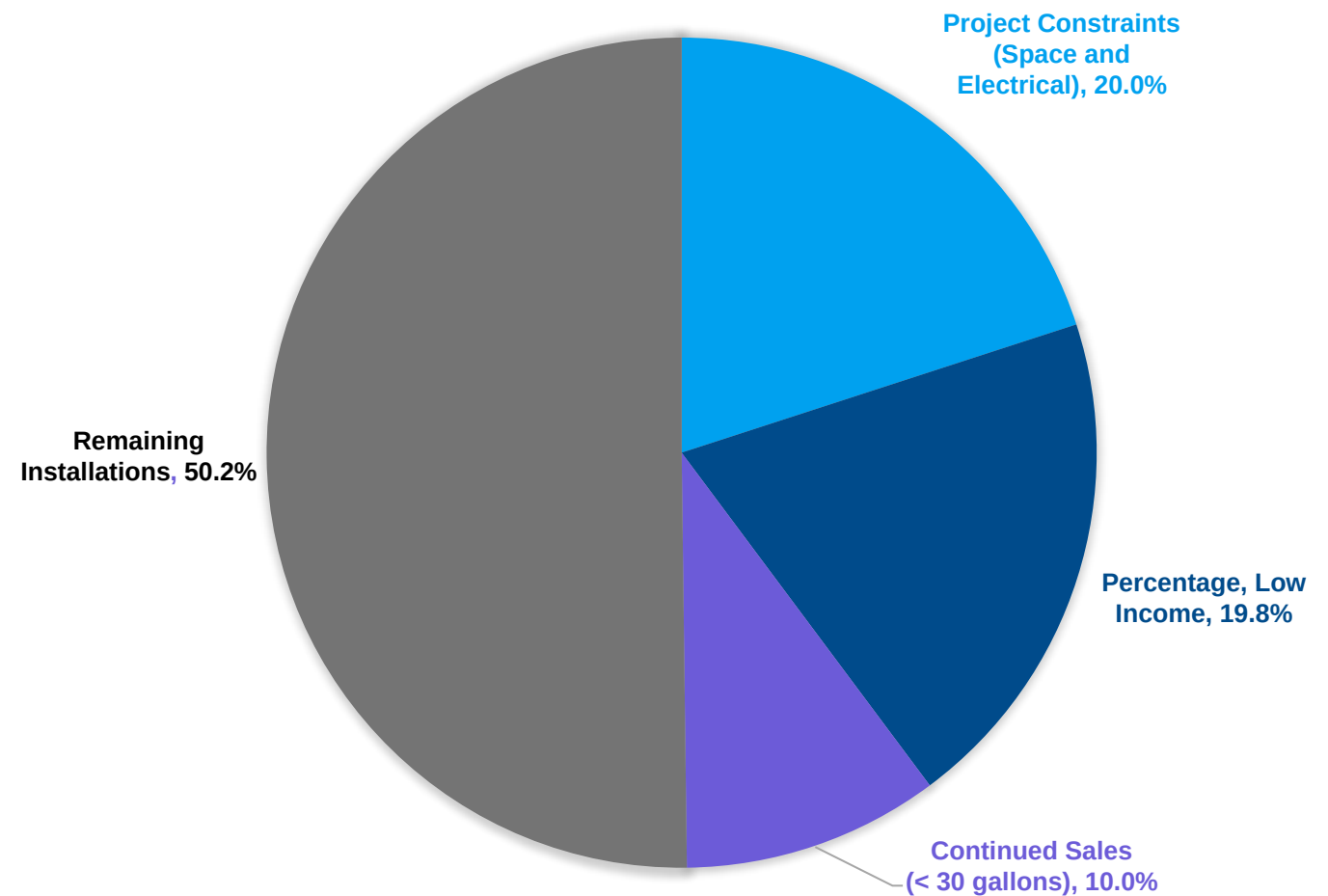
Projected Percentage of Bay Area Households:

- 19.8%

Total Estimated Exemptions

- Approximately 120,000 small water heaters turnover annually
- Staff estimate up to half of water heater installations would qualify for exemptions

ESTIMATED ANNUAL DISTRIBUTION OF EXEMPTION PATHWAYS



Part III. Exemption Framework and Implementation Process

Implementation Guiding Principles

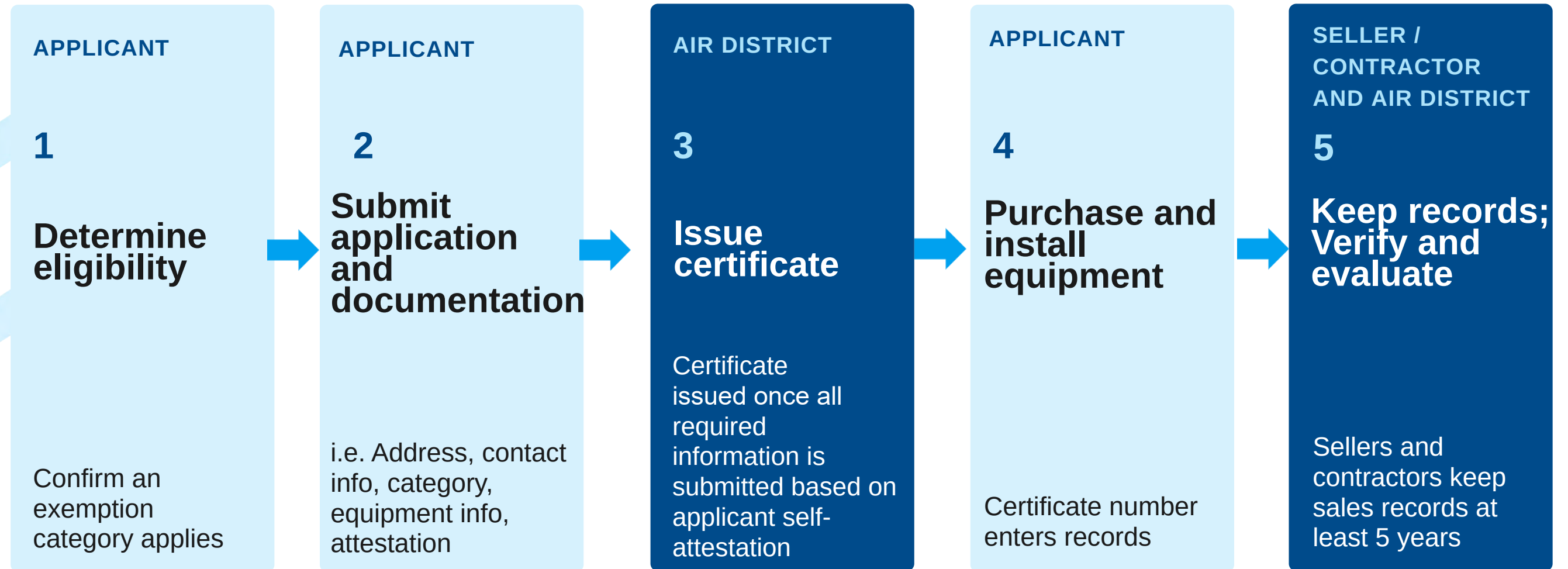
- **Simple:** Automated process with limited supporting documentation
- **Timely:** No delays in restoring hot water
- **Targeted:** For specific, identified barriers impacting installation, infrastructure and affordability



Source: istockphoto.com

An administrative certification process through an online portal, not traditional permitting

Implementation Process



Iterative: APCO, with the Board, may adjust requirements in the future through a public process.

Public Awareness Campaign Timeline

Multi-phase communications plan to educate and engage all audiences

Phase I – Summer and Fall 2026

- Develop clear, audience-specific messaging focused on benefits of switching to zero NOx appliances
- Conduct baseline awareness survey (April–June)
- Launch media, contractor, and social outreach

Phase II – Fall through early 2027 (post-Board action)

- Launch local advertising campaign
- Expand outreach, including door-to-door, with clear timelines and calls to action

Phase III – 2027 and beyond

- Continuation of advertising, public relations, stakeholder, and social media outreach

Part IV. Environmental and Socioeconomic Impacts

2023 Socioeconomic Analysis

- Full socioeconomic analysis was conducted for the 2023 amendments
 - Considered compliance costs for both water heaters (Rule 9-6) and space heaters (Rule 9-4)
 - Provided details on how affordable the regulations would be for low-income households and renters
 - Calculated impacts on the overall economy due to shifts in spending driven by the zero-NOx requirements

2026 Socioeconomic Impacts from Amended Rule

- Full socioeconomic analysis of proposed amended Rule 9-6
- Updated costs of compliance for water heaters
- Updated regional economic metrics
- Provided updated details on how affordable the regulations would be for low-income households and renters
- Calculated impacts on the overall economy due to shifts in spending driven by costs to comply with the rule
- Assessed benefit of low-income exemptions by race/ethnicity and county

Socioeconomic Impacts from Amended Rule

- HPWH on average cost \$3,500 more to install than new gas units based on data from > 4,000 Bay Area installations
 - Average baseline cost (gas-to-gas replacement): \$3,575
 - Average upfront HPWH cost: \$7,071
 - Annual utility savings: \$40–\$50
 - Incremental cost estimate supported by analysis of datasets without potential incentive project selection bias
- Household net cost: \$33 per month for 13 years
- Regional net costs decline as more households receive ongoing utility savings

Socioeconomic Impacts from Amended Rule

- Analysis concludes that the proposed amendments are not expected to result in significant socioeconomic impacts
- Under worst case assumptions, costs from the amended rule reduce employment by less than 0.02% in impacted sectors
- Proposed homeowner exemptions reduce estimated net annualized household compliance costs by \$97.9 million

Bay Area household costs	Annualized cost
Current Rule 9-6 requirements	\$470.7 million
With proposed exemptions	\$372.8 million
Savings from exemptions	\$97.9 million

CEQA Impact Analysis: Rule 9-6 Addendum

The Addendum evaluates how the proposed amendments alter the analysis of the Rule's environmental impacts contained in the 2023 EIR.

- **Air Quality and GHGs:** *Beneficial impacts from emission reductions are delayed, with some potentially forgone due to exemptions.*
- **Utilities and Noise:** Adverse electrical infrastructure impacts are less than projected in 2023 EIR; noise impacts remain similar.
- **No new significant adverse impacts** or substantial worsening of significant impacts evaluated in 2023 EIR – no subsequent or supplemental EIR is required.

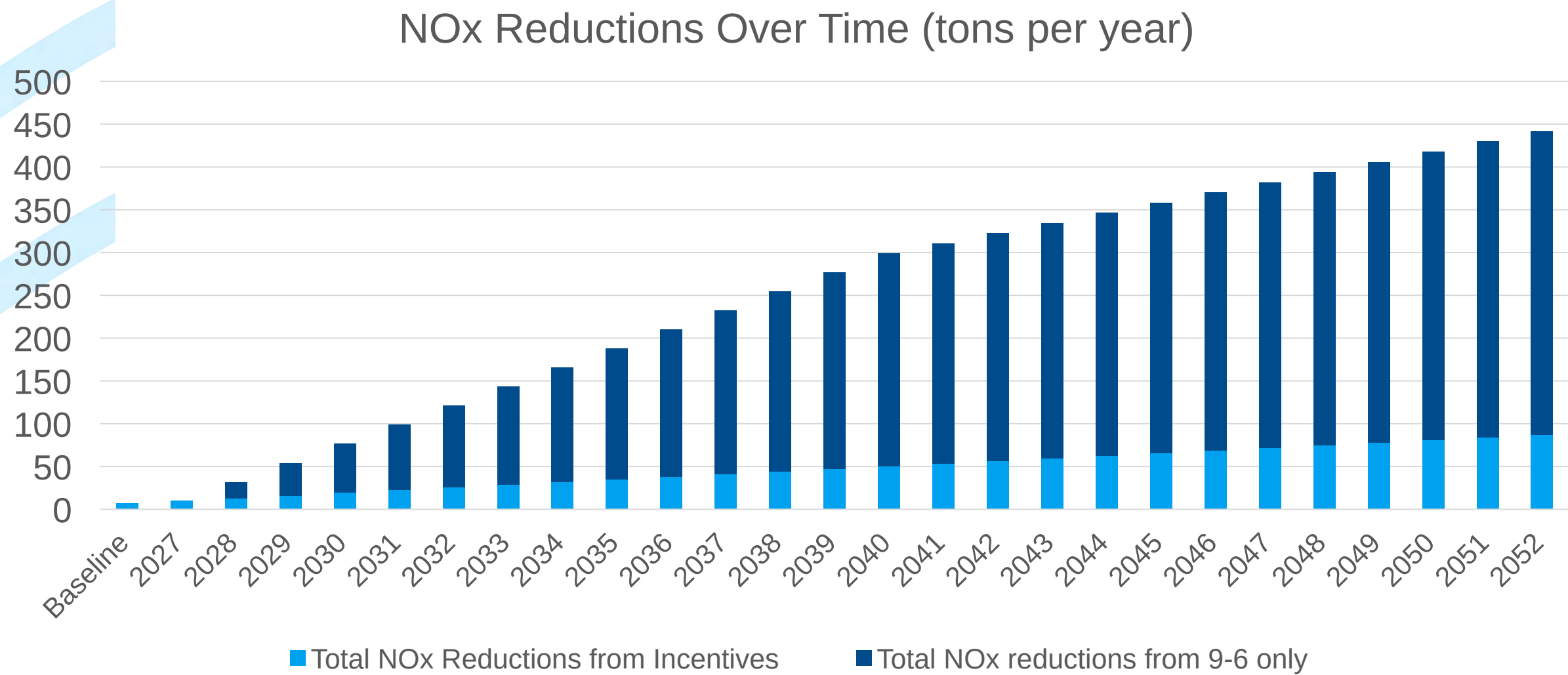
Ongoing HPWH Incentives

- In September and October 2026, staff requested full budgets for HPWH incentive programs from local administrators estimated for the next several years, if available
- The following organizations responded:
 - BayREN
 - CleanPower SF
 - MCE
 - Palo Alto Utility
 - PG&E
 - San Jose Clean Energy
 - Sonoma Clean Power
 - Silicon Valley Clean Energy (SVCE)
 - WestLight Energy (formerly PCE)

Ongoing HPWH Incentives, cont.

- Staff normalized funding amounts per year and for the Bay Area for organizations covering counties outside the Air District
- Most programs fund multiple measures (e.g., HPWH, HP HVAC, induction cooking, etc.)
 - Staff assumed 40% of these program funds are used for HPWHs
- Resulting annual total is \$16.8 M annually for HPWHs in the Bay Area
 - Staff assumed \$2,000 per HPWH = 8,400 replacements annually
 - Annual marginal NOx reductions of these replacements = 3 tons per year

NOx Reductions from Incentives and 9-6



Part V. Public Comment

Public Comments Received

- Note to public: This section of the presentation will be updated prior to the Board of Directors meeting with complete information based on comments received and common responses following the close of the public comment period.

Rule Language Updates

- Section 9-6-112: Statement regarding exemption not applying to new construction was the to header section of Section 9-6-112
 - Clarify that this exclusion of the exemption for new construction applies to all subsections of 9-6-112, including 9-6-112.3 for electrical exemptions
- Section 9-6-113.4: clarify that the non-profit mutual housing cooperative time-limited exemption applies to multiple organizational types
 - 501(c)(3) and 501(c)(12) organizations as well as other nonprofit stock cooperatives as defined by the Davis-Stirling Common-Interest Development Act and Civil Code Section 4190
- Section 9-6-115: Section 9-6-407 added to the list of sections from which wholesale sales are exempt
 - Clarify that wholesale sales do not need to meet the noticing requirement laid out in Section 9-6-407 as this section was intended to provide information to consumers in retail settings.

Part VI. Resolution and Recommended Action

Statutory Findings

- Before adopting, amending, or repealing a rule, the Board of Directors must make the following findings based on the Health and Safety Code:
 - Necessity - Section 40727(b)(1)
 - Authority - Section 40727(b)(2)
 - Clarity - Section 40727(b)(3)
 - Consistency - Section 40727(b)(4)
 - Non-Duplication - Section 40727(b)(5)
 - Reference - Section 40727(b)(6)

Additional Resolution Language

Continued work with affordable housing providers to evaluate 2033 delay provided in proposed amendments:

- The Board of Directors directs Air District staff to **continue engagement with affordable housing providers and multifamily housing owners and operators**, including meetings with individual stakeholders and groups, as well as with stakeholder representatives regarding implementation of Rule 9-6.
- The Board of Directors directs Air District staff to evaluate and report to the Board of Directors **no later than December 31, 2030**, regarding the readiness of affordable housing and multifamily housing properties to comply with the requirements of Rule 9-6. The evaluation and report shall include **assessment of infrastructure readiness associated with rule compliance, costs of compliance including consideration of available subsidies and financing options, cost recovery information associated with utility allowance schedules; and impacts on the availability of affordable housing.**

Recommended Action

Adopt the Resolution, which includes:

- Proposed Amendments to Regulation 9, Rule 6; and
- Findings of necessity, authority, clarity, consistency, non-duplication, and reference