

BAY AREA AIR DISTRICT
Memorandum

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

From: Philip M. Fine
Executive Officer/APCO

Date: May 6, 2026

Re: Rule 9-6 Regulatory Overview and Discussion of Flexibility and Affordability
Amendments for Zero-NOx Water Heaters

RECOMMENDED ACTION

Discuss and provide input on staff recommendations or alternative approaches.

BACKGROUND

In March 2023, the Bay Area Air District Board of Directors adopted amendments to Regulation 9, Rule 6 (Rule 9-6) that established a zero nitrogen oxides (NOx) emissions standard for all sales and installations of covered water heaters beginning with those manufactured after January 1, 2027. These amendments did not include any flexibilities or exemptions for any potential extenuating circumstances. Over the past two years, Air District Staff have collaborated with stakeholders to develop and refine potential amendments to introduce flexibility into the zero NOx standard, with the intention of easing requirements and potential cost impacts and provide options for an easier transition.

The Air District convened an external Implementation Working Group (IWG) comprised of over 40 members representing a variety of stakeholder segments to identify and compile potential solutions for implementation barriers. The IWG's focus areas included technology readiness, costs, permitting, workforce, grid capacity, and equitable access to incentives and financing. Over 20 IWG meetings were held between May 2023 and August 2024 that informed staff's December 2024 Board update and subsequent October 2025 preliminary concepts paper for flexibility and affordability amendments.

DISCUSSION

Flexibility Amendments

While the long-term benefits of Rule 9-6 remain clear, stakeholder engagement has highlighted several practical challenges that can significantly increase costs or limit implementation feasibility for certain properties. Air District Staff are recommending that the Board of Directors provide direction to move forward with a proposal for further amendments to Rule 9-6 that would provide flexibility in the following scenarios:

- Challenging installations due to space constraints, existing electrical system or panel upgrades.
- Low-income qualified property owners
- Water heaters with a capacity of less than 30 gallons
- Hydronic systems (combined water and space heating)
- Businesses with high-heat demand (examples: restaurants, healthcare, dry cleaners, etc.)
- Temporary emergency gas water heaters installed by certified contractors

Air District staff estimate that the average incremental cost to install a heat pump water heater for a “standard” project is approximately \$3,500. Of this, the incremental retail cost of a heat pump water heater as compared to a new natural gas fired unit ranges from \$600 - \$1,600. The remaining difference is due to additional labor costs to install the zero NOx unit.

Air District staff estimate up to 38 percent of new water heater installations would qualify for exemptions as described above. Income-based eligibility exemptions for low-income or housing cost burdened property owners would account for approximately 18 percent, while project or building constraints, such as space or electrical limitations, would account for the other 20 percent. Given the technical nature of the project-specific exemptions, some participation from licensed contractors would be required.

In order to provide sufficient time to make necessary project-specific upgrades while still ensuring that emission reductions are achieved over time, staff recommend that project-specific exemptions be granted on a *one-time basis* per address or location. For water heaters less than 30 gallons and hydronic units, staff recommend amending the compliance date to January 1, 2031 to allow for more time for market development and for the IWG to further evaluate technology readiness and costs at the appropriate time.

Air District staff plans to provide a website for property owners to request and immediately receive exemptions through a process that is as fast and seamless as possible and ensures that rule requirements are met.

The rule will continue to deliver meaningful regional air quality benefits, particularly through reductions in fine particulate matter (PM2.5). However, the introduction of exemptions will result in a more gradual realization of emissions reductions. Over time, as exempted properties transition to compliant technologies, the full benefits of the rule will be achieved.

Common Questions and Concerns

Throughout the stakeholder engagement process, Air District Staff have received some common questions regarding the implementation of Rule 9-6 and potential flexibility amendments including:

- **Scope:** Rules 9-4 and 9-6 apply specifically to furnaces and water heaters. The rules do not impose requirements on other household appliances such as stoves or clothes dryers, as the rules are focused on reducing NOx emissions from major sources.
- **Equity and Affordability:** Equity considerations are central to the proposed amendments. The combination of targeted exemptions and available incentives is intended to reduce financial burdens, particularly for low-income and cost-burdened households. Staff intend to direct all interested parties towards available rebates to support equitable education and access.
- **Electric Grid Readiness:** Air District commissioned research has confirmed that the implementation of Rule 9-6 will not result in significant unplanned burden to the electrical grid. Additionally, the flexibility amendments account for scenarios in which access to additional building-level electrical capacity is limited.
- **Homeowner Costs:** The estimated \$3,500 incremental cost of installation is a one-time investment that may be partially offset through rebates. The exemption pathways are designed to avoid requiring replacement in situations that would result in high-cost installations. Additionally, associated health benefits will accrue continuously once the replacement is completed.

Communications and Outreach

A multi-phase communications campaign is underway to support implementation of Rule 9-6. The campaign will focus on increasing understanding of the health impacts of NOx-emitting appliances, the benefits of zero NOx technologies and key steps for replacement.

Outreach will be conducted through multiple channels, including contractors, local governments, media, and community organizations, with messaging tailored to different audiences over time.

Staff Recommendations

Staff are seeking Board consensus on the following recommendations to continue moving forward with the planned amendments:

1. **Low-Income Qualification Criteria:** Staff recommend defining eligible households as those either participating in an existing low-income program (e.g. Medicaid, food stamps, etc., with a household income $\leq 250\%$ of federal poverty guidelines) or experiencing housing cost burden (i.e. housing costs $\geq 28\%$ of gross income). This approach aims to capture a broader set of financially vulnerable households.
2. **Requirement for Contractors:** Staff recommend that project-specific exemptions be evaluated and verified by contractors. This ensures an accurate assessment of technical constraints and alignment with evolving technologies.
3. **One-Time Exemption per Address:** Staff recommend that only one exemption is allowed per property, providing approximately 13 years (one equipment lifecycle) for owners to prepare for eventual compliance. This balances near-term feasibility with long-term policy goals and ensures eventual realization of all emissions benefits.
4. **Delayed Implementation Date (October 2027):** Staff recommend postponing the rule's effective date one year to October 1, 2027 to allow additional time for online system development, market alignment, workforce training, and public outreach. While this delay supports smoother implementation, it also postpones the associated air quality benefits.

Next Steps

Air District staff plan to release detailed proposed rule language, along with updated environmental and socioeconomic analyses, in advance of a targeted vote for adoption of the amendments by the Board of Directors in October 2026. Continued stakeholder engagement and refinement of the proposal will occur throughout this period.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

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ATTACHMENT(S):

1. Rule 9-6 Regulatory Overview May
2. Rule 9-6: Flexibility and Affordability Amendments for Zero NOx Water Heaters Presentation