

San Diego County Air Pollution Control District
PROPOSED AMENDMENTS TO RULE 69.6 – NATURAL GAS-FIRED
FAN-TYPE CENTRAL FURNACES

Public Workshop Tuesday, June 18 at 2-3:30 pm

2024



Background

Which furnaces will Rule 69.6 apply to?

- ➤ Used in San Diego County.
- Fired exclusively with natural gas.
- ➤ Provide heated air through ducts more that 10 inches in length.
- ➤ Have a heat input capacity of <175,000 Btu/hr or a cooling capacity of <65,000 Btu/hr for combination heating and cooling units.
- ➤ Residential and Commercial

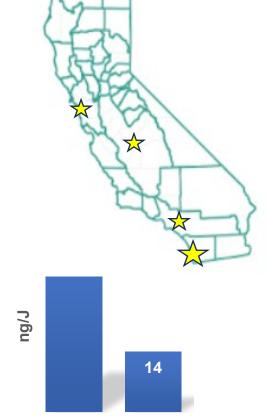
Who would be responsible for complying?

Any person who manufactures, distributes, sells, offers for sale or installs furnaces for use in San Diego County.





- New furnace emission requirements (Standards, Section (d)(1))
 - ➤ With the exception of furnaces installed in manufactured and mobile homes, all furnaces installed in San Diego County would not be able to emit more than 14 nanograms of nitrogen oxides per joule (ng NOx/J).
 - Existing standard: 40 ng NOx/J
 - o 65% decrease compared to existing standard
 - Emission limit would be consistent with requirements in place today at Bay Area AQMD, South Coast AQMD, and San Joaquin Valley APCD



Proposed

New Standard

Existing

Standard



- New furnace emission requirements (continued) (Standards, Section (d)(2))
 - ➤ All furnaces installed in manufactured and mobile homes would not be able to emit more than 40 nanograms of nitrogen oxides per joule.
 - No current existing standard
 - 80% decrease compared to actual unregulated emissions
 - Emission limit would be consistent with previous requirements at South Coast AQMD, and San Joaquin Valley APCD.





- How to demonstrate compliance (Certification, Section (e)(1) through (e)(3))
 - ➤ Upon the District's request, a certification statement shall be provided for each new furnace model (not for each new furnace).
 - ➤ The certification statements approved by South Coast AQMD, San Joaquin Valley APCD or Bay Area AQMD are sufficient to demonstrate compliance.







Other requirements

≻Labeling Section (f)

Furnace and its shipping carton shall be labeled with the model name / number and capacity.

➤ Test Methods and Emission Test Requirements Section (h) and (i)

The manufacturer shall maintain certification records and emission test records.

These revisions were done to update and provide alternative test methods, harmonize with the other proposed amendments, and align with EPA performance standards.

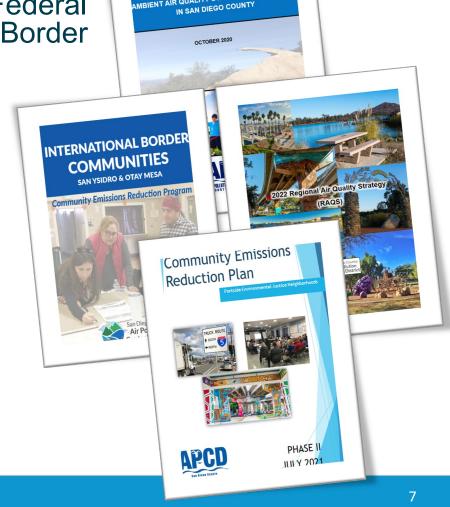


Plans Support

➤ 2022 Regional Air Quality Strategy (RAQS), 2020 Federal Ozone Plan (SIP), Portside CERP (Action C3), Int. Border CERP (Community Care, Strategy 2)

- Estimated Emission Reductions
 - ≥256 tons NOx / year
- Estimated Cost Effectiveness
 - >\$95 / Ib NOx reduced
- Estimated Health Benefits
 - ➤ Incidence decrease of health effects = 617
- Estimated Health Cost Savings
 - ➤\$13.1 million



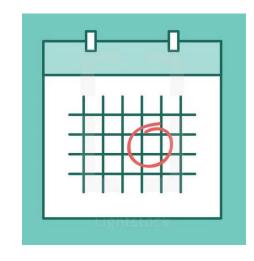


Tentative Timelines

- ➤ Consideration of proposed Rule 69.6 amendments is tentatively scheduled for Governing Board consideration in November 2024.
- ➤ If adopted as proposed, any <u>new</u> furnace installed six months after the adoption of Rule 69.6 amendments would be subject to the new requirements found in the amended rule.

Existing Furnaces

- Existing/operational furnaces installed would <u>not</u> be affected;
- ➤ No deadline to remove/replace.





Consistency with Statewide Actions

- District evaluation indicates proceeding with proposed amendments is timely, effective and beneficial.
 - ➤ Proposed amendments will achieve significant emission reductions in the short term (necessary for attainment purposes).
 - ➤ Proposed amendments will work in concert with CARB's efforts to develop a statewide zero-emission appliance regulation, planned to phase-in by 2029 for furnaces.
 - ➤ CARB working to address complexity, technological/infrastructure barriers, high costs, and equity concerns.
 - ➤ Proposed amendments will quickly reduce NOx emissions from home appliances, both regionwide and in under-resourced communities.
 - ➤ Proposed amendments are a natural step to transition to zero emitting appliances.





Consideration of Zero-Emission Technology

- Electric furnaces cost \$2,900 to \$30,000 more than traditional furnaces, depending if upgrades are needed for electrical panel and underground wiring.
- High-cost issues resulted in BAAQMD adopting a regulation that does not phase in electric furnaces until 2029.
- To achieve significant emissions reductions and quickly improve public health, BAAQMD, SCAQMD and SJVAPCD are currently requiring a 14 ng NOx/J limit consistent with the District's proposal.

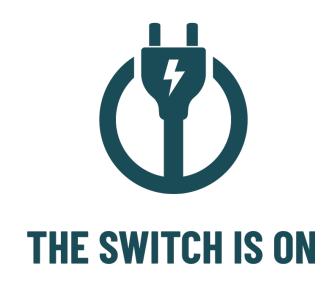
"Out of 9,895 heat pumps installed with Tech CLEAN funding, the average total project cost before incentives was \$18,842, with an average total incentive of \$3,433."

https://www.sfchronicle.co m/bayarea/article/bayarea-gas-appliance-banfull-cost-17843287.php



Funding Available for Zero-Emission Furnaces

- Consider installing electric furnaces before they are required!
- Potential incentive programs available (not all may qualify):
 - Inflation Reduction Act Rebate (anticipated Summer 2024)− up to \$8,000
 - ➤ TECH Clean California up to \$1,000
 - ➤ Tax credits up to \$2,000
- The District participates in CARB's, BAAQMD's and SCAQMD's zero-emission work groups to ensure San Diego County is well prepared for statewide zero-emission regulations are adopted.





Next Steps

- Proposed amendments and informational videos (in English and Spanish) can be found at https://bit.ly/workshops-public-notices.
- Comments due July 2, 2024.
- Please direct questions and feedback to <u>Archi.delaCruz@sdapcd.org</u> or call (858) 586-2894.





Q&A



