

**SAN DIEGO COUNTY
AIR POLLUTION CONTROL DISTRICT**

**DRAFT PROPOSED AMENDMENTS
RULE 69.6 – NATURAL GAS-FIRED FAN-TYPE CENTRAL FURNACES**

RESPONSE TO COMMENTS REPORT

The San Diego County Air Pollution Control District (District) held a virtual public workshop on June 18, 2024, to discuss and receive input on draft proposed amendments to Rule 69.6 – Natural Gas-Fired Fan-Type Central Furnaces. A workshop notice was mailed to known manufacturers, distributors, sellers and installers of natural gas-fired furnaces in San Diego County. The notice was posted on the District’s website, on social media, and distributed to interested parties via the District’s electronic mail service. The District also produced an informational video which provided background data to help the public understand the proposed amendments and was posted on the District’s website. The informational video was presented to the Portside Community Steering Committee (CSC) on June 25, 2024, and to the International Border CSC on June 26, 2024.

The virtual workshop was attended by 30 people. A summary of the comments and District responses from the virtual workshop, each CSC meeting, and submitted written comments are provided below:

1. PUBLIC COMMENT

Do the proposed amendments allow more natural gas to be used by furnaces?

DISTRICT RESPONSE

No. The proposed amendments to Rule 69.6 do not allow more natural gas to be used in furnaces. The capacity of the applicable furnaces required to comply with Rule 69.6 will not be increasing nor decreasing. If the proposed amendments are adopted by the Governing Board, nitrogen oxides (NOx) emissions will decrease significantly while the amount of natural gas to produce the same amount of heat will not change. The proposed amendments prompt the use of readily available, cleaner combusting technology inside homes which will result in significant health benefits.

2. PUBLIC COMMENT

Is the District trying to eliminate the use of natural gas furnaces through the proposed amendments to Rule 69.6?

DISTRICT RESPONSE

No. However, as a response to climate change, there are efforts happening at the State level in parallel to the proposed amendments to Rule 69.6 that may reduce or eliminate the use of natural gas and other fossil fuel combustion devices. The California Air Resources Board (CARB) is

developing a statewide regulation to potentially transition furnaces and other combustion devices to be zero-emission. The District is supportive of CARB's efforts at the State level and will seek to align our respective rules with CARB's statewide regulation if and when it is developed. In the meantime, it is critical for the region to reduce NOx as much as possible in an equitable way to support attainment of State and federal ozone standards.

3. PUBLIC COMMENT

If the proposed amendments are adopted by the Governing Board, the requirements of the rule will be effective six months after adoption. This will result in a short time period to deplete current inventories of furnaces. The District should consider extending the six month sell-through provision.

DISTRICT RESPONSE

The District disagrees. The six-month sell-through period is considered a reasonable amount of time since furnaces that comply with the proposed amendments are readily available and have already been required for several years in air districts such as the Bay Area, South Coast and San Joaquin Valley. Should inventory remain after the six-month sell-through period elapses, furnace providers should exercise other options such as providing their non-compliant inventory to other areas where such devices are still allowed to be installed.

4. PUBLIC COMMENT

Assuming the six-month sell-through period ends on April 30, 2025 (tentative), would a 40 nanograms of nitrogen oxides per joule (ng NOx/J) furnace manufactured on April 10, 2025, still comply and allowed to be installed? Is the sell-through period of the old furnaces based on the manufactured date or installation date?

DISTRICT RESPONSE

As proposed, six months after Governing Board adoption, all furnaces manufactured, distributed, sold, offered for sale, or installed within San Diego County would be required to meet the proposed emission standard of 14 ng NOx/J. A furnace that complies with the existing 40 ng NOx/J emission standard is allowed to be manufactured and installed up and until the six-month sell-through period elapses. However, after the six-month sell-through period ends, all furnaces manufactured or installed for use in San Diego County would be required to meet the proposed 14 ng NOx/J emission standard.

Section (d) in the proposed draft amendments to Rule 69.6 will be modified as follows:

~~“Except as otherwise provided in Section (b), e~~Effective January 1, 1999 *(six months after adoption)*, no person shall manufacture, distribute, sell, offer for sale, or install for use within San Diego County;

5. PUBLIC COMMENT

Are furnaces fueled by propane required to comply with Rule 69.6?

DISTRICT RESPONSE

No. Propane-fired furnaces are not subject to Rule 69.6 and do not have to comply with its provisions.

6. PUBLIC COMMENT

If a natural gas-fired furnace is connected to a direct current electrical power supply to provide heat, would the furnace be subject to Rule 69.6?

DISTRICT RESPONSE

Rule 69.6 is intended to regulate NOx emissions from natural gas-fired furnaces. If a furnace can use natural gas and/or electricity to provide heat, it is subject to the provisions in Rule 69.6. If a furnace provides heat exclusively using electricity (either direct current or alternating current), it is not subject to Rule 69.6. The District proposes to modify Subsection (c)(2) as follows to clarify this point:

~~“Natural Gas-Fired Fan-Type Central Furnace” means a self-contained space heater fired exclusively by natural gas providing for circulation of heated air at pressures other than atmospheric through ducts more than 10 inches in length that has a rated heat input capacity of less than 175,000 Btu per hour or, for combination heating and cooling units, that has a rated cooling capacity of less than 65,000 Btu per hour.”~~

With this amendment, Section (c) will be re-alphabetized accordingly.

7. PUBLIC COMMENT

The District’s presentation at the public workshop discussed zero-emission (i.e., electric) furnaces. An HVAC-installed electric furnace that uses electrical resistance to provide heat is different from a heat pump. Using electrical resistance to heat may have lower purchase costs but can result in higher electricity usage.

DISTRICT RESPONSE

The District acknowledges the distinction between electrical resistance and heat pump technology. The District presentation which included information on zero-emission furnaces was intended to inform workshop attendees of possible upcoming zero-emission requirements for furnaces and other appliances being developed at the State level. The proposed amendments to Rule 69.6 are considered an important interim step toward the ultimate electrification of appliances throughout San Diego County.

8. PUBLIC COMMENT

The District should consider conducting hybrid workshops (in person and virtual), instead of only virtual opportunities.

DISTRICT RESPONSE

The District acknowledges the comment and will consider hybrid meeting formats for future rule development-related workshops as opportunities allow.

9. PUBLIC COMMENT

The summary of the proposed amendments to Rule 69.6 would benefit from including photos and schematic diagrams of furnaces to be more understandable.

DISTRICT RESPONSE

The District agrees. Staff will consider inclusion of photos and diagrams of furnaces and how they operate within the forthcoming Staff Report.

10. PUBLIC COMMENT

The Portside and International Border communities are adversely affected by air pollution, which disproportionately impacts vulnerable people living within these communities.

DISTRICT RESPONSE

Under Assembly Bill 617, State officials have recognized the Portside and International Border communities as being disproportionately impacted by air pollution. As a result, and under the guidance of the Governing Board, the District is addressing community-level air pollution and environmental justice efforts through Community Emission Reduction Plans (CERPs). Additional information about these efforts can be found on the District's website at <https://www.sdapcd.org/content/sdapcd/community/community-air-protection-program.html>.

The proposed amendments to Rule 69.6 will result in substantial NOx emission reductions that will improve the health of residents living in vulnerable neighborhoods like Portside and the International Border, as well as the entirety of San Diego County.

11. PUBLIC COMMENT

District Rule 11 exempts ceramics kiln from permit requirements. Ceramics kilns are a source of emissions and as a result, the exemption should be removed.

DISTRICT RESPONSE

The comment is beyond the scope of the proposed amendments to Rule 69.6. No revisions to Rule 11 are proposed at this time.

12. PUBLIC COMMENT

The proposed amendments to Rule 69.6 should be more stringent. The use of natural gas should be discontinued and the District should require the use of zero-emission (i.e., electric) furnaces.

DISTRICT RESPONSE

The District acknowledges the comment and understands the need to transition to zero-emission devices. The District evaluated the use of zero-emission furnaces as part of the proposed amendments to Rule 69.6. The District determined a significant amount of NOx emission reductions could be achieved in the short term by requiring more efficient combustion technology through the proposed amendments. Concurrently, the proposed amendments (if adopted) will work in tandem with CARB's efforts at the statewide level to create statewide zero-emission requirements for furnaces in the future. A smooth transition to zero-emission devices comes with significant challenges, such as high costs, equity and socioeconomic concerns, and legal and logistical coordination; all of which will take additional time to address and are key reasons why the District is not proposing zero-emission requirements at this time. However, CARB will be attempting to address these challenges at a statewide level, especially for residents in low-income and disadvantaged communities.

CARB's proposed statewide zero-emission appliance regulation is tentatively slated for consideration in 2025, and may propose requiring furnaces to be zero-emission by 2029. The District fully supports CARB's efforts to require zero-emission standards for these devices and other appliances. If the statewide regulation is adopted, the District would plan to align our respective rules with CARB requirements. In the meantime, the District's proposed amendments to Rule 69.6 represent an expedient way to significantly reduce NOx emissions in the short term to improve public health, and a natural step to ultimately transition San Diego County to zero-emission technology.

13. PUBLIC COMMENT

Are the proposed amendments to Rule 69.6 addressed in the Portside Community Emissions Reduction Plan (CERP)?

DISTRICT RESPONSE

Yes. The proposed amendments to Rule 69.6 are encompassed within the Portside CERP under Action C3 which calls for the District to evaluate existing rules and consider rules that can reduce emissions within the community. The Portside CERP can be found at <https://www.sdapcd.org/content/sdapcd/community/community-air-protection-program/portside-community/portside-cerp.html>.

14. PUBLIC COMMENT

Are incentives/rebates available for an ultra-low NOx furnace that complies with the proposed amendments? Similarly, are incentives/rebates available for zero-emission furnaces?

DISTRICT RESPONSE

The District is not aware of any incentives or rebates provided for purchasing ultra-low NOx furnaces that comply with the proposed amendments. Potential rebates for zero-emission furnaces may be available soon through the Inflation Reduction Act (<https://www.whitehouse.gov/cleanenergy/inflation-reduction-act-guidebook/>) and TECH Clean California (<https://techcleanca.com/incentives/>). Homeowners may also qualify for federal tax credits (<https://www.energystar.gov/about/federal-tax-credits>) for both natural gas and zero-emission furnaces. Local furnace installers may also offer individual incentives as applicable.

15. PUBLIC COMMENT

Who do these proposed amendments affect? What are the effects of these proposed changes to the average person?

DISTRICT RESPONSE

The proposed amendments and Rule 69.6 in general, primarily affect manufacturers, distributors, sellers and installers of natural gas-fired fan-type central furnaces. These furnace providers are responsible for complying with Rule 69.6. Six months after the proposed amendments are adopted, end users (i.e., prospective furnace owners) should only be able to purchase new furnaces that meet the new emission standards. Though end users are not responsible for demonstrating compliance with the rule, they are welcome to verify with the District whether their new furnace complies with Rule 69.6. The proposed amendments do not specify a date by which end users have to replace existing furnaces. Staff will include the average cost difference between a new natural-gas fired

furnace that complies with the proposed amendments, and a furnace that currently complies with existing Rule 69.6, within the forthcoming Staff Report.

16. PUBLIC COMMENT

Can the District explain the operational cost difference between using a typical natural gas furnace versus a typical zero-emission furnace?

DISTRICT RESPONSE

Yes. Staff will consider inclusion of the average cost difference between operating a natural gas and zero-emission furnace within the forthcoming Staff Report.

17. CARB COMMENT

CARB has no official comments at this time.

18. ENVIRONMENTAL PROTECTION AGENCY (EPA) COMMENT

Subsections (e)(1) and (e)(2) require manufacturers to submit certification statements upon request by the District. The "upon request" language may limit access to records needed to verify compliance. The South Coast and Bay Area air districts rules require submittal of compliance statements.

DISTRICT RESPONSE

The District appreciates EPA's review of the proposed draft amendments to Rule 69.6. The District will further evaluate the comment and will consider modifying the "upon request" at a future date should the need arise.

19. EPA COMMENT

Subsection (e)(1)(iii)(E) requires NOx emission "test results" be submitted with the certification statement for each model being certified. Is a full copy of the test report required, or can the manufacturer simply state the results of the testing?

DISTRICT RESPONSE

A copy of the full test report is not required and providing the results of the testing along with the other data required in Subsection (e)(1)(iii)(E) is considered sufficient to demonstrate compliance. With Subsection (e)(1)(i) requiring a person to "attest to the accuracy of all the information" and

Subsection (g) requiring the “emission test records and certification records” to be provided upon request, the District has the authority and capability to verify compliance. The “emission test records” are all records needed to demonstrate compliance, which include, but are not limited to, the full copy of the test report.

20. EPA COMMENT

Subsection (e)(3) allows certification statements from the referenced air districts to be submitted to comply with Subsections (e)(1) and (e)(2). The current language seems to read as if the certification statements are from the districts, rather than the manufacturers. The language could more clearly indicate that manufacturer certification statements submitted to other districts may be submitted to the District to comply with Subsections (e)(1) and (e)(2).

DISTRICT RESPONSE

The District agrees. To address the above comment, Subsection (e)(3) in the proposed draft amendments to Rule 69.6 will be modified as follows:

“To ~~comply~~ demonstrate compliance with Subsections (e)(1) or (e)(2), a manufacturer may submit to the ~~Air Pollution Control Officer District a South Coast Air Quality Management District~~ certification statement for the each furnace model ~~from~~ verified by South Coast Air Quality Management District, San Joaquin Valley Air Pollution Control District or Bay Area Air Quality Management District. The manufacturer may also submit the same certification statement submitted to other air districts as long as it meets the provisions required in Subsection (e)(1).”

21. EPA COMMENT

Subsection (e)(3) allows certification statements from the referenced districts to be submitted to comply with Subsections (e)(1) and (e)(2). Do the certification statements in the referenced air districts’ rules require, at a minimum, the same information required by Subsection (e)(1)(iii)? Could the District’s rule simply indicate that certification statements submitted to other agencies may be submitted to the District, so long as the certification statements meet the criteria of Subsection (e)(1)(iii)?

DISTRICT RESPONSE

The District acknowledges the comment. South Coast, Bay Area and San Joaquin Valley air districts each require the brand name, model number and a statement the model complies. If what is submitted to these air districts also fulfills the requirements of Subsection (e)(1) in proposed amended Rule 69.6, the same documentation may be submitted to the District to demonstrate compliance. Subsection (e)(3) is proposed to be modified as shown in the District response to Comment #20.

22. EPA COMMENT

Section (f) does not require labeling of units with the applicable NOx emission limit or date of manufacture. Could this create an enforcement issue since all who distribute, sell, offer for sale or install units are subject to the rule and may not have this information readily available?

DISTRICT RESPONSE

The District does not foresee potential enforcement issues. Persons that distribute, sell, offer for sale or install units are required to maintain records needed to demonstrate compliance with Rule 69.6 for each furnace model. Paired with a corresponding manufacturer certification statement, such documentation is sufficient to determine compliance for a point-of-sale rule. The District's proposed labeling requirement is similar to the level of detail required by Bay Area Air Quality Management District.

23. EPA COMMENT

Subsection (h)(4) gives the District discretion to allow use of test methods not approved by EPA. EPA approval of alternative test methods is also necessary to avoid "unbounded director's discretion".

DISTRICT RESPONSE

The District acknowledges the comment. Consequently, Subsection (h)(4) of the proposed amendments to Rule 69.6 is modified as follows:

"Any other test method approved in writing by the District and the Environmental Protection Agency."

24. DISTRICT COMMENT

To further clarify the labeling requirements, the District is proposing the following amendment to Section (f):

"On the shipping carton and the nameplate of every new natural gas-fired, fan-type central furnace to be offered for sale in San Diego County, the manufacturer shall display the model number, the rated heat input capacity in Btu per hour, and the rated cooling capacity (if applicable) in Btu per hour ~~of the furnace complying with Section (e) of this rule.~~"

RULE 69.6. NATURAL GAS-FIRED FAN-TYPE CENTRAL FURNACES
(Adopted June 17, 1998; Rev. Adopted & Effective January 1, 1999
date of adoption)

(a) **APPLICABILITY**

~~Except as otherwise provided in Section (b),~~ This rule shall apply to any person who manufactures, distributes, sells, offers for sale, or installs natural gas-fired, fan-type central furnaces, ~~including combination heating and cooling units,~~ for use in San Diego County with: (1) a rated heat input capacity of less than 175,000 Btu per hour or and (2) combination heating and cooling units with a rated cooling capacity less than 65,000 Btu per hour.

(b) **EXEMPTIONS RESERVED**

The provisions of this rule shall not apply to:

(1) ~~Fan type central furnaces with a rated heat input capacity of 175,000 Btu per hour or greater, or~~

(2) ~~Combination heating and cooling units with a rated cooling capacity of 65,000 Btu per hour or greater, or~~

(3) ~~Fan type central furnaces installed in mobile homes.~~

(c) **DEFINITIONS**

For the purpose of this rule the following definitions shall apply:

(1) **“Btu”** means British thermal units.

~~(2) **“Natural Gas Fired Fan Type Central Furnace”** means a self-contained space heater fired exclusively by natural gas providing for circulation of heated air at pressures other than atmospheric through ducts more than 10 inches in length that has a rated heat input capacity of less than 175,000 Btu per hour or, for combination heating and cooling units, that has a rated cooling capacity of less than 65,000 Btu per hour.~~

~~(3) **“Heat Output”** means the product obtained by multiplying the Annual Fuel Utilization Efficiency, as defined by Section 4.6 of Code of Federal Regulations, Title 10, Part 430, Subpart B, Appendix N, by the rated heat input capacity of the furnace.~~

~~(4) **“Manufactured Home”** means a structure as defined in 42 United States Code Section 5402 and Section 18007 of the California Health and Safety Code.~~

~~(5) **“Mobile Home”** means a structure as defined in Section 18008 of the California Health and Safety Code.~~

(5) “Natural Gas-Fired Fan-Type Central Furnace” means a self-contained space heater fired by natural gas providing for circulation of heated air at pressures other than atmospheric through ducts more than 10 inches in length.

(5-6) “Rated Cooling Capacity” means the cooling capacity, in Btu per hour, as specified by the manufacturer on the nameplate of the cooling unit.

(6-7) “Rated Heat Input Capacity” means the heat input capacity of a furnace, in Btu per hour, as specified by the manufacturer on the nameplate of the furnace.

(d) **STANDARDS**

~~Except as otherwise provided in Section (b), e~~Effective January 1, 1999 (six months after adoption), no person shall manufacture, distribute, sell, offer for sale, or install for use within San Diego County:

(1) ~~a~~Any natural gas-fired, fan-type central furnace that emits more than 40 14 nanograms of oxides of nitrogen oxides (calculated as nitrogen dioxide) per joule (93 lb of oxides of nitrogen per billion Btu) of heat output. This standard does not apply to furnaces used in manufactured or mobile homes.

(2) Any natural gas-fired, fan-type central furnace used in a manufactured or mobile home that emits more than 40 nanograms of nitrogen oxides (calculated as nitrogen dioxide) per joule of heat output.

(e) **CERTIFICATION**

(1) Upon request by the District, A manufacturer of any new natural gas-fired, fan-type central furnace to be offered for sale in San Diego County shall submit to the ~~Air Pollution Control Officer-District~~ a statement certifying that each model of furnace subject to the requirements of Section (d) of this rule complies with the provisions of this rule.

(i) The statement shall be signed, dated, and attest to the accuracy of all information.

(ii) The statement shall be submitted at least 30 days before the furnace model is offered for sale, sold, or installed within San Diego County.

(iii) The statement shall include:

(A) Brand name,

(B) Model number,

(C) Rated heat input capacity in Btu per hour as specified on the nameplate, and

(D) Rated cooling capacity (if applicable) in Btu per hour as specified on the nameplate, and

~~(D-E)~~ Oxides of nitrogen oxides emission test results in nanograms of nitrogen oxides per joule of each model being certified.

(2) Upon request by the District, a manufacturer shall submit to the Air Pollution Control Officer District a new certification statement for any natural gas-fired, fan-type central furnace model whose design is changed in any manner which may alter oxides of nitrogen oxides emissions.

(3) To ~~comply~~ demonstrate compliance with Subsections (e)(1) or (e)(2), a manufacturer may submit to the Air Pollution Control Officer District a South Coast Air Quality Management District certification statement for the each furnace model ~~from~~ verified by South Coast Air Quality Management District, San Joaquin Valley Air Pollution Control District or Bay Area Air Quality Management District. The manufacturer may also submit the same certification statement submitted to other air districts as long as it meets the provisions required in Subsection (e)(1).

(f) **LABELING**

On the shipping carton and the nameplate of every new natural gas-fired, fan-type central furnace to be offered for sale in San Diego County, the manufacturer shall display the model number, the rated heat input capacity in Btu per hour, and the rated cooling capacity (if applicable) in Btu per hour of the furnace complying with Section (e) of this rule.

(g) **RECORD KEEPING REQUIREMENTS**

A manufacturer shall keep ~~oxides of nitrogen oxides~~ emission test records and certification records for as long as the natural gas-fired, fan-type central furnace model is offered for sale or sold within San Diego County, or for three calendar years after manufacture, whichever is longer. Such records shall be provided to the District upon request.

(h) **TEST METHODS**

To determine compliance with Section (d) of this rule, measurement of nitrogen oxides shall be conducted in accordance with:

(1) San Diego County Air Pollution Control District Test Method 100 as approved by the federal Environmental Protection Agency ~~in May 1995~~, or

(2) South Coast Air Quality Management District Test Method 100.1 as approved by the federal Environmental Protection Agency ~~in March 1989~~, or

(3) Environmental Protection Agency Test Methods 7E and 3A, or

(4) Any other test method approved in writing by the District and the Environmental Protection Agency.

(i) **EMISSION TEST REQUIREMENTS**

During Emission tests, shall be performed in accordance with the procedures and methods outlined in the South Coast Air Quality Management District Protocol: Rule 1111 Nitrogen Oxides Emissions Compliance Testing for Natural Gas Fired, Fan Type Central Furnaces as it exists on June 17, 1998 operation of the natural gas-fired, fan type central furnace shall be in accordance with the procedures specified in Code of Federal Regulations, Title 10, Part 430, Subpart B, Appendix N.