

BOARD MEETING DATE: December 6, 2019

AGENDA NO.

PROPOSAL: Determine Proposed Amendment to Rule 1111 – Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces, is Exempt from CEQA; and Amend Rule 1111

SYNOPSIS: Rule 1111 was amended in 2009 to require ultra-low NOx furnaces (14 ng/J) by 2014, and was subsequently amended to extend the compliance date to October 1, 2019 with a mitigation fee. Staff is proposing to amend the rule to allow an exemption to manufacture, distribute, sell, and install low-NOx furnaces (40 ng/J) in altitudes at or higher than 4,500 feet above sea level until October 1, 2020.

COMMITTEE: Stationary Source, November 15, 2019; Reviewed

RECOMMENDED ACTIONS:

Adopt the attached Resolution:

1. Determining that the proposed amendment to Rule 1111 – Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces, is exempt from the requirements of the California Environmental Quality Act; and
2. Amending Rule 1111 – Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces

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Background

Rule 1111 - Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces was adopted in December 1978 to reduce emissions of nitrogen oxides (NOx) from residential and commercial gas-fired fan-type space heating furnaces with a rated heat input capacity of less than 175,000 BTU per hour and applies to manufacturers, distributors, sellers, and installers of such furnaces. Rule 1111 was amended in 2009 to lower the NOx emission limit from 40 to 14 ng/Joule (ng/J), and was again amended in 2014 to include a mitigation fee option where manufacturers can pay a per-unit fee in lieu of meeting the 14 ng/J compliant limit. The mitigation fee option for condensing and non-condensing furnaces ended September 30, 2019.

While there are 14 ng/J NO_x Furnaces available for sale throughout the South Coast AQMD's jurisdiction, as of October 1, 2019, only one furnace manufacturer had compliant units that can operate up to 5,000 feet in elevation and there are currently no other manufacturers with Ultra-Low NO_x Furnaces available for elevations above 4,500 feet. So far, at least three manufacturers are conducting, or planning on conducting, high altitude testing and developing high altitude guidance. These three manufacturers have also applied and been granted interim product variances that allows their non-compliant furnaces to be sold, distributed, or installed above 4,500 feet unless there is a comparable (type and size) compliant furnace available for sale.

Concerns were raised by distributors and contractors in the high altitude areas as to the limited availability of products and the possible timing to procure an allowable furnace compounded by the fact the winter season is beginning and it will be colder in the mountain region. Without a reliable inventory of units there are potential public health and safety issues should a resident decide to burn more wood for heating or open ovens in their homes.

As noted, testing 14 ng/J furnaces in high altitudes is occurring but staff recognizes time is needed to complete the test, derive appropriate guidance for operating in high altitude, and possibly develop software or hardware for the units to operate in high altitude. Thus, the exemption will extend the compliance date for those applications originally set at October 1, 2019 to until October 1, 2020.

Public Process

This issue was discussed at two Board meetings with public testimony and ultimately direction from the Board members to assist in resolving the concerns. A Public Workshop was conducted on November 14, 2019.

Proposed Amendments

Based on the input from the manufacturers, distributors and contractors, PAR 1111 will exempt condensing and non-condensing natural gas furnaces installed at or greater than 4,500 feet above sea level from complying with the 14 ng/J NO_x limit until October 1, 2020 with recordkeeping requirements. The amendment would result in an estimated delay of NO_x emission reduction of 1.35 lbs/day.

Key Issues

Staff is proposing this exemption to resolve the concern raised as to the availability of compliant furnaces for high altitude areas.

Comparative Analysis

Under Health and Safety Code Section 40727.2, the South Coast AQMD is required to perform a comparative written analysis when adopting, amending, or repealing a rule or regulation. The comparative analysis is relative to existing federal or state

requirements, existing or proposed South Coast AQMD rules, and air pollution control requirements and guidelines that are applicable to industrial, institutional, and commercial combustion equipment.

The South Coast AQMD is not aware of any state or federal requirements regulating air pollution that are applicable to new or in-use PAR 1111 units. Rule 1111 is also the only South Coast AQMD rule regulating this type of equipment. Because there are no state or federal requirements for PAR 1111 units, the proposed amendments are not in conflict with and do not duplicate any South Coast AQMD, state, or federal requirement.

California Environmental Quality Act (CEQA)

Pursuant to the California Environmental Quality Act (CEQA) and South Coast AQMD Rule 110, the South Coast AQMD, as lead agency for the proposed project, has reviewed PAR 1111 pursuant to: 1) CEQA Guidelines Section 15002(k) – General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA; and 2) CEQA Guidelines Section 15061 - Review for Exemption, procedures for determining if a project is exempt from CEQA. South Coast AQMD staff has determined that allowing the installation and operation of 40 ng/J furnaces in the high altitude areas for a limited period of time would result in minimal and temporary NO_x emission reductions foregone; thus, it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. Therefore, the proposed project is considered to be exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption. Further, because PAR 1111 will not have statewide, regional or areawide significance, no CEQA scoping meeting is required to be held pursuant to Public Resources Code Section 21083.9(a)(2). A Notice of Exemption has been prepared pursuant to CEQA Guidelines Section 15062, and is included as Attachment C of this Board Letter. If the project is approved, the Notice of Exemption will be filed with the county clerks of Los Angeles, Orange, Riverside and San Bernardino counties.

Socioeconomic Impact Assessment

PAR 1111 does not impose any additional requirements on affected facilities and as such will have no socioeconomic impacts.

Resource Impacts

Existing staff resources are adequate to implement the proposed rule amendments.

Attachments

- A. Resolution
- B. Proposed Amended Rule 1111
- C. Notice of Exemption
- D. Board Meeting Presentation