# Proposed Amended Rule (PAR) 1111 NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces

**Working Group Meeting** 

November 15, 2017

SCAQMD Headquarters Diamond Bar, California

## Agenda

Rule 1111 overview
Implementation status update
Rule development process
Updates to staff's recommendations for PAR 1111
Public comments
Future activities and schedules

## Rule 1111 Overview

- Applies to residential and commercial natural gas-fired fan-type central furnaces
- Regulates manufacturers, distributors, sellers, and installers of these units
- First adopted in 1978 and NOx emission limit (40 ng/J) established
- NOx emission limit lowed to 14 ng/J in 2009
- Delayed compliance date and added mitigation fee option in 2014
- Mitigation fee option will end, and the NOx limit of 14 ng/J will phase in starting:
  - April 1, 2018 for condensing furnaces;
  - October 1, 2018 for non-condensing furnaces;
  - October 1, 2019 for weatherized furnaces; and
  - October 1, 2021 for mobile home furnaces

### **Implementation Status**

- At least three original equipment manufacturers (OEMs) have demonstrated compliance with Rule 1111 NOx limits either for standard or high efficiency furnaces with field tests underway
- NOx certifications have been issued to three high efficiency models in three sizes (40, 60, and 80 kbtu/hr), a standard furnace model in one size (70 kbtu/hr), four standard furnace models in three sizes (60, 80, and 100 kbtu/hr); certification applications are expected for more standard and high efficiency models in recent months
- All OEMs have been paying a mitigation fee as they have no compliant products in the market; however, some OEMs have proposed timelines to commercialize compliant products
- On November 2, 2017 at a local tradeshow, Lennox Industries, Inc. unveiled their commercialized compliant furnace

### **Rule Development Process**

Two Task Force meetings (April 27, 2017 and May 25, 2017)

- Product development and implementation status, mitigation fee, NOx limit, and stakeholders' rule recommendations
- Stationary Source Committee meeting (June 16, 2017)
  - Status update and staff's initial recommendations for Rule 1111 amendment
- Three Working Group meetings (July 2, 2017, September 21, 2017, and November 15, 2017)
  - Staff's analysis and recommendations for Rule 1111 amendment
- Public Workshop/CEQA Scoping meeting (October 19, 2017)
  - Close of comments extended to November 9, 2017

#### Staff's Proposal for PAR 1111

Maintain the 14 ng/J NOx limit but with the following mitigation fee extension:

Condensing (High Efficiency): 1.5 years (From April 2018)

- Non-condensing (Standard): 1 year (From October 2018)
- > Weatherized:
- > Mobile Home:

- 1 year (From October 2019)
- 1 year (From October 2021)

Preventing the installation of propane furnaces capable of being fired on natural gas without proper certification

### Staff's Proposal for PAR 1111 - continued

Increase the mitigation fee to \$400 for all types of furnaces effective from the date of amendment

Breakdown the mitigation fee payment of each annual compliance plan into two phases by adding a phase one payment for the first six months' estimated sales\*

\*The underlined new language is new proposal under consideration; staff is still seeking feedback

## Staff's Proposal for PAR 1111 – continued

The following summarizes is a new proposal under consideration in which staff is seeking feedback. The purpose of this proposal is to not disrupt the OEM's existing development plan.

OEMs may be exempt from the mitigation fee increase provided

- A compliance plan is submitted prior to March 2, 2018 to demonstrate compliance with the existing mitigation fee compliance date in the 2014 amendment
- OEMs under this proposal will be required to pay a \$20 administration fee per non-compliant unit sold in advance of the above 2014 amendment compliance dates
- If an OEM fails to comply with the plan (i.e., sells non-compliant units), then they will be required to retroactively pay the full mitigation fee increase within 30 days post the 2014 amendment compliance dates

#### Proposal Companion to PAR 1111 - continued

#### Implement a rebate program

\$500 for the first 6,000 compliant furnaces and \$250 for the rest units that were purchased and installed by rebate end dates as below (six calendar months beyond the mitigation end date)

Equipment Category	Rebate End Date
Condensing Furnace	March 31, 2020
Non-condensing Furnace	March 31, 2020
Weatherized Furnace	March 31, 2021
Mobile Home Furnace	March 31, 2023

Recommendation to issue an RFP to solicit proposals and have a third party contractor administer the rebate program (Nov. 17 SSC)

# **Public Comments**

#### **Mitigation Fee Increase**

- Will negatively impact companies located within the District versus business outside of the District
- Make homeowners to opt to repair versus replacing with new and technologically advanced equipment
- Will encourage non-compliance
- Restrict consumer choice
- The current mitigation fee already can buy more than the emission forgone by the NOx credit price in the RECLAIM program
- The proposed fee increase is not only punitive, it might also be an unconstitutional tax
- Recommend not to change the current mitigation fee

One OEM supports the SCAQMD to increase the mitigation fee for noncompliant furnaces to \$400

#### Fee Increase Effective Date

- Any change in the fee should be implemented after the 3-year period for the mitigation fee option currently specified in the rule has expired
- Provide OEMs with a reasonable period of adjustment by having the new fees in effect not less than 8 months from the date of the proposed amendment
- The current proposal to increase the mitigation fee and introduce a rebate for compliant furnaces prior to the end of the original 3 year schedule, and with short notice, does not allow sufficient time to adjust our product development and production schedules
- Mitigation fee should only be applied when any type of product becomes available in the market
- Delaying approval and implementation of the proposed amendment will severely and negatively impact manufacturers who invested, while rewarding those manufacturers who did not and may lead to additional delays in the introduction and commercialization of compliant products
- Recommends SCAQMD proceed with the proposed amendment schedule and immediately implement

#### **Cost and Fee Analysis**

- The manufacturer does not have complete control over the process by which the final installed cost of the furnace is established, and thus does not agree with the cost analysis used to justify the mitigation increase
- The District has not yet produced the economic model details it uses as the basis for its proposed fee increase and rebate program or its environmental analysis
- One OEM finds the economic analysis conducted by SCAQMD to be valid and strongly supports the Amendment proposal

#### Fee Increase to Fund Rebate

- It is understandable to have mitigation fees cover the cost of a rebate, but the proposed \$400 fee allows \$150 per unit for an unspecified 'administrative cost' which is an exorbitant amount. A fee at or around \$300 is more reasonable
- The already collected funds and the projected collection for next year using the current fee structure may provide funds for a consumer rebate program
- The increase mitigation fee has no rational relationship to the actual cost of offsetting excess emission but rather attempt to influence customer behavior through market price
- Support the increase of the mitigation fees to a minimum of \$400 for all furnaces and the use of the \$250 increase in the mitigation fees to incentivize consumers to purchase compliant units
- Recommends the rebate program to be retro-active 120 days prior to its final approval

#### **Consideration of Condensing Furnace**

- Compared to non-condensing furnaces, condensing furnaces should have a higher incentive for compliant products and higher penalty for non-compliant products
- For OEMs focused on condensing furnace development, it is unfair to start the mitigation fee increase at the same time for condensing and noncondensing units

#### **CEQA**

Are the materials/information used for the proposed Rule 1111 compliance with CEQA available (Staff: In preparation and an email notice of its availability will be sent out)

#### **Emission Limit**

- There are still no furnaces on the market which can meet the 14 ng/J low-NOx specification
- Mitigation fee is not the underlying driver in providing complying units to the district; ensuring consumer safety, product reliability, and fully developing the technology to meet the emission standards are time consuming activities
   SCAQMD must maintain the 14 ng/J emission limit

#### <u>Others</u>

- Provide projected emissions reductions including the operating hours, the number of furnaces, emission reduction of each replacement, and expected replacement
- Distributors should not be responsible to pay mitigation fees for units coming into their warehouses in SCAQMD but are subsequently distributed outside of SCQAMD
- Rebate program should be well-communicated to stakeholders with appropriate lead time prior to the start of the rebate availability
- Request an extension until December 4, 2017 to file comments
- Analyze the impact of an increased mitigation fee not only on homeowners of single family house, but also on residents of multi-family house
- Any extension of the mitigation must be balanced not to punish manufacturers that already invested significantly in the development of compliant products

### **Future Activities and Schedules**

Continue individual stakeholder meetings Stationary Source Committee meeting – November 17, 2017 Working Group meeting – January, 2018 Set Hearing – January 5, 2018 Public Hearing – February 2, 2018

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