Proposed Amended Rule (PAR) 1111

NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces

Working Group Meeting
January 9, 2018
SCAQMD Headquarters
Diamond Bar, California

Agenda

- Considerations for proposed amendments
- Updates to staff’s recommendations for PAR 1111
- Rebate program
- Future activities and schedules
Staff Considerations Based on Input from Stakeholders

- OEMs have their product development targeted at 14 ng/J
- Compliant condensing and non-condensing furnaces are being certified below 10 ng/J for NOx
- Ensure sufficient consumer choices and more reasonably priced units
- Sustain the fee schedule for the current compliance plan with no fee increase prior to its end
- Should condensing units have higher incentive and higher fee?
- Should smaller units and mobile home that are mostly for lower income customers have lower or no fee?
- OEMs who have “invested heavily” and developed compliant products should be rewarded and not disadvantaged
- Emission reductions are needed for the AQMP

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: 1 year (From October 2019)
  - Mobile Home: No change

* This approach supports manufacturers that are at and working toward 14 ng/J furnaces; 14 ng/J units are achievable based on recent certifications

- Prevent the installation of propane furnaces capable of being fired on natural gas without proper certification
Staff’s Proposal for PAR 1111 - continued

- Mitigation fee increases implemented at the beginning of the next compliance plan cycle
- Increases in the mitigation fee for non-compliant products based on size and phased in over time as in Table 1 (exemplified in Figures 1 and 2)
  - Phase one fee increase, implementing 50% of the full mitigation fee increase at the beginning of the next compliance plan cycle
  - Phase two fee increase, implementing the full mitigation fee increase 6 months later
  - Furnaces are tiered by three size ranges for difference fee increases, imposing lower fee increase for smaller units (≤ 60 kbtu/hr) and higher fee increase for larger units (> 90 kbtu/hr)
  - There is no mitigation fee increase for mobile home units (compliance date, fee, and payment schedule remain unchanged)

* This approach considers size and type variation in the market, and maintains the current alternate compliance plan cycle

Table 1 –Mitigation Fee Increase Based On Size and Phased In Over Time

<table>
<thead>
<tr>
<th>Furnace</th>
<th>Phase One Mitigation Fee Increase</th>
<th>Phase Two Mitigation Fee Increase</th>
<th>Mitigation Fee End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 60 kbtu/hr</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Condensing Furnace</td>
<td>$200</td>
<td>April 1, 2018 $75 $275</td>
<td>September 30, 2019</td>
</tr>
<tr>
<td>Non-condensing Furnace</td>
<td>$150</td>
<td>October 1, 2018 $75 $225</td>
<td>September 30, 2019</td>
</tr>
<tr>
<td>Weatherized Furnace</td>
<td>$150</td>
<td>October 1, 2018 $75 $225</td>
<td>September 30, 2019</td>
</tr>
<tr>
<td>Mobile Home Furnace</td>
<td>$150</td>
<td>October 1, 2018 $0 $150</td>
<td>September 30, 2021</td>
</tr>
<tr>
<td>&gt; 60 kbtu/hr and ≤ 90 kbtu/hr</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Condensing Furnace</td>
<td>$200</td>
<td>April 1, 2018 $100 $300</td>
<td>September 30, 2019</td>
</tr>
<tr>
<td>Non-condensing Furnace</td>
<td>$150</td>
<td>October 1, 2018 $100 $250</td>
<td>September 30, 2019</td>
</tr>
<tr>
<td>Weatherized Furnace</td>
<td>$150</td>
<td>October 1, 2018 $100 $250</td>
<td>September 30, 2019</td>
</tr>
<tr>
<td>Mobile Home Furnace</td>
<td>$150</td>
<td>October 1, 2018 $0 $150</td>
<td>September 30, 2021</td>
</tr>
<tr>
<td>&gt; 90 kbtu/hr</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Condensing Furnace</td>
<td>$200</td>
<td>April 1, 2018 $125 $325</td>
<td>September 30, 2019</td>
</tr>
<tr>
<td>Non-condensing Furnace</td>
<td>$150</td>
<td>October 1, 2018 $125 $275</td>
<td>September 30, 2019</td>
</tr>
<tr>
<td>Weatherized Furnace</td>
<td>$150</td>
<td>October 1, 2018 $125 $275</td>
<td>September 30, 2019</td>
</tr>
<tr>
<td>Mobile Home Furnace</td>
<td>$150</td>
<td>October 1, 2018 $0 $150</td>
<td>September 30, 2021</td>
</tr>
</tbody>
</table>
Staff’s Proposal for PAR 1111 - continued

Mitigation fee payment due date
- Phase one period: no later than thirty (30) days after the end of the phase one period;
- Any other period: according to the current compliance cycle payment due date
- The last payment: no later than thirty (30) days after the end of mitigation fee extension

Figure 1 – Proposed Alternate Compliance Plan for Non-condensing Furnaces (> 60,000 Btu/hr and ≤ 90,000 Btu/hr)
Figure 2 – Proposed Alternate Compliance Plan for Condensing Furnaces (> 60,000 Btu/hr and ≤ 90,000 Btu/hr)

Staff’s Proposal for PAR 1111 – continued

- Staff previously proposed a rule concept by which facilities would be exempt from the mitigation fee increase due to early compliance, provided a plan was submitted and a fee of $20/unit sold was submitted.
- This proposal has been removed from consideration.
Staff’s Proposal for PAR 1111 - continued

- OEMs, in a contractual agreement signed prior to January 1, 2018 may apply for exemption of the mitigation fee increase provided:
  - The application for exemption is submitted prior to April 2, 2018
  - The total quantity of furnaces in application(s) by any one manufacturer does not exceed 15% of furnaces distributed and sold in the previous compliance plan period
  - Those furnaces are sold no later than their mitigation fee option end dates
  - The following documents and information are provided, including but not limited to:
    - Contractual agreement for the units sold or will be sold in the District at a specified unit cost or total cost that was based on a specified unit cost
    - Quality, unit price, model number and serial number of the subject units
    - Contract execution date
    - Names(s) of the contractor(s)
  - Failure to comply with the requirements above requirements would result in paying or retroactively paying the corresponding mitigation fee specified in paragraph (c)(5) within 30 days upon notification

Rebate Program

- Implement a rebate program
  - $500 for the first 6,000 compliant furnaces
  - $300 for the remaining condensing furnaces and $200 for the remaining non-condensing, weatherized, and mobile home furnaces
  - Rebate will be implemented until funds are exhausted
  - RFP to solicit proposals and have a third party contractor administer the rebate program which was issued on December 1, 2017 and closes on January 9, 2018

- Seek input on designating rebate funds for certain number of high efficiency units

- Program outreach
  - The SCAQMD
  - OEMs
  - The third party contractor for the implementation
Future Activities and Schedules

- Continue individual stakeholder meetings
- Stationary Source Committee meeting – January 19, 2018
- Set Hearing – February 2, 2018
- Public Hearing – March 2, 2018

Rule Development Staff Contacts

- Yanrong Zhu
  Air Quality Specialist
  (909) 396-3289
  yzhu1@aqmd.gov

- Gary Quinn, P.E.
  Program Supervisor
  (909) 396-3121
  gquinn@aqmd.gov