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# **IMPLEMENTATION STATUS OF RULE 111**

## **NOX EMISSIONS FROM NATURAL-GAS-FIRED, FAN-TYPE CENTRAL FURNACES**

TASK FORCE MEETING

MAY 25, 2017

SCAQMD HEADQUARTERS  
DIAMOND BAR, CALIFORNIA

## AGENDA

- Recap and discussion highlights of the Rule 1111 Task Force meeting on April 27, 2017
- Follow up individual meetings with Manufacturers in May, 2017
- Summary of Stakeholders' recommendations
- Rule 1111 considerations
- Future activities and schedules
- Lantec Demonstration

## RECAP - RULE IIII TASK FORCE MEETING ON APRIL 27, 2017

- Rule IIII background
- Individual meetings with Manufacturers in March – April, 2017
- Implementation status and challenges
- Product availability
- Manufacturers' recommendations
- Staff considerations

## DISCUSSION HIGHLIGHTS - RULE 1111 TASK FORCE MEETING ON APRIL 27, 2017

- Stakeholder feedback:
  - Rebate may be an option to incentivize compliant products
  - High efficiency units should have a later compliance date
  - Lower limit results in rapid change of technology which may bring about safety hazards
  - It is not fair to raise the limit or have 14 ng/J limit only applying to new constructions, for OEMs who already developed compliant units

## DISCUSSION HIGHLIGHTS - RULE 1111 TASK FORCE MEETING ON APRIL 27, 2017- continued

- Staff needs to have further discussion with OEMs for low-volume market product development and cost increase information related to commercialized compliance products
- Illegal sales, propane furnaces not regulated, different emission limit for retrofit market, economic impact related to low-volume market product, etc.
- No additional recommendation was provided for mitigation option extension and mitigation fee change

## FOLLOW UP INDIVIDUAL MEETINGS – MAY, 2017

- **Updates to status:**

- Standard units: One more OEM expects to start field test in the fall of 2017
- Weatherized units: One more OEM is in lab test phase; another OEM is in discussion phase
- Mobile home units: One OEM is in discussion phase

- **Updates to recommendations previously provided:**

- Eliminate mitigation fee for OEMs who are in active commercialization process for compliant products
- A greater variety of products could be commercialized if the compliance date is extended
- One stakeholder suggested that 14 ng/J performed better than if raising the emission limit
- Rebate was recommended and discussed

## FOLLOW UP INDIVIDUAL MEETINGS – MAY, 2017 - continued

- **Cost increase relative to commercializing compliance products**
  - Manufacturing cost increase is similar to mitigation fee
  - In the lower end for standard units and in the higher end for other type of units
  - Retail markup – refer to DOE rule development data
- **Safety and reliability for new technology**
  - OEMs that expect compliant products are confident with their safety and reliability
  - Other than the national standards (i.e., ANSI), internal reliability testing, field test, OEMs conduct extensive testing for new products
  - Training installers is crucial to proper implementation
- **Other concerns**
  - Commercialization may be delayed until the rule amendment is finalized
  - Rule 1111 test method needs to be updated to reflect frequent start-ups

# STAKEHOLDERS' RECOMMENDATIONS – MAY, 2017 (SUMMARY)

	<b>Current Rule Requirements</b>			
	Condensing (High Efficiency)	Non-condensing (Standard)	Weatherized	Mobile Home
Compliance Date	April 1, 2015	October 1, 2015	October 1, 2016	October 1, 2018
Compliance date - Mitigation End	April 1, 2018	October 1, 2018	October 1, 2019	October 1, 2021
Mitigation Fee (per unit)	\$200	\$150	\$150	\$150
	<b>Recommendations</b>			
Mitigation option extension	1 yr/2 yrs	no extension/1 yr/2 yrs	1 yr	1 yr
	Others: 2 yrs/3 yrs/5 yrs, but no distinction made for which type			
Mitigation Fee (per unit)	\$150 for all types; eliminating mitigation fee for OEMs in active commercialization; phased approach for mitigation fee from 40 to 30 then 14 ng/J			
Emission limit (ng/J)	14 (no change)/20/29/30			



## STAFF CONSIDERATIONS REGARDING RULE IIII

- OEMs who have developed compliant standard units need assurance that the Rule IIII emission limit of 14 ng/J is maintained so that they have the proper incentive to proceed with the capital investment to commercialize their units
- Continue to maintain a competitive market among OEMs and burner manufacturers; this will help ensure more reasonably priced units for the consumers

## STAFF CONSIDERATIONS REGARDING RULE 1111

- continued

- Ensure that the compliant products adequately cover the size ranges
- Safety and reliability should not be compromised by current emission limit
- Make sure that there is a clear path for the higher efficiency furnaces; the application of high efficiency equipment is in line with the 2016 AQMP goal

## FUTURE ACTIVITIES AND SCHEDULES

- Continue stakeholder meetings
- Stationary Source Committee – June 16, 2017
- Next Task Force meeting
  - Late June to mid July, 2017 (pending Committee guidance)

## RULE DEVELOPMENT STAFF CONTACTS

- Yanrong Zhu  
Air Quality Specialist  
(909) 396-3289  
[yzhu1@aqmd.gov](mailto:yzhu1@aqmd.gov)
- Gary Quinn, P.E.  
Program Supervisor  
(909) 396-3121  
[gquinn@aqmd.gov](mailto:gquinn@aqmd.gov)



# LANTEC DEMONSTRATION



# DISCUSSION