

Public Workshop and CEQA Scoping Meeting for

Proposed Rule 1153.1

Emissions of Oxides of Nitrogen From Food Ovens

April 2, 2014

1:30 p.m. Auditorium

SCAQMD Headquarters

Diamond Bar, California

Overview

- Review rule proposal under consideration
- Solicit input on PR 1153.1 definitions, NOx emission limits, schedule and proposed CO limit
- Summarize rule development schedule

Background

- Rule 1147 as amended September 2011, provided a July 1, 2014 compliance date for food ovens
- As part of the 2011 amendment to Rule 1147 staff committed to:
 - Address implementation issues
 - Prepare a Technology Assessment for small sources
- Rules 219 and 222 as amended exempted some food ovens
- The assessment of the availability of ULN burner replacements and alternate control technologies for the food ovens is ongoing:
 - In many applications, suitable replacement ULN burners have not been available
 - Other concerns regard the impact of an altered heating profile on the texture and taste of the food product processed

PR 1153.1 Development Activity

- Staff is proposing to move food ovens, roasters and smokehouses from Rule 1147 and place them into Proposed Rule 1153.1
- Task Force meetings with stakeholders
 - October 23, 2013
 - January 9, 2014
 - March 6, 2014
- Discussions with stakeholders, site visits and dialog with manufacturers
- Draft proposal presented to industry at March 6, 2014 Task Force meeting
- Status update presented at March 21, 2014 Stationary Source Committee meeting

Proposed Rule 1153.1 Applicability

- PR 1153.1 Includes:
 - Ovens that require an SCAQMD Permit
 - ConveyORIZED baking/food ovens
 - Batch baking/food ovens
 - Dry Roasters
 - Smokehouse ovens/smoke generators
- Excludes:
 - Fryers (including fryers used for “nut roasting”)
 - Char-broilers
 - Control equipment such as afterburners
 - The above units included in a production line

Staff Proposal for Rule 1153.1

- Upon rule adoption, applicable **existing** equipment shift from Rule 1147 to PR1153.1 requirements
- **New or relocated** equipment would be subject to NSR and BACT
- Proposal Includes:
 - Higher NOx emission limits:
 - 40 ppm vs 30 ppm for units operating at temperatures < 500 °F
 - 60 ppm vs 30 ppm for units operating at temperatures ≥ 500 °F - < 1200 °F
 - Cap CO emissions at 800 ppm (vs. Rule 407 at 2,000 ppm)
 - Delay compliance dates
 - Phase-in based on 20-year vs 15-year life for all units
 - Exemption for small ≤ 1lb/day and low-use units
 - Testing exemption for infrared burners
 - Alternate compliance plan and mitigation fee options
- Maximum 2023 emissions forgone: 0.06 TPD (120 lbs/day)

PR 1153.1 NO_x Emission Limit

Equipment Category(ies)	NOx Emission Limit PPM @ 3% O ₂ , dry or Pound/mmBTU heat input		
	Process Temperature		
	$\leq 500^{\circ} F$	$> 500^{\circ} F$ and $< 900^{\circ} F$	$\geq 900^{\circ} F$
In-use units with only radiant tube heating	60 ppm or 0.073 lb/mmBTU	60 ppm or 0.073 lb/mmBTU	60 ppm or 0.073 lb/mmBTU
Other in-use units	40 ppm or 0.042 lb/mmBTU	60 ppm or 0.073 lb/mmBTU	60 ppm or 0.073 lb/mmBTU

PR 1153.1 In-Use Units Compliance Schedule

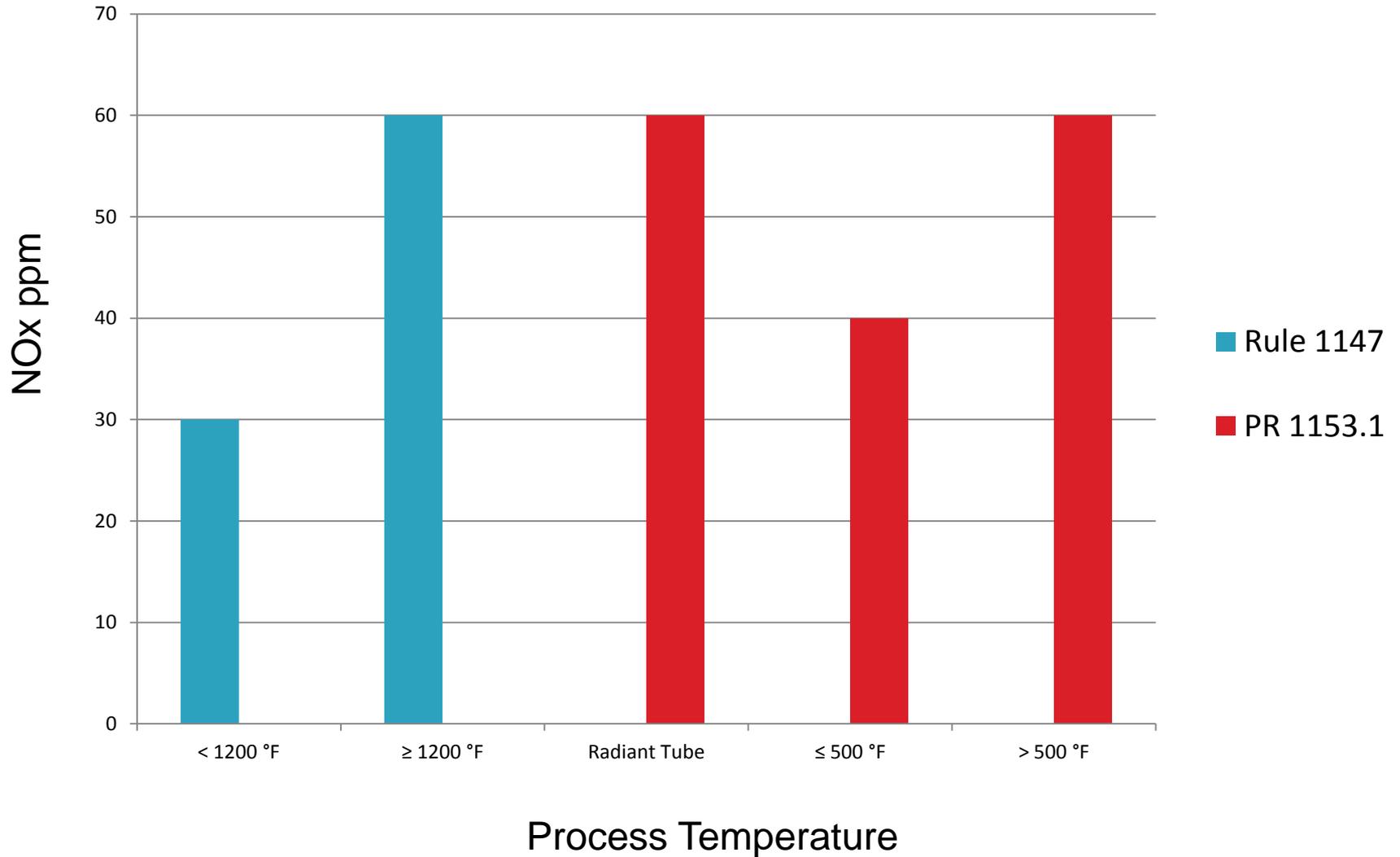
Equipment Category(ies)	Permit Application Shall be Submitted By	Unit Shall Be in Compliance On and After
Griddle ovens and ovens used solely for making pita bread and manufactured prior to 1994	October 1, 2017	July 1, 2018
Other unit manufactured prior to 1992	October 1, 2015	July 1, 2016
Other unit manufactured between 1992 to 2000	October 1, 2018	July 1, 2019
Any unit manufactured after 2000	October 1 of the year prior to the compliance date	July 1 of the year the unit is 20 years old

Comparison of Implementation Schedules

Category	Jul-14	Jul-15	Jul-16	Jul-17	Jul-18	Jul-19	Jul-20	Beyond
<i>Rule 1147</i>								
> 1 lb/day & Mft < 1998								
> 1 lb/day & Unit 15 yrs old								
≤ 1 lb/day & Mft < 1998								
≤ 1 lb/day & Unit 20 yrs old								
<i>Propose Rule 1153.1</i>								
In Use & Mft < 1992*								
In Use Pita and griddle & Mft < 1994								
In Use & Mft < 2000 (20 years old)								
In Use & 20 years old								

*Except Pita and Griddle

Comparison of NOx Emissions Limits



PR 1153.1 Key Components

- Allow use of Rule 1147 mitigation application for up to three years after Rule 1153.1 compliance date
- Alternate Compliance Plan for facilities with multiple units that have compliance dates within one year of each other
 - 3 years for 3 – 4 units
 - 5 years for 5 or more units
- Small and low use exemption for existing in-use units
 - ≤ 1 lb/day permit condition
 - Use limit based on rating
 - ≤ 1 lb/day by recordkeeping
 - Time meter required and gas meter optional for recordkeeping
- Include option for testing of ovens and afterburners together

Facilities, Equipment and Emissions

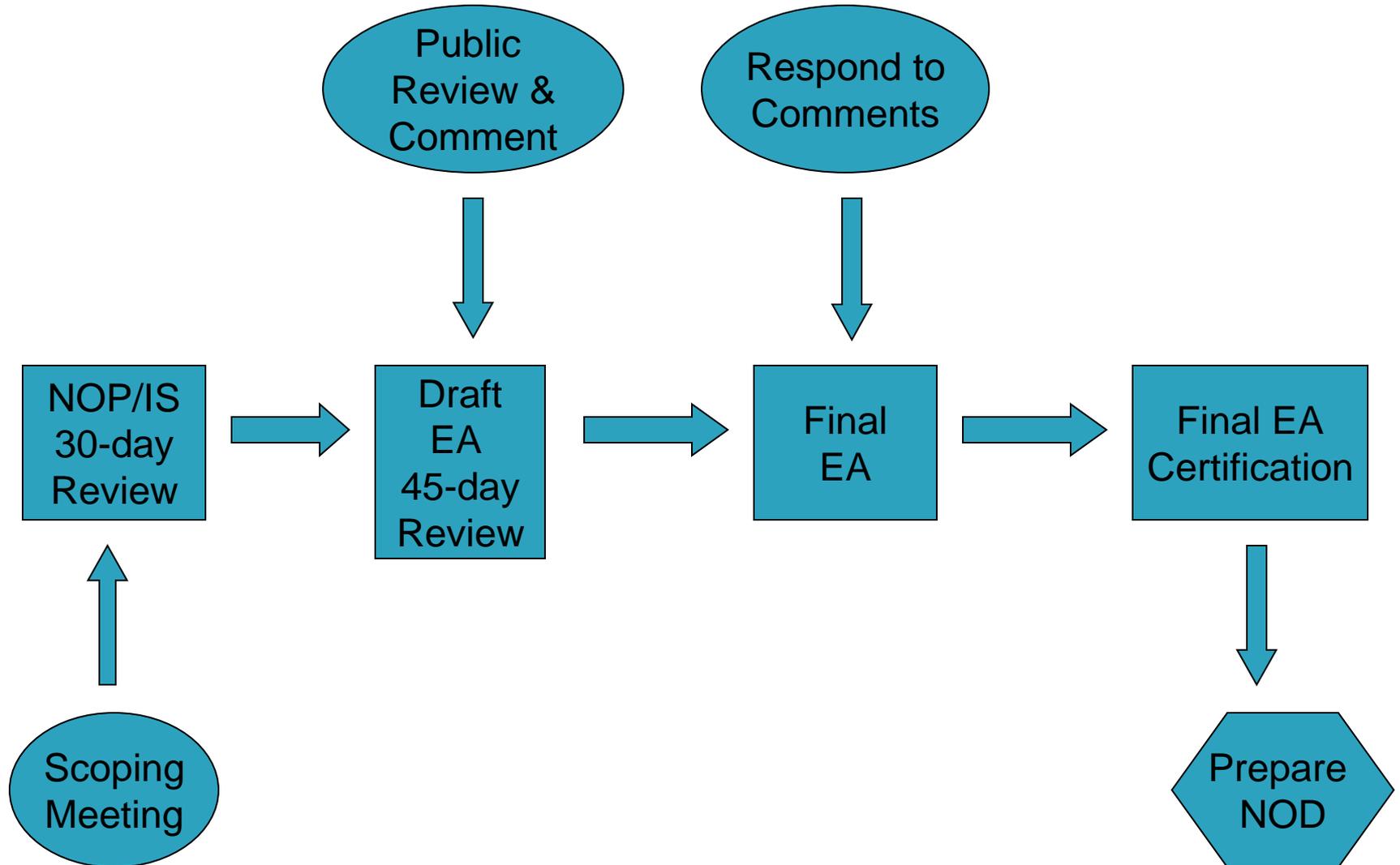
Facilities and Equipment

- 94 Facilities Total
- 210 Units Total
 - 75 with emissions >1 lb/day
 - 135 with emissions ≤ 1 lb/day
- 3 Categories of Equipment
 - 148 Food Ovens (81 ≤ 1 lb/day)
 - 61 Roasters (53 ≤ 1 lb/day)
 - 1 Smokehouse (≤ 1 lb/day)

Emissions

- NOx Emissions ~ 0.2 ton/day
 - 80% from > 1 lb/day units
 - 20% from ≤ 1 lb/day units
- % NOx Emissions by Category
 - > 1 lb/day units
 - Food Ovens 70%
 - Roasters 30%
 - ≤ 1 lb/day units
 - Food Ovens 70%
 - Roasters 30%
 - Smokehouse
- **~ 120 lb/day NOx forgone**

EIR Process



Initial Study

- Preliminary analysis to identify potential adverse environmental impacts
- Notice of Preparation of an EA / Initial Study (NOP/IS) will be released for 30-day public review period in late April
- NOP/IS will be available online at www.aqmd.gov/ceqa/nonaqmd.html
- Hardcopies will be available at SCAQMD Headquarters or by calling 909.396.2039
- Any comments on the NOP/IS must be submitted to the SCAQMD by the end of the 30-day public review period

Potentially Significant Environmental Impacts

- Environmental topics currently identified that could be adversely affected by the proposed project to be further analyzed in the Draft EA:
 - Air Quality

Public Comments

- Responses to oral and written comments will be prepared and included in the Draft EA
- Mail written comments to:
 - Attn: Mr. Jeff Inabinet
 - South Coast AQMD
 - 21865 Copley Drive
 - Diamond Bar, CA. 91765
- Comments can also be submitted by:
 - E-mail to jinabinet@aqmd.gov
 - Fax to 909.396.2453

Questions or Comments, Contact:

Rule Development

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California Environmental Quality Act (CEQA) Environmental Impact Analysis

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Schedule

- Public Workshop/CEQA Scoping: April 2, 2014
- Continue Task Force meetings and discussions with stakeholders
- Return to SSC for update on rule development
- Tentative Public Hearing Date: September 5, 2014

Discussion