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\textsubscript{x} Emission Limit**

<table>
<thead>
<tr>
<th>Equipment Category(ies)</th>
<th>NO\textsubscript{x} Emission Limit</th>
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<tbody>
<tr>
<td></td>
<td>PPM @ 3% O\textsubscript{2}, dry or Pound/mmBTU heat input</td>
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<tr>
<td></td>
<td>Process Temperature</td>
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<td>(\leq 500^\circ F)</td>
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<tr>
<td>In-use units with only radiant tube heating</td>
<td>60 ppm or 0.073 lb/mmBTU</td>
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<tr>
<td>Other in-use units</td>
<td>40 ppm or 0.042 lb/mmBTU</td>
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## PR 1153.1 In-Use Units Compliance Schedule

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

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<tbody>
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<td><strong>Rule 1147</strong></td>
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<td>&gt; 1 lb/day &amp; Mft &lt; 1998</td>
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<td>&gt; 1 lb/day &amp; Unit 15 yrs old</td>
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<td>≤ 1 lb/day &amp; Mft &lt; 1998</td>
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<td>≤ 1 lb/day &amp; Unit 20 yrs old</td>
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<td><strong>Propose Rule 1153.1</strong></td>
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<td>In Use &amp; Mft &lt; 1992*</td>
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<td>In Use &amp; Mft &lt; 1992*</td>
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<tr>
<td>In Use &amp; Mft &lt; 2000 (20 years old)</td>
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<td>In Use &amp; 20 years old</td>
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*Except Pita and Griddle*
Comparison of NOx Emissions Limits

- Process Temperature:
  - < 1200 °F
  - ≥ 1200 °F
  - Radiant Tube
  - ≤ 500 °F
  - > 500 °F

- NOx ppm:
  - Rule 1147
  - PR 1153.1
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

- NOP/IS
  - 30-day Review
- Scoping Meeting
- Draft EA
  - 45-day Review
- Public Review & Comment
- Respond to Comments
- Final EA
- Final EA Certification
- Prepare NOD
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](http://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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Phone (909) 396-3077

**California Environmental Quality Act (CEQA) Environmental Impact Analysis**

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Phone (909) 396-2453
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