NOx RECLAIM WORKING GROUP MEETING

JUNE 13, 2019
SOUTH COAST AQMD
DIAMOND BAR, CA
CALL-IN # 1-888-450-5996
PASSCODE: 5684587
Agenda

- Rulemaking Status
  - PAR 1110.2
  - PR 1109.1
  - PAR 218/218.1
  - PAR 1117
  - 1147 series

- Regulation XX

- New Source Review
Rulemaking Status

**Gaseous- and Liquid-Fueled Engines**
- Ongoing site visits
- Discussed initial proposal for NOx emission limits based on BARCT assessment
- Working Group Meeting #5 May 30, 2019
- Public Workshop: 3rd Quarter 2019
- Public Hearing: October 2019

**Refinery Equipment**
- May 3, 2019 Board approved contracts for two third party consults for review of BARCT assessment
- Staff reviewing additional CEMS data from refineries
- Working Group Meeting #7 April 30, 2019
- Public Hearing: 4th Quarter 2019

**Monitoring, Reporting, and Recordkeeping – Continuous Emissions Monitoring Systems**
- Applicable to non-RECLAIM and RECLAIM facilities
- Specifying CEMS requirements and performance standards
- Surveys to CEMS operators
- Working Group Meeting #3 June 11, 2019
- Public Hearing: 4th Quarter 2019

**Glass Melting Furnaces**
- Staff in data gathering phase
- Public Hearing: December 2019
<table>
<thead>
<tr>
<th>PAR 1147</th>
<th>PR 1147.1</th>
<th>PR 1147.2</th>
<th>PR 1147.3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Miscellaneous Combustion Sources</strong>&lt;br&gt;• 3rd Working Group&lt;br&gt;May 30, 2019&lt;br&gt;• Facility surveys mailed&lt;br&gt;March 22, 2019&lt;br&gt;• Public Hearing:&lt;br&gt;4th Quarter 2019</td>
<td><strong>Large Miscellaneous Combustion Sources</strong>&lt;br&gt;• 3rd Working Group&lt;br&gt;May 30, 2019&lt;br&gt;• Facility surveys mailed&lt;br&gt;March 22, 2019&lt;br&gt;• Public Hearing:&lt;br&gt;4th Quarter 2019</td>
<td><strong>Metal Melting Facilities</strong>&lt;br&gt;• Data gathering and site visits&lt;br&gt;• Facility surveys mailed&lt;br&gt;March 22, 2019&lt;br&gt;• 1st Working Group&lt;br&gt;May 16, 2019&lt;br&gt;• Public Hearing:&lt;br&gt;1st Quarter 2020</td>
<td><strong>Aggregate Facilities</strong>&lt;br&gt;• Staff in data gathering phase&lt;br&gt;• Facility surveys mailed&lt;br&gt;March 22, 2019&lt;br&gt;• Public Hearing:&lt;br&gt;2nd Quarter 2020</td>
</tr>
</tbody>
</table>
REGULATION XX

PAR 2001
Proposed Amended Rules (PARs) 2001 and 2015

- PAR 2015
  - Proposed amendments were intended to provide additional clarity for backstop provisions during the transition
  - Stakeholders commented that additional clarity is not needed
  - South Coast AQMD discussed issue with key stakeholders, and agreed not to move forward with the proposed amendments

- PAR 2001
  - Removes opt-out provision and will not exit any facilities from RECLAIM
  - No changes since Public Workshop last month
  - Public hearing is scheduled for July 12, 2019
UPDATE ON NEW SOURCE REVIEW
Key Issue #1
For new sources that are permitted in RECLAIM, what are the offset obligations as facilities transition out of RECLAIM?

Key Issue #2
When and how pre-modification potential to emit (PTE) is calculated to determine if an emission increase occurs that triggers NSR after facilities transition out of RECLAIM?

Key Issue #3
How will the South Coast AQMD ensure that sufficient offsets are available to satisfy NSR requirements?
Federal CAA 110(l) states:

“…The Administrator shall not approve a revision of a plan if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress…or any other applicable requirement of this chapter.”

California Senate Bill 288 requires:

“No air quality management district or air pollution control district may amend or revise its new source review rules or regulations to be less stringent than those that existed on December 30, 2002.”

Need to ensure compliance with SB 288 and CAA 110(l) requirements for these sources as they transition out of RECLAIM.
Discussions with EPA NSR Applicability and Offsetting

- During discussions on Key Issue #2, U.S. EPA raised concerns regarding NSR applicability and offsetting calculations
- Subsequent discussions with U.S. EPA occurred to understand EPA’s concerns and possible paths forward
- Updating RECLAIM Working Group on these discussions
- Still working on details and possible options
EPA Comments

- Comments focused on two issues
  - **Issue 1**: NSR applicability – Defining an emission increase for applicability under Regulation XIII for Best Available Control Technology (BACT) and offsets
  - **Issue 2**: Offsetting – Methodology to determine amount of offsets required
- Comments apply to all pollutants – not RECLAIM specific
- Affects all federal major sources
  - Federal major sources (e.g. NOx Potential to emit > 10 tons per year)
  - Federal NSR requirements do not apply to minor sources
EPA’s Comments on the Applicability Test

- EPA’s comments on applicability are based on the December 2002 promulgation of EPA’s revisions to its NSR program also known as “NSR Reform”
- Federal NSR, which includes NSR Reform, applies to major sources

<table>
<thead>
<tr>
<th>Major Source PTE Thresholds (Tons per year)</th>
<th>Pollutant</th>
<th>South Coast Air Basin</th>
<th>Riverside County Portion of Salton Sea Air Basin</th>
<th>Riverside County Portion of Mojave Desert Air Basin</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC</td>
<td>10</td>
<td>25*</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>NOx</td>
<td>10</td>
<td>25*</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>SOx</td>
<td>70</td>
<td>70</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>PM10</td>
<td>70</td>
<td>70</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>CO</td>
<td>50</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

*To be changed to 10 tons per year after reclassification of Coachella Valley to “extreme” for 1997 8-hour ozone standard
EPA’s Comments on the Applicability Test (Continued)

- EPA’s 2002 NSR Reform applicability test for modified major sources:
  - Baseline Actual Emissions-to-Projected Actual Emissions
  - Allows option to use Actual Emissions-to-Potential to Emit (PTE)
- EPA’s 2002 NSR Reform did not change the applicability test for new major sources
  - Actual Emissions-to-PTE was maintained

### Baseline Actuals

| Emissions: | Emissions during any consecutive 24-month period over the past 10 years (5 years for Electricity Generating Facilities) |

### Actuals

| Emissions: | Emissions during the immediately preceding 24-month period or other 24-month period which is representative of normal operations |
Projected Actual Emissions

Projected Actual Emissions = Maximum Projected Emissions – Demand Growth

- Maximum projected emissions are based on the company’s representation of business activity (next 5 years or 10 years if increased capacity)
- Demand Growth represents the increase in emissions that an existing unit actually and physically could have accommodated
- Staff believes use of **Projected Actual Emissions** could result in backsliding under SB288
  - Regulation XIII uses PTE for determining post-modification emissions
  - **Projected Actual Emissions** are typically less than PTE
  - Using **Projected Actual Emissions** could result in fewer facilities being subject to BACT
  - Maximum projected emissions and demand growth are difficult to calculate and verify
Applicability Test Under Existing Regulation XIII

- For **new** major sources, Regulation XIII requires Actual Emissions-to-PTE
  - Consistent with EPA applicability test for new major sources
- For existing major sources – NSR applicability differs for equipment permitted
  - Prior to adoption of Regulation XIII* in 1976 referred to as “pre-NSR”; or
  - After adoption of Regulation XIII referred to as “post-NSR”
- For **pre-NSR** existing sources, Regulation XIII applicability is based on Actual Emissions-to-PTE
  - Consistent with EPA 2002 NSR Reform applicability test
- For post-NSR existing sources, Regulation XIII applicability is based on the pre- and post-modification PTE (PTE_{Pre-Modification} -to-PTE_{Post-Modification})
  - Inconsistent with EPA 2002 NSR Reform applicability test which requires Baseline Actual Emissions-to-Projected Actual Emissions or Actual Emissions-to-PTE

* Regulation XIII was formerly Rule 213
### NSR Applicability Comparison for Major Sources

<table>
<thead>
<tr>
<th>New or Modified Emission Sources</th>
<th>Regulation XIII Applicability Test</th>
<th>Federal NSR Applicability Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>New emission source</td>
<td>Actual-to-PTE</td>
<td>Actual-to-PTE</td>
</tr>
<tr>
<td>Modification to existing pre-NSR emission source</td>
<td>Actual-to-PTE</td>
<td>Actual-to-PTE*</td>
</tr>
<tr>
<td><strong>Modification to existing post-NSR emission source</strong></td>
<td><strong>PTE-to-PTE</strong></td>
<td><strong>Actual-to-PTE</strong>*</td>
</tr>
</tbody>
</table>

* NSR Reform also allows Baseline Actual Emissions to Projected Actual Emissions. Staff believes using Projected Actual Emissions can result in backsliding under SB288.
Initial Proposal for NSR Applicability for Modifications to Existing Post-NSR Emission Sources

- Applicability based on **Actual Emissions-to-PTE** test
- If there is an increase between pre-modification **Actual Emissions** and post-modification **PTE**, then project is subject to:
  - BACT
  - Offsetting
  - Modeling
EPA’s Offsetting Comments

- EPA has commented that federal NSR offsetting requirements for major sources should be based on the difference between Actual Emissions-to-PTE\textsubscript{Post-Modification}.
- Under Regulation XIII, offsetting for modifications of post-NSR major sources is based on PTE\textsubscript{Pre-Modification}-to-PTE\textsubscript{Post-Modification}.
- Staff is working with EPA to explore potential options for calculating the amount of offsets required for modifications of post-NSR major sources.
- No impact on minor sources
  - Modifications for post-NSR minor sources will continue to use PTE-to-PTE to calculate offsets.
## Offsetting Comparison

- Differences only for **federal major sources**
- Federal NSR requirements do not apply to minor sources

<table>
<thead>
<tr>
<th>New or Modified Emission Units</th>
<th>Regulation XIII Offsetting Test</th>
<th>Federal NSR Offsetting Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>New emission source</td>
<td>Actual-to-PTE</td>
<td>Actual-to-PTE</td>
</tr>
<tr>
<td>Modification to existing pre-NSR emission source</td>
<td>Actual-to-PTE</td>
<td>Actual-to-PTE</td>
</tr>
<tr>
<td><strong>Modification to existing post-NSR emission source</strong></td>
<td><strong>PTE-to-PTE</strong></td>
<td><strong>Actual-to-PTE</strong></td>
</tr>
</tbody>
</table>
Initial Proposal for Offsetting for Modifications to Existing Post-NSR Emission Sources

- Staff is discussing with EPA to explore a hierarchy to determine the amount of offsets required

  **First Tier:** Allow use of PTE-to-PTE when
  - Actual emissions are at least 80% of the PTE
  - Past emission increases were fully offset less than 5 years prior to an application deemed complete

- **Second Tier:** Require Actual Emissions-to-PTE for all other situations
Summary

- U.S. EPA has raised concerns about differences between Federal NSR and current South Coast AQMD NSR calculation methodologies
  - Comments affect modifications of post-NSR major sources only
- Initial proposal for modifications of post-NSR major sources:
  - Applicability is based on Actual Emissions-to-PTE
  - Quantity of offsets required is based on a two tier approach of PTE-to-PTE if certain conditions are met, then Actual Emissions-to-PTE
- Staff will continue working with EPA on both initial proposals
## Contacts

### General RECLAIM Questions

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

- **Kevin Orellana**
  - Program Supervisor
  - 909-396-3492
  - korellana@aqmd.gov

### New Source Review

- **Michael Morris**
  - Planning and Rules Manager
  - 909-396-3282
  - mmorris@aqmd.gov

- **Kevin Orellana**
  - Program Supervisor
  - 909-396-3492
  - korellana@aqmd.gov

- **Lizabeth Gomez**
  - Air Quality Specialist
  - 909-396-3103
  - lgomez@aqmd.gov

- **Melissa Gamoning**
  - Assistant Air Quality Specialist
  - 909-396-3115
  - mgamoning@aqmd.gov
# Rule Contacts – Proposed Amended/Adopted

<table>
<thead>
<tr>
<th>Rule 1109.1</th>
<th>Heather Farr</th>
<th>Program Supervisor</th>
<th>909-396-3672</th>
<th><a href="mailto:hfarr@aqmd.gov">hfarr@aqmd.gov</a></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sarady Ka</td>
<td>Air Quality Specialist</td>
<td>909-396-2331</td>
<td><a href="mailto:ska@aqmd.gov">ska@aqmd.gov</a></td>
</tr>
<tr>
<td></td>
<td>Jong Hoon Lee</td>
<td>Air Quality Specialist</td>
<td>909-396-3903</td>
<td><a href="mailto:jhlee@aqmd.gov">jhlee@aqmd.gov</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proposed Amended Rule 1110.2</th>
<th>Kevin Orellana</th>
<th>Program Supervisor</th>
<th>909-396-3492</th>
<th><a href="mailto:korellana@aqmd.gov">korellana@aqmd.gov</a></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rudy Chacon</td>
<td>Air Quality Specialist</td>
<td>909-396-2729</td>
<td><a href="mailto:rchacon@aqmd.gov">rchacon@aqmd.gov</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rule 1147 &amp; Proposed Rule 1147.1</th>
<th>Gary Quinn, P.E.</th>
<th>Program Supervisor</th>
<th>909-396-3121</th>
<th><a href="mailto:gquinn@aqmd.gov">gquinn@aqmd.gov</a></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Shawn Wang</td>
<td>Air Quality Specialist</td>
<td>909-396-3319</td>
<td><a href="mailto:swang@aqmd.gov">swang@aqmd.gov</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proposed Rule 1147.2</th>
<th>Uyen-Uyen Vo</th>
<th>Program Supervisor</th>
<th>909-396-2238</th>
<th><a href="mailto:uvo@aqmd.gov">uvo@aqmd.gov</a></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>James McCreary</td>
<td>Assistant Air Quality Specialist</td>
<td>909-396-2451</td>
<td><a href="mailto:jmccreary@aqmd.gov">jmccreary@aqmd.gov</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proposed Amended Rules 218 &amp; 218.1</th>
<th>Gary Quinn, P.E.</th>
<th>Program Supervisor</th>
<th>909-396-3121</th>
<th><a href="mailto:gquinn@aqmd.gov">gquinn@aqmd.gov</a></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yanrong Zhu</td>
<td>Air Quality Specialist</td>
<td>909-396-3289</td>
<td><a href="mailto:yzhu1@aqmd.gov">yzhu1@aqmd.gov</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proposed Amended Rule 1117</th>
<th>Kevin Orellana</th>
<th>Program Supervisor</th>
<th>909-396-3492</th>
<th><a href="mailto:korellana@aqmd.gov">korellana@aqmd.gov</a></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Robert Gottschalk</td>
<td>Air Quality Specialist</td>
<td>909-396-2456</td>
<td><a href="mailto:rgottschalk@aqmd.gov">rgottschalk@aqmd.gov</a></td>
</tr>
<tr>
<td>Rule</td>
<td>Name</td>
<td>Position</td>
<td>Phone</td>
<td>Email</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------</td>
<td>---------------------------</td>
<td>------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>1134 &amp; 1135</td>
<td>Michael Morris</td>
<td>Planning and Rules Manager</td>
<td>909-396-3282</td>
<td><a href="mailto:mmorris@aqmd.gov">mmorris@aqmd.gov</a></td>
</tr>
<tr>
<td></td>
<td>Uyen-Uyen Vo</td>
<td>Program Supervisor</td>
<td>909-396-2238</td>
<td><a href="mailto:uvo@aqmd.gov">uvo@aqmd.gov</a></td>
</tr>
<tr>
<td>1146, 1146.1, &amp; 1146.2</td>
<td>Gary Quinn, P.E.</td>
<td>Program Supervisor</td>
<td>909-396-3121</td>
<td><a href="mailto:gquinn@aqmd.gov">gquinn@aqmd.gov</a></td>
</tr>
<tr>
<td></td>
<td>Kalam Cheung, Ph.D.</td>
<td>Program Supervisor</td>
<td>909-396-3281</td>
<td><a href="mailto:kcheung@aqmd.gov">kcheung@aqmd.gov</a></td>
</tr>
<tr>
<td></td>
<td>Lizabeth Gomez</td>
<td>Air Quality Specialist</td>
<td>909-396-3103</td>
<td><a href="mailto:lgomez@aqmd.gov">lgomez@aqmd.gov</a></td>
</tr>
<tr>
<td></td>
<td>Shawn Wang</td>
<td>Air Quality Specialist</td>
<td>909-396-3319</td>
<td><a href="mailto:swang@aqmd.gov">swang@aqmd.gov</a></td>
</tr>
<tr>
<td>1118.1</td>
<td>Heather Farr</td>
<td>Program Supervisor</td>
<td>909-396-3672</td>
<td><a href="mailto:hfarr@aqmd.gov">hfarr@aqmd.gov</a></td>
</tr>
<tr>
<td></td>
<td>Steve Tsumura</td>
<td>Air Quality Specialist</td>
<td>909-396-2549</td>
<td><a href="mailto:stsumura@aqmd.gov">stsumura@aqmd.gov</a></td>
</tr>
</tbody>
</table>