NOx RECLAIM WORKING GROUP MEETING

DECEMBER 13, 2018
SCAQMD
DIAMOND BAR, CA

Agenda

- Landing Rule Updates
  - Rule 1146 Series/PR 1100
  - PR 1118.1
  - PAR 1134
  - PR 1109.1
  - PAR 1110.2
  - PAR 113
- New Source Review
  - Discussion of Key Issue #2 – Establishing baselines to determine NSR events
LANDING RULE UPDATES

Command-and-Control BARCT Rulemaking Status

PAR 1146, 1146.1 and 1146.2
Boilers, steam generators, and heaters
• Public Hearing: December 2018
• Amendments approved by the Board

PR 1118.1
Non-Refinery Flares
• Public Hearing: January 2019

PAR 1134
Gas Turbines
• Public Workshop: December 18, 2018
• Public Hearing: April 2019
# Command-and-Control BARCT Rulemaking Status

## PR 1109.1
- Refineries
  - Request for Proposal for third party verification of BARCT analysis:
    - Governing Board Approval Release December 7, 2018
    - Working Group Meeting held November 28, 2018
    - Next Working Group Meeting scheduled for mid-January
    - Continuing site visits
    - Public Hearing: 2019

## PAR 1110.2
- Gaseous- and Liquid-Fueled Engines
  - Initiated site visits, more to be scheduled
  - Sent survey questionnaire
  - Public Workshop: 1st Quarter 2019
  - Public Hearing: 3rd Quarter 2019

## PR 113
- Monitoring, Reporting, and Recordkeeping
  - Integrated MRR requirements for:
    - Former RECLAIM
    - Possibly non-RECLAIM
    - Initiated preliminary analysis
    - Comparing District and Federal requirements
    - Conducted five site visits

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# UPDATE ON NEW SOURCE REVIEW
Key Issue #1 Summary
(November 8 Working Group Meeting)

3 Questions:

Guiding Principles

Do ongoing Rule 2005 holding requirements need to be retained?
- Facilities that were permitted during RECLAIM are required to hold RTCs equal to their PTE year after year
- A programmatic demonstration can be done to show equivalency to the SIP-approved Rule 2005 requirement

Compliance with State and Federal Requirements

Should an ongoing demonstration of an offsetting requirement be made for sources that were permitted during RECLAIM?
- No, RECLAIM NSR has a holding requirement but does not have ongoing offsetting requirements

No Backsliding

Should current federal offsetting be demonstrated programmatically or individually by facility?
- Future offsetting should be demonstrated programmatically

Summary of Three Key NSR Issues

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
For permits issued without a NOx PTE, when and how will a baseline be established to determine if an NSR event occurs after facilities transition out of RECLAIM?

Key Issue #3
How will the SCAQMD ensure that sufficient offsets are available to satisfy NSR requirements?
Addressing Key Issue #2

Proposed pathway to transition sources to Regulation XIII

Permitting under Regulation XIII versus RECLAIM NSR

Permitting Under Regulation XIII

- Regulation XIII is SIP-approved - Applies to the installation of any new source and to the modification of any existing source
- All new and modified permitted sources are reviewed under Regulation XIII
  - Regulation XIII acts as the “gatekeeper” to determine if a permit action results in an emission increase (NSR event)
  - Any emission increase must be offset (e.g., ERCs)
  - BACT and modeling is always required for new and modified sources
Permitting Under Regulation XIII (continued)

- When a facility submits a permit application for new or modified equipment, it will be evaluated for an emissions increase pursuant to Regulation XIII
- An emission increase would occur if:

  Post-modification PTE (lbs/day) > Pre-modification PTE (lbs/day)

- The emission increase is determined with a baseline PTE specified in lbs/day

Baseline PTEs Issued for Permits Over Specific Timeframes

- Baseline PTEs in RECLAIM permits depend on when past emission increases occurred

  - Pre-NSR: Permits issued Pre-1976
  - Post-NSR to Pre-RECLAIM: Permits issued between 1976 and 1993
  - During RECLAIM: Permits issued post-1993
## Comparison of Non-RECLAIM and RECLAIM PTEs Over Specific Timeframes

<table>
<thead>
<tr>
<th>Permits issued Pre-1976 (Pre-Regulation XIII NSR)</th>
<th>PTEs Non-RECLAIM</th>
<th>PTEs RECLAIM</th>
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<tbody>
<tr>
<td>No PTE</td>
<td>Same</td>
<td></td>
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<tr>
<td>Permits issued 1976-1993 (Post-NSR to Pre-RECLAIM)</td>
<td>PTE in lbs/day</td>
<td>Same</td>
</tr>
<tr>
<td>Permits issued Post 1993 (During RECLAIM)</td>
<td>PTE lbs/hour</td>
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<tr>
<td>Permits issued Post 1993 (During RECLAIM)</td>
<td>No specified PTE (some cases)</td>
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## Permits Issued Pre-NSR

- Sources that have never been subject to Regulation XIII or Rule 213 will have baseline emissions calculated pursuant to existing Regulation XIII provisions
- These sources have never had an NSR event through RECLAIM
- Regulation XIII has an established methodology to calculate emissions increases in lbs/day:

\[
\text{Post-modification PTE} - \text{Actual Emissions (lbs/day)} \quad \text{Baseline PTE}
\]
**Permits Issued Post-NSR to Pre-RECLAIM**

- Sources that have been subject to Regulation XIII or Rule 213, but never had an NSR event during RECLAIM
- The baseline PTEs for these sources have already been established pursuant to Regulation XIII
- Regulation XIII emission increase calculation in lbs/day:
  \[
  \text{Post-modification PTE} - \text{Pre-modification PTE} \text{ (lbs/day)}
  \]

**Baseline Calculations (continued)**

- Sources with emission increases during RECLAIM that have been subject to Rule 2005
- These sources may have:
  1) Baseline PTE specified in lbs/day
  2) Baseline PTE specified in lbs/hr
  3) No specified PTE, only concentration limit
  4) No specified PTE or concentration limit
- These baseline PTEs need to be converted to lbs/day to determine emission increases pursuant to Regulation XIII
Baseline Calculations (continued)

1) Baseline PTE specified in lbs/day
   - No further action required

2) Baseline PTE specified in lbs/hr
   - Use hourly mass limit multiplied by daily throughput limit, if available
   - If not, use 24 hours per day

Permits Without Specified PTEs

- Some sources that were permitted during RECLAIM do not have specified PTEs in lbs/hr
- No specified PTE, only concentration limit
  - Applies to some large sources and process units
  - Mass rates based on concentration limits
- No specified PTE or concentration limit
  - Applies to some major sources that do not have an hourly mass limit
  - Mass rates based on continuous emissions monitoring systems (CEMS) data
3) No specified PTE, only concentration limit
   - Use the most stringent concentration limit or equivalent concentration from RECLAIM emission factor, multiplied by throughput limit, if available
   - If not, maximum throughput limit and 24 hours per day
   - NOx PTE can be back-calculated from another pollutant PTE

4) No specified PTE or concentration limit
   - Obtain maximum hourly emission rate from previous 12 month actuals prorated to maximum rated capacity and multiply by throughput limit, if available
   - If not, multiply by maximum throughput limit and 24 hours per day
   - Emission rate can be obtained from CEMS data
Overview of Establishing PTEs

- Facility submits application for permit for new or modified source
- Permit is evaluated
  - Never went through Rule 2005 or Regulation XIII (no PTE)
  - Never went through Rule 2005 (PTE in lbs/day)
  - Source went through Rule 2005
    - Convert to lbs/day using max hourly conditions

When Will Permits Be Evaluated?

- When the facility submits a permit application to install new or modify existing equipment
- RECLAIM facilities will be issued new permits when they exit, but will retain existing NSR limits/conditions until next NSR event
Summary

- Baseline calculations will occur when a facility submits a permit application to determine if the facility has an emissions increase.
- All permitting actions that result in an emissions increase will be subject to Regulation XIII.
- Baseline PTEs in lbs/hr will be converted to lbs/day.
- There is a baseline calculation methodology that covers all situations (e.g., for equipment without a PTE).
- SIP-approved Regulation XIII will always be the “gatekeeper.”

Update of Key Issue #3 - Ensuring Sufficient Offsets

- Discussed at October 2017 and April 2018 Working Group Meetings.
- Discussed concerns for availability of offsets in the open market.
- Discussed possible options for offsets.
- Further discussion in subsequent meeting(s).
- Identify potential sources of offsets after facilities transition out of RECLAIM?
NSR – Process Moving Forward

Continuing discussions with USEPA regarding RECLAIM NSR transition
- Ensure all NSR, AQMP, and CAA requirements will be met after sunset of RECLAIM program
- Weekly calls with EPA
- Periodic face-to-face meetings for more extensive discussions

Work with RECLAIM Working Group Meeting
- Monthly RECLAIM Working Group Meetings will shift focus towards NSR
- Continued discussions with stakeholders

Updates to Stationary Source Committee (SSC)
- Quarterly presentation with quarterly RECLAIM update
- Monthly written report

Contacts

General RECLAIM Questions
- Gary Quinn, P.E. Program Supervisor
  909-396-3121
gquinn@aqmd.gov
- Kalam Cheung, Ph.D. Program Supervisor
  909-396-3281
kcheung@aqmd.gov
- Kevin Orellana Program Supervisor
  909-396-3492
korellana@aqmd.gov

Rules 1146, 1146.1, 1146.2 and Rule 1100
- Gary Quinn, P.E. Program Supervisor
  909-396-3121
gquinn@aqmd.gov
- Lizabeth Gomez Air Quality Specialist
  909-396-3103
lgomez@aqmd.gov
- Shawn Wang Air Quality Specialist
  909-396-3319
swang@aqmd.gov
- Kalam Cheung, Ph.D. Program Supervisor
  909-396-3281
kcheung@aqmd.gov
# Contacts

<table>
<thead>
<tr>
<th>Proposed Rule 1109.1</th>
<th>Proposed Rule 1118.1</th>
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| • Heather Farr  
  Program Supervisor  
  909-396-3672  
  hfarr@aqmd.gov | • Heather Farr  
  Program Supervisor  
  909-396-3672  
  hfarr@aqmd.gov |
| • Jong Hoon Lee  
  Air Quality Specialist  
  909-396-3903  
  jhlee@aqmd.gov | • Sarady Ka  
  Air Quality Specialist  
  909-396-2331  
  ska@aqmd.gov |

<table>
<thead>
<tr>
<th>Proposed Amended Rule 1110.2</th>
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| • Kevin Orellana  
  Program Supervisor  
  909-396-3492  
  korellana@aqmd.gov | • Rudy Chacon  
  Air Quality Specialist  
  909-396-2726  
  rchacon@aqmd.gov |

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<tr>
<th>Rule 1135</th>
<th>Proposed Amended Rule 1134</th>
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</thead>
</table>
| • Michael Morris  
  Planning and Rules Manager  
  909-396-3282  
  mmorris@aqmd.gov | • Michael Morris  
  Planning and Rules Manager  
  909-396-3282  
  mmorris@aqmd.gov |
| • Uyen-Uyen Vo  
  Air Quality Specialist  
  909-396-2238  
  uvo@aqmd.gov | • Uyen-Uyen Vo  
  Air Quality Specialist  
  909-396-2238  
  uvo@aqmd.gov |
### Contacts

#### New Source Review

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<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>Kevin Orellana</td>
<td>Program Supervisor</td>
<td>909-396-3492</td>
<td><a href="mailto:korellana@aqmd.gov">korellana@aqmd.gov</a></td>
</tr>
<tr>
<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>Melissa Gamoning</td>
<td>Assistant Air Quality Specialist</td>
<td>909-396-3115</td>
<td><a href="mailto:mgamoning@aqmd.gov">mgamoning@aqmd.gov</a></td>
</tr>
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