NOx RECLAIM WORKING GROUP MEETING

JUNE 14, 2018
SCAQMD
DIAMOND BAR, CA

Agenda

- Rule Updates
  - PAR 1146 Series/PR 1100
  - PR 1118.1
  - PAR 1134
  - PAR 1135
  - PR 1109.1
  - PAR 1110.2
- Public comments received
- Proposed amendments to Rules 2001/2002
  - BARCT Compliance plans
  - Opt-out provisions
  - Option to remain in RECLAIM
UPDATE ON PROPOSED RULES AND PROPOSED AMENDED RULES

Upcoming Working Group Meetings

<table>
<thead>
<tr>
<th>Proposed Amended Rules 1146, 1146.1, 1146.2 and Proposed Rule 1100</th>
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<tr>
<td>• Working Group Meeting #5</td>
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<td>Late June 2018</td>
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<table>
<thead>
<tr>
<th>Proposed Rule 1109.1</th>
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<tr>
<td>• Working Group Meeting #2</td>
</tr>
<tr>
<td>June 14, 2018</td>
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<td>2 PM</td>
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<table>
<thead>
<tr>
<th>Proposed Amended Rule 1110.2</th>
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<tr>
<td>• Working Group Meeting #1</td>
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<tr>
<td>June 28, 2018</td>
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<tr>
<td>1:30 PM</td>
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Upcoming Working Group Meetings

<table>
<thead>
<tr>
<th>Proposed Amended Rule 1135</th>
<th>Proposed Amended Rule 1134</th>
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<tr>
<td>• Working Group Meeting #4 July 2018</td>
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PAR 1146 Series and PR 1100

- Staff is continuing work on BARCT assessment for affected units
- Staff is conducting further evaluation of BARCT levels
- Received comments at the May 4 Set Hearing regarding BARCT analysis
- Board delayed Set Hearing
- Next Working Group Meeting scheduled for the end of June 2018
- Public Hearing currently scheduled for December 2018
PR 1118.1 - Control of Emissions from Non-Refinery Flares

- Preliminary rule concepts released on March 4, 2018
- Received nine comment letters
- Met with key stakeholders
  - Southern California Alliance of Publicly Owned Treatment Works (SCAP)
  - Western States Petroleum Association (WSPA)
  - Eastern Municipal Water District
  - City of San Bernardino
- Sixth Working Group Meeting held June 12, 2018
  - Based on stakeholder input, revised initial rule concepts
  - Discussed alternative rule concepts and other proposed provisions
- Public Hearing scheduled for November 2, 2018

PAR 1134 – Emissions of Oxides of Nitrogen from Stationary Gas Turbines

- Third Working Group Meeting held June 13, 2018 and discussed:
  - BARCT analysis
  - Cost effectiveness
  - Recommended emission limits based on BARCT analysis
  - Monitoring, Reporting, and Recordkeeping
- Fourth Working Group Meeting scheduled for July 2018
- Public Hearing scheduled for 2019
<table>
<thead>
<tr>
<th>PAR 1135 – Emissions of Oxides of Nitrogen from Electric Power Generating Systems</th>
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<tr>
<td>- Third Working Group Meeting held June 13, 2018 and discussed:</td>
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<tr>
<td>- BARCT analysis</td>
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<tr>
<td>- Cost effectiveness</td>
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<tr>
<td>- Recommended emission limits based on BARCT analysis</td>
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<tr>
<td>- Monitoring, Reporting, and Recordkeeping</td>
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<tr>
<td>- Fourth Working Group Meeting scheduled for July 2018</td>
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<td>- Public Hearing scheduled for October 2018</td>
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<table>
<thead>
<tr>
<th>PR 1109.1 – Refinery Equipment</th>
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<tr>
<td>- First Working Group Meeting held February 21, 2018</td>
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<td>- Worked with stakeholders to establish the format for a survey questionnaire of detailed information on equipment and pollution controls</td>
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<td>- Survey questionnaire spreadsheets pre-populated with data and sent to 17 affected refineries</td>
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<tr>
<td>- NOx emissions data analysis and initial BARCT level identification in progress</td>
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<tr>
<td>- Next Working Group Meeting scheduled for June 14, 2018</td>
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</table>
PAR 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines

- First Working Group Meeting scheduled for June 28, 2018
- Items for discussion:
  - Initial rule concepts
  - Universe of sources
  - BARCT analysis

PUBLIC COMMENTS RECEIVED
Recent Comment Letters Received

- Comment Letters have been received from CCEEB, WSPA and Biz Fed
  - Posted on Proposed Rules page
- General summary of comments:
  - Program level CEQA and Socioeconomic analysis should be conducted
  - NSR issues should be resolved before facilities transition out of RECLAIM
  - Individual rulemaking is considered piecemealing of the project
  - MRR requirements should provide flexibility in meeting command-and-control rules

CEQA/Socioeconomic Assessments

- Comments
  - Program level CEQA and Socioeconomic assessments need to be conducted
  - CEQA and Socioeconomic assessments stemming from CMB-05 of the 2016 AQMP are insufficient to apply to the RECLAIM Transition project
- Response
  - The CEQA Program Impact Environmental Report (PEIR) analysis for the 2016 AQMP includes the RECLAIM Transition
  - SCAQMD will continue to evaluate each RECLAIM transition rule that is developed to determine if any additional CEQA review is required
CEQA/Socioeconomic Assessments

- **Response (continued)**
  - Additional CEQA analysis could include the preparation of a project level EIR or Subsequent EIR to the PEIR
  - The PEIR addressed the environmental impacts of implementing CMB-05, including the impacts from installation and operation of control equipment pertaining to the RECLAIM Transition project, which represents the convergence of a market structure with a command-and-control structure
  - The Final Socioeconomic Report for the 2016 AQMP fully analyzed the socioeconomic impacts for the 2016 AQMP, which includes the entire RECLAIM transition project

New Source Review (NSR)

- **Comments**
  - NSR should be determined before facilities transition out of RECLAIM
    - Uncertainty about permit transition requirements and effect of changes on operations
    - RTCs should be able to cover any offsets
    - Concerns with NSR equivalency, SIP, ERCs

- **Responses**
  - The Draft Transition Plan states that staff will not issue Final Determination Notifications to facilities to transition out of RECLAIM until NSR issues are resolved
  - Staff is currently working with stakeholders and EPA to address all NSR issues related to the RECLAIM transition
  - Staff is also introducing an option for facilities to remain in RECLAIM until these matters are resolved
Piecemealing

- **Comments**
  - Individual rulemaking without an all-inclusive transition plan is concerning and makes it difficult for facilities to create a comprehensive plan
  - Fragmented rulemaking is piecemealing of the project and is forbidden by CEQA
- **Responses**
  - The Draft Transition Plan document was made available to the public on March 8, 2018
  - Streamlined environmental review pursuant to a Program EIR is allowed and is not considered piecemealing

Monitoring, Reporting and Recordkeeping (MRR)

- **Comments**
  - Title V permits would require modifications
  - MRR requirements should provide flexibility in meeting command-and-control rules
    - Concerns about daily reporting and reporting cycles
- **Responses**
  - Facilities with Title V permits will maintain the RECLAIM MRR requirements with possible changes to reporting frequency
  - When MRR requirements in the command-and-control rules and RECLAIM are similar, the command-and-control MRRs will be used
    - Other differences will require further assessment
PROPOSED AMENDMENTS TO RULES 2001/2002

Proposed Amendments to Rule 2001

- Developing two provisions for transitioning facilities from RECLAIM to command-and-control
  - BARCT Compliance Plan – Transition approach for facilities with equipment where there is no current or planned landing rule
  - Opt-out Provision – Provision for facilities that meet specific criteria to opt-out of RECLAIM before an Initial Determination Notification is sent
Overview for BARCT Compliance Plan

- Key elements of provisions for BARCT Compliance Plan
  - Applicability
  - Initiating use
  - Required elements
  - Submittal and evaluation
  - Approval/Denial
  - Implementation

Applicability of BARCT Compliance Plan

- Purpose of the BARCT Compliance Plan is to establish the BARCT requirements that otherwise would have been achieved through a command-and-control landing rule
- Preference is to address BARCT requirements through command-and-control landing rules - approach recognizes unique situations
- Some equipment may not have landing rules because the equipment or the use of the equipment is unique
- Use of BARCT Compliance Plans are limited to those facilities with equipment without a current or proposed landing rule for some or all of their equipment
Initiating Use of a BARCT Compliance Plan

- Use of a BARCT Compliance Plan can be initiated by:
  - Executive Officer; or
  - Facility
- Facility would provide basic information pertaining to its equipment
  - e.g., equipment description, control technology, emissions data, cost data, etc.
- Executive Officer would verify that the facility meets the criteria for use of a BARCT Compliance Plan and will notify the facility
- Upon verification by the Executive Officer, a BARCT Compliance Plan can be submitted by the facility

Elements of BARCT Compliance Plan

- BARCT Compliance Plan must include the following information:
  - Description of all RECLAIM equipment at the facility
  - Proposed NOx limits for each device
  - Proposed method of NOx control for each device
  - Implementation schedule for all RECLAIM NOx sources, including permit application submittal deadlines
  - Proposed MRR for each device
Submittal and Evaluation of a BARCT Compliance Plan

- A BARCT Compliance Plan would be:
  - Submitted with Form 400-A; and
  - Subject to Rule 306 plan fees
- Upon submittal, staff will conduct evaluations for RECLAIM equipment without landing rules for the following:
  - Available control technology
  - BARCT emission level
  - Cost effectiveness
  - Implementation schedule
  - MRR requirements
- Staff will meet with facilities and discuss the BARCT Compliance Plan requirements throughout the evaluation process

Approval/Denial of BARCT Compliance Plan

- Executive Officer will review and approve the BARCT Compliance Plan based on the following criteria:
  - RECLAIM equipment has BARCT limits
  - Permit application submittal dates demonstrate the earliest feasible compliance dates
  - Implementation schedules demonstrate the earliest feasible compliance date for all RECLAIM equipment
  - Proposed MRR requirements reflect those in command-and-control or equivalent
- If approved, facility will be required to implement all provisions of the BARCT Compliance Plan (further explanation on next slide)
- If denied, facility must revise and resubmit the BARCT Compliance Plan, addressing the deficiencies identified by the Executive Officer
- After a second denial of a BARCT Compliance Plan, the Executive Officer will issue a BARCT Compliance Plan that will be enforceable
Implementation of BARCT Compliance Plan

- BARCT Compliance Plan would be enforceable and contain conditions for:
  - NOx BARCT levels
  - Implementation schedule for installation of BARCT (including permit application deadlines)
  - MRR provisions
- Modifications to the BARCT Compliance Plan can be made under certain specific circumstances
  - e.g., changing the control technology as long as it can achieve the same BARCT level of control

Overview of RECLAIM Transition Process w/ BARCT Compliance Plan

1. The Executive Officer notifies the facility that a BARCT Compliance Plan is required
2. Facility notifies SCAQMD that the facility requires a BARCT Compliance Plan
3. Facility provides SCAQMD with basic equipment information
4. The Executive Officer reviews facility equipment and notifies the facility if it meets the requirements to submit a BARCT Compliance Plan
5. Facility submits BARCT Compliance Plan
6. The Executive Officer approves or denies the BARCT Compliance Plan
7. Denied: Facility revises the BARCT Compliance Plan and resubmits within a certain time period
8. Denied: The Executive Officer issues enforceable BARCT Compliance Plan
9. Initial Determination Notification: Executive Officer sends the facility an Initial Determination Notification (R2002 (f)(6))
10. Approved: The BARCT Compliance Plan becomes enforceable
Overview for Opt-Out Provisions

- Key elements of opt-out provisions
  - Opt-out provisions
  - Need for opt-out
  - Criteria for opt-out
  - Approval process for opt-out requests


- Adding provision to allow facilities that meet specific criteria to exit RECLAIM through an opt-out process
- Existing opt-out provisions are currently contained in Rule 2001(g) [Exit from RECLAIM]
  - These were adopted for the 2015 RECLAIM amendments
  - Applies only to EGFs
  - Involves an approval/denial process based on defined criteria
    - These criteria would not apply today due to the sunset of the RECLAIM program
Need for Opt-Out Provisions

- Initial Determination Notifications for first set of RECLAIM facilities identified facilities that generally met the criteria for opt-out provision.
- Some facilities may not have been identified to transition out of RECLAIM because:
  - Previously non-compliant equipment has been either retrofitted, replaced, or removed.
  - Previously shutdown equipment has been removed from the facility permit.
- Opt-out provision provides a pathway for these facilities to exit RECLAIM.


- Facilities would be eligible to opt-out upon notifying the Executive Officer if they meet the following criteria:
  - Facility has no NOx equipment and, therefore, no NOx emissions; or
  - Facility has NOx emissions from Rule 219 equipment, equipment that is subject to various location permits, or unpermitted equipment; and/or
  - NOx emissions from RECLAIM source equipment (Major Source, Large Source, or Process Unit) meets current command-and-control BACT; and
  - All applicable landing rules have been amended.
Approval Process for Opt-Out Requests

- Proposed opt-out provisions would also be contained in Rule 2001(g) (Exit from RECLAIM)
- Facility that elects to opt-out would be required to submit a request to opt-out
- Request to opt-out must include:
  - Demonstration that facility meets the criteria to opt-out
  - List of all applicable NOx equipment and the NOx emission limit and mass emissions
  - If applicable, evidence that existing NOx equipment is no longer operating
  - Identification of applicable landing rules, if any
  - RECLAIM equipment emission levels and applicable landing rules would be evaluated by the Executive Officer upon receipt of an opt-out request from the facility
- The Executive Officer shall approve or deny the opt-out request and notify the facility if facility meets the criteria for opting out
  - If approved, the facility would be issued an Initial Determination Notification, and would be subject to the requirements of Rule 2002(f)(6) through (f)(9)
  - If denied, the facility would remain in RECLAIM

Overview of RECLAIM Transition Process w/ Opt-Out

<table>
<thead>
<tr>
<th>Opt-Out</th>
<th>Executive Officer reviews facility information and conducts evaluation</th>
<th>Executive Officer approves or denies the request to exit upon evaluation</th>
<th>Facility Remains in RECLAIM</th>
<th>Initial Determination Notification</th>
<th>Does the facility meet the criteria for being transitioned out of RECLAIM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility submits request to opt-out of RECLAIM</td>
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<td></td>
<td>Executive Officer sends facility an Initial Determination Notification</td>
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<table>
<thead>
<tr>
<th>Executive Officer reviews facility information and conducts evaluation</th>
<th>Equipment Confirmation</th>
<th>Final Determination Notification</th>
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<tbody>
<tr>
<td></td>
<td>Facility confirms all RECLAIM NOx equipment including R219 equipment within 45 days</td>
<td>Executive Officer sends facility a Final Determination Notification</td>
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</tbody>
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<table>
<thead>
<tr>
<th>RTC use, sales, or transfers prohibited until all requested information is submitted</th>
<th>Did facility submit information within 45 days of Initial Determination Notification?</th>
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<tbody>
<tr>
<td>No</td>
<td>Yes</td>
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</table>

| Facility submits information – Did facility submit correct information within timeframe specified by Executive Officer? Is information submitted complete? |
|-------------------------------------------------|---------------------------------|
| Yes | Yes |

RTC use:
- Only RTCs in that current year can be sold or transferred
- Future year holdings cannot be sold or transferred
Proposed Amendments to Rule 2002

- Developing provisions to provide facilities the option to remain in RECLAIM subsequent to receiving an Initial Determination Notification
- Allows facilities to remain in RECLAIM while staff resolves issues pertaining to the transition

Remaining in RECLAIM

- Upon receiving an Initial Determination Notification, a facility would notify the District of its request to remain in RECLAIM
- Facilities would remain in the RECLAIM program until it is officially sunsetted, or some time before based on the status of the program
- Facilities would still be subject to any implementation schedules for BARCT that are contained in Rule 1100 while remaining in RECLAIM
Overview of RECLAIM Transition Process w/ Option to Remain in RECLAIM

Initial Determination Notice
Executive Officer sends facility an Initial Determination Notification

Equipment Confirmation
Facility confirms all RECLAIM NOx equipment including R219 equipment within 45 days

RTC Use
- Only RTCs in that current year can be sold or transferred
- Future year holdings cannot be sold or transferred

Facility Remains in RECLAIM
Executive Officer notifies facility will not be transitioned out of RECLAIM

Does the facility meet the criteria for being transitioned out of RECLAIM?

RTC Use
Facility submits request to remain in RECLAIM

Is information submitted complete?

Facility submits information – Did facility submit correct information within timeframe specified by Executive Officer?

Opt-Out
Facility submits request for opt-out

BARCT Compliance Plan
Facility follows procedures for submitting a plan

Executive Officer Review
DENIED

Executive Officer Review
APPROVED

After 2 denials, the Executive Officer issues a BARCT Compliance Plan

Does facility meet the criteria for exiting?

Facility Remains in RECLAIM

Does facility meet the criteria for exiting?

Final Determination Notification
Facility submits request to remain in RECLAIM

Option to Remain in RECLAIM
Executive Officer notifies facility will not be transitioned out of RECLAIM

Overview of RECLAIM Transition Process
Rule 2001/2002 Development Schedule

<table>
<thead>
<tr>
<th>July 20, 2018</th>
<th>July 2018</th>
<th>Sept. 7, 2018</th>
<th>Oct. 5, 2018</th>
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<tbody>
<tr>
<td>Stationary Source Committee Meeting</td>
<td>Public Workshop</td>
<td>Set Hearing</td>
<td>Public Hearing</td>
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Contacts

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<tr>
<th>General RECLAIM Questions</th>
<th>Proposed Amended Rules 1146, 1146.1, 1146.2 and Proposed Rule 1100</th>
<th>Proposed Rule 1109.1</th>
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<tbody>
<tr>
<td>Gary Quinn, P.E. Program Supervisor 909-396-3121 <a href="mailto:gquinn@aqmd.gov">gquinn@aqmd.gov</a></td>
<td>Gary Quinn, P.E. Program Supervisor 909-396-3121 <a href="mailto:gquinn@aqmd.gov">gquinn@aqmd.gov</a></td>
<td>Heather Farr Program Supervisor 909-396-3672 <a href="mailto:hfarr@aqmd.gov">hfarr@aqmd.gov</a></td>
</tr>
<tr>
<td>Kevin Orellana Program Supervisor 909-396-3492 <a href="mailto:korellana@aqmd.gov">korellana@aqmd.gov</a></td>
<td>Kalam Cheung Program Supervisor 909-396-3281 <a href="mailto:kcheung@aqmd.gov">kcheung@aqmd.gov</a></td>
<td>Jong Hoon Lee Air Quality Specialist 909-396-3903 <a href="mailto:jhlee@aqmd.gov">jhlee@aqmd.gov</a></td>
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# Contacts

<table>
<thead>
<tr>
<th>Proposed Rule 1118.1</th>
<th>Proposed Amended Rule 1135</th>
<th>Proposed Amended Rule 1134</th>
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<tbody>
<tr>
<td>• Heather Farr</td>
<td>• Michael Morris</td>
<td>• Michael Morris</td>
</tr>
<tr>
<td>Program Supervisor</td>
<td>Planning and Rules Manager</td>
<td>Planning and Rules Manager</td>
</tr>
<tr>
<td>909-396-3672</td>
<td>909-396-3282</td>
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<tr>
<td><a href="mailto:hfarr@aqmd.gov">hfarr@aqmd.gov</a></td>
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<tr>
<td>• Steve Tsumura</td>
<td>• Uyen-Uyen Vo</td>
<td>• Uyen-Uyen Vo</td>
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<tr>
<td>Air Quality Specialist</td>
<td>Air Quality Specialist</td>
<td>Air Quality Specialist</td>
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<tr>
<td>909-396-2549</td>
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