Regulation XIII – New Source Review

Working Group Meeting
February 18, 2021

Join Zoom Meeting
https://scaqmd.zoom.us/j/97332779341
Meeting ID: 973 3277 9341
Passcode: 945220
Teleconference Dial-In: 1-669-900-6833
Agenda

- Previous Working Group Summary
- Status of NSR Issues
- Proposed Amended Rule 1304
- Overall Structure and Implementation for Offsets
Previous Working Group Meeting Summary

- Capacity Utilization for Quantification of Offsets Without Records
  - Proposed to use 70% of the Potential to Emit
- Generation of ERCs for the Open Market
  - Proposed no interruption in the ability to generate ERCs for the Open Market
- Responses to Regulation XIII Comment Letters
  - Proposed to incorporate federal NSR by reference
  - Will not include permit limits for projected actual emissions
- Co-Pollutant Strategy
  - Proposed a BACT exemption for non-ozone precursor emission increases associated with air pollution control equipment installations to comply with NOx BARCT standards
Status of NSR Issues

Transitionsing Facilities Out of RECLAIM
- Regulatory Requirements Needed Prior to the RECLAIM Transition
- Is a facility's transition out of RECLAIM an NSR event?

Demonstrations Post-RECLAIM
- SIP Commitment for 12 tpd RTC Shave
- On-Going RTC Holding Requirement for Rule 2005
- 2015 SIP Commitment for CMB-05

NSR Applicability Test for Major Source Modifications
- NSR Applicability Test

Offset Calculation for Major Source Modifications
- Offset Calculation for Existing Post-NSR Major Sources

Offset Calculation for Existing Post-NSR Major Sources
- Minor and Major Source Banks
  - Open Market
  - Internal Bank
  - Overall Structure and Implementation
  - ERC and Offset Calculation Methodology

Regulation XIII Post-RECLAIM Offsets
- Ammonia Slip Requirements for SCR
- PM BACT Applicability for SCR Projects

Topics discussed at prior Working Group Meetings (Does not mean consensus)
Topics will be discussed in today's Working Group Meeting
Regulation XIII Offsets Post-RECLAIM

**Topics discussed at prior Working Group Meetings (Does not mean consensus):**
- Minor and Major Source Banks
- Open Market
- Internal Bank
- Overall Structure and Implementation
- ERC and Offset Calculation Methodology

**Topics will be discussed in today’s Working Group Meeting:**
- Quantification of Offsets without Records
- Conversion of RTCs to ERCs
- Fee for Generating ERC
- Surplus Discounting
- Interaction between Open Market, Internal Bank, Minor Source Bank and Major Source Bank
- Ensuring offsets meet federal integrity tests

* Will revisit application of usage factor
Background and Purpose

- Adopted in October 1979 and last amended in June 1996
- Rule 1304 exempts specific sources from the modeling requirement of Rule 1303 (b)(1) and offsetting requirement of Rule 1303 (b)(2)
- Currently, Rule 1304 does not exempt any sources from BACT
PAR 1304 – Approach

- Staff is proposing to add a narrow BACT exemption for non-ozone precursor emission increases associated with air pollution control equipment installations to comply with NOx BARCT standards.
- Other air districts in California have a similar BACT exemption for sources that are complying with a BARCT requirement.
- Projects such as installation of Selective Catalytic Reduction (SCR) projects apply to the largest combustion equipment and have the potential to reduce NOx emissions by 95 percent:
  - NOx reductions are needed to achieve state and federal ambient air quality standards.
  - Increases in non-ozone precursors such as PM are expected to be relatively low, but can cost over $100 million.
  - Any increases in non-ozone precursors must be below federal modification thresholds.
The exemption will be limited to:

- Projects that are being implemented to comply with a rule that establishes a BARCT emission limit for an ozone precursor
- RECLAIM or former RECLAIM facilities that are complying with a BARCT emission limit that is part of the transition from RECLAIM to command-and-control regulatory structure
- Non-ozone precursor emission increases
- Projects must be below the federal NSR thresholds
  - For major sources over 70 tons per year, the major modification thresholds are 15 ton per year for PM10 and 10 tons per year for PM2.5

The exemption will not apply to:

- Increases in total capacity or utilization (including hours and throughput)
- Additional improvements or upgrades not for BARCT compliance
- Ammonia emissions associated with installation of SCR
PAR 1304 – Proposed Rule Language

(f) BACT Exemptions

A RECLAIM NOx facility or a former RECLAIM NOx facility that is transitioning from a RECLAIM regulatory structure to a command-and-control regulatory structure shall be exempt from the BACT requirement of Rule 1303 (a)(1) for non-ozone precursors, except for ammonia emissions, provided:

1. The facility installs or modifies an emission control device solely to comply with South Coast AQMD command-and-control NOx BARCT rules;

2. There is no increase in maximum rating or permitted operating schedule of the source;

3. There is no increase in the physical or operational design of the existing facility, except for those changes to the design needed for the installation or modification of the emission control device itself;

4. Emissions from the source, by itself, do not cause an exceedance of any ambient air quality standards; and

5. The project does not constitute a federal major modification.
Which scenarios will the co-pollutant BACT exemption apply to?

Will the co-pollutant BACT exemption apply to projects with pending applications?

What happens if a PM increase is exempt from BACT, but the facility has an existing PM limit that may not account for the emission increase?
Facility Upgrade Projects

- Which scenarios will the co-pollutant BACT exemption apply to?
- Intent is to allow replacement of sources with variable number of sources as long as there is no increase in total capacity
- Increase will be evaluated under the federal applicability test
- Project scenarios that meet the intent (*replacement with no increase in total capacity*) and used to comply with a NOx BARCT standard will be acceptable:
  - Scenario 1: Facility installs SCR and replaces an existing boiler with a replacement boiler - **ACCEPTABLE**
  - Scenario 2: Facility installs SCR and replaces two existing small boilers with one large replacement boiler with no increase in total capacity - **ACCEPTABLE**
  - Scenario 3: Facility installs SCR and replaces an existing boiler with two or more boilers with no increase in total capacity - **ACCEPTABLE**
  - Scenario 4: Facility installs SCR and replaces two or more boilers with two or more boilers with no increase in total capacity - **ACCEPTABLE**
Co-pollutant BACT Exemption for Pending Applications

- Will the co-pollutant BACT exemption apply to projects with pending applications?
  - Pending projects needed to comply with proposed NOx BARCT standard as part of the RECLAIM transition should be eligible
  - Pending projects are those where the application has not been deemed complete prior to public workshop for Rule 1304
Existing PM Limits

What happens if a PM increase is exempt from BACT, but the facility has an existing PM limit that may not account for the emission increase?

Staff initial thoughts are:

- Existing PM limits will need to be evaluated on a case-by-case basis
  - Past permitting actions or other regulatory requirements, such as BACT limits, might require maintaining existing limits in some form
- Considering separate permit limits for the PM increase exempt from BACT to ensure modification does not exceed the federal NSR thresholds or other regulatory requirements
## Schedule for PAR 1304

- Scheduled for a Public Hearing in June 2021 to accompany PR 1109.1
- Provide draft rule language at March Working Group Meeting

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
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<tbody>
<tr>
<td>Public Workshop</td>
<td>Mid-March 2021</td>
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<tr>
<td>Stationary Source Committee</td>
<td>April 16, 2021</td>
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<tr>
<td>Set Hearing</td>
<td>May 7, 2021</td>
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<tr>
<td>Public Hearing</td>
<td>June 4, 2021</td>
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Overall Structure and Implementation for Offsets

- Staff previously discussed concepts for a Large Source Bank to ensure sufficient offsets post-RECLAIM
- Instead of a Large Source Bank, staff is proposing a:
  - Major Source Bank that only Major Source Projects can access
  - Minor Source Bank that only Minor Source Projects can access
- Proposed Minor Source Bank and Major Source Bank will be managed by South Coast AQMD and provide NOx, SOx, and PM10 offsets
Offsets for Minor and Major Sources

- Based on discussions with U.S. EPA, Major Sources can only use offsets generated from emission decreases with supporting emissions data.
- Minor Sources can use a quantification approach based on a percentage of the Permit to Emit or offsets generated from emission decreases with supporting data.
- In order to separate the use of offsets between Major and Minor Source, staff is proposing to establish a Minor Source Bank and a Major Source Bank.
  - Proposed banks would be a source of offsets post-RECLAIM in addition to the existing Internal Bank and Open Market.
Federal NSR Major Source

- Major Source under Federal NSR is
  - A new Major Polluting Facility\(^1\); and
  - A Major Modification\(^2\) at a Major Polluting Facility

- If a Minor Polluting Facility has a modification that exceeds the Major Polluting Facility thresholds, the modification would be a Major Source Project and the facility would become a Major Polluting Facility

- Federal Major Source for nonattainment NSR is pollutant specific

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Major Polluting Facility Potential to Emit Thresholds</th>
<th>Major Modification Significant Emission Thresholds</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO(_x)</td>
<td>≥10 tons per year</td>
<td>≥0.5 pound per day</td>
</tr>
<tr>
<td>SO(_x)</td>
<td>≥70 tons per year</td>
<td>≥40 tons per year</td>
</tr>
<tr>
<td>PM(_{10})</td>
<td>≥70 tons per year</td>
<td>≥15 tons per year</td>
</tr>
</tbody>
</table>

\(^1\) Federal NSR uses Major Stationary Source as defined in 40 CFR 51.165(a)(1)(iv)
\(^2\) Major Modification is defined in 40 CFR 51.165(a)(1)(v)
### Minor and Major Source Projects

- A project at a **Minor Polluting Facility**, will be a Major Source Project if the permitting project **exceeds the Major Polluting Facility Thresholds**
- A project at a **Major Polluting Facility**, will be a Minor Source Project if the permitting project **is less than the Major Modification Significant Emissions Thresholds**

<table>
<thead>
<tr>
<th>Facility</th>
<th>Modification Potential to Emit</th>
<th>Minor or Major Source Projects Based on Federal NSR Thresholds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor Polluting Facility</td>
<td>Less than <strong>Major Polluting Facility Thresholds</strong></td>
<td>Minor Source Project</td>
</tr>
<tr>
<td></td>
<td>Greater than or equal to <strong>Major Polluting Facility Thresholds</strong></td>
<td>Major Source Project</td>
</tr>
<tr>
<td>Major Polluting Facility</td>
<td>Less than <strong>Major Modification Significant Emissions Thresholds</strong></td>
<td>Minor Source Project</td>
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<tr>
<td></td>
<td>Greater than or equal to <strong>Major Modification Significant Emissions Thresholds</strong></td>
<td>Major Source Project</td>
</tr>
</tbody>
</table>
Access to Offsets Managed by South Coast AQMD

- Eligible Minor and Major Sources will access Internal Bank I-ERCs:
  - Projects at a Minor or Major Polluting Facility eligible through:
    - Priority Reserve (Rule 1309.1)
    - Essential Public Services
    - Exempt from offsetting (Rule 1304)
      - Facilities w/ PTE < 4 tons per year
      - Facility w/ PTE ≥ 4 tons per year listed under Rule 1304 categories

- Only Minor Source Projects will access Minor Source Bank Mi-ERCs:
  - Projects that are Minor Sources at a Minor or Major Polluting Facility that are not eligible to use I-ERCs

- Only Major Source Projects will access Major Source Bank Ma-ERCs:
  - Projects not eligible to use I-ERCs or Mi-ERCs that are:
    - A new Major Polluting Facility
    - Modifications that are Major Sources at a Minor or Major Polluting Facility
Interaction between Open Market, Internal Bank, Minor Source Bank, and Major Source Bank

Open Market (ERCs)
- **Access**: Available to all sources
- **Usage fee**: ERC cost based on market value

Internal Bank (I-ERCs)
- **Access**: Sources exempt from offsetting (Rule 1304)
  - Facilities w/ PTE <4 tpy
  - Priority Reserve (Rule 1309.1)
  - Essential Public Services
- **Usage fee**: No Fee

Minor Source Bank (Mi-ERCs)
- **Access**: Minor Source Projects not eligible to use I-ERCs
  - Includes minor modifications at Major Polluting Facilities
- **Usage fee**: Fee to be determined

Major Source Bank (Ma-ERCs)
- **Access**: Major Source Projects not eligible to use I-ERCs or Mi-ERCs
- **Usage fee**: Fee to be determined
Seeding for the Proposed Banks

- Since there is a sufficient supply of offsets in the Internal Bank, staff is proposing to temporarily stop I-ERCs into the Internal Bank.

- All new emission decreases from orphan reductions or shutdowns will be used to seed either the Minor Source Bank or the Major Source Bank.

- Offsets will be directed based on how they were quantified:
  - Orphan reductions without records will go to the Minor Source Bank.
  - Orphan reductions with supporting data will go to the Major Source Bank.

- Offsets for the Major Source Bank can be generated from emission decreases with supporting data from both Minor and Major Polluting Facilities.
Directing Offsets Between Banks

- Once a sufficient supply of Ma-ERCs are generated (after the first 5 years) deposits into the Internal Bank will resume
  - Offsets without supporting data will be split between the Minor Source Bank and the Internal Bank
  - All emission decreases with supporting emissions data will be directed to the Major Source Bank
- After the seeding period, emission decreases with supporting data could be used for any bank as needed
- Amounts directed to each bank will be assessed periodically to ensure offset availability

<table>
<thead>
<tr>
<th>Bank Managed by South Coast AQMD</th>
<th>First Five Years</th>
<th>After First Five Years</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal Bank</strong>&lt;br&gt;(Eligible Minor and Major Source Projects)</td>
<td>Suspend deposits to direct all orphan reductions without records to the Minor Source Bank</td>
<td>Use a portion of the orphan reductions without records</td>
</tr>
<tr>
<td><strong>Minor Source Bank</strong>&lt;br&gt;(Minor Source Projects only)</td>
<td>Use all orphan reductions without records</td>
<td>Use a portion of the orphan reductions without records</td>
</tr>
<tr>
<td><strong>Major Source Bank</strong>&lt;br&gt;(Major Source Projects only)</td>
<td></td>
<td>Use all orphan reductions with records</td>
</tr>
</tbody>
</table>
### Key Features of the Open Market, Internal Bank, Minor Source Bank, and Major Source Bank

<table>
<thead>
<tr>
<th>Offset Name</th>
<th>Open Market (ERCs)</th>
<th>Internal Bank (I-ERCs)</th>
<th>Minor Source Bank (Mi-ERCs)</th>
<th>Major Source Bank (Ma-ERCs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pollutants</td>
<td>VOC, NOx, SOx, and PM10</td>
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<td>NOx, SOx, and PM10</td>
</tr>
<tr>
<td>Access</td>
<td>All sources</td>
<td>▪ Sources exempt from offsetting (Rule 1304) ▪ Priority Reserve (Rule 1309.1)</td>
<td>▪ Minor Source Projects not eligible to use I-ERCs</td>
<td>▪ Major Source Projects not eligible to use I-ERCs or Mi-ERCs</td>
</tr>
<tr>
<td>Generation Fee</td>
<td>▪ $4,800 for non-Title V ▪ $6,000 for Title V</td>
<td>No fee</td>
<td>No fee</td>
<td>No fee</td>
</tr>
<tr>
<td>Use Fees</td>
<td>Market price of ERC</td>
<td>No fee</td>
<td>Fee (to be established)</td>
<td>Fee (to be established)</td>
</tr>
<tr>
<td>How Offsets are Accessed</td>
<td>Open Market w/ buyers &amp; sellers</td>
<td>Provided by South Coast AQMD</td>
<td>Provided by South Coast AQMD</td>
<td>Provided by South Coast AQMD</td>
</tr>
<tr>
<td>How Offset Generated</td>
<td>ERC application</td>
<td>Any orphan reductions</td>
<td>Any orphan reductions</td>
<td>Only orphan reductions with supporting data</td>
</tr>
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Working Group Meeting Summary

▪ Proposed Amended Rule 1304 Rule Development
  ▪ Adding a narrow BACT exemption for non-ozone precursor emission increases associated with air pollution control equipment installations to comply with NOx BARCT standards

▪ Overall Structure and Implementation for Offsets
  ▪ Offsets for Minor and Major Sources
  ▪ Seeding for the proposed banks
Next Steps

▪ Continue rule development for PAR 1304
  ▪ Public Workshop will be held in mid-March
  ▪ Public Hearing scheduled for June 4, 2021 to accompany PR 1109.1
▪ Continue working on key aspects for the proposed Minor and Major Source Banks
▪ Staff will continue working with U.S. EPA, CARB, and stakeholders to resolve NSR issues
## Contacts

### General Questions

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### General RECLAIM Questions

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### New Source Review

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