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



Non-Refinery Flares

 Public Hearing: January 2019



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

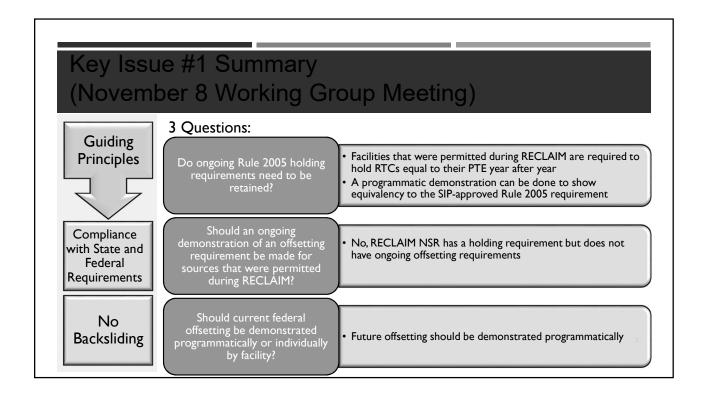
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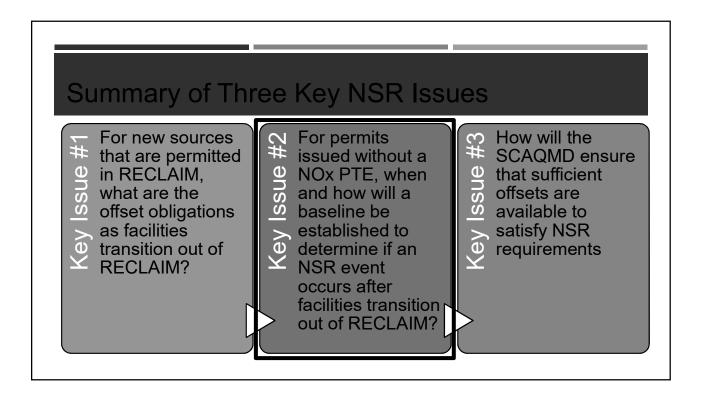


Monitoring, Reporting, and Recordkeeping

- Integrated MRR requirements for:
 - Former RECLAIM
 - Possibly non-RECLAIM
- · Initiated preliminary analysis
- Comparing District and Federal requirements
- · Conducted five site visits

UPDATE ON NEW SOURCE REVIEW





Permitting under Regulation XIII versus RECLAIM NSR RECLAIM NSR REgulation XIII

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 <u>lbs/day</u>

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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

	PTEs Non-RECLAIM	PTEs RECLAIM
Permits issued Pre-1976 (Pre-Regulation XIII NSR)	No PTE	Same
Permits issued 1976-1993 (Post-NSR to Pre-RECLAIM)	PTE in lbs/day	Same
Permits issued Post 1993 (During RECLAIM)		PTE lbs/hour
Permits issued Post 1993 (During RECLAIM)		No specified PTE (some cases)

Permits Issued Pre-NSR

Permitted 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:

Post-modification PTE – Actual Emissions (lbs/day)

Baseline PTE

Permits Issued Post-NSR to Pre-RECLAIM

Permitted 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 source have already been established pursuant to Regulation XIII
- Regulation XIII emission increase calculation in lbs/day:

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

Baseline PTE

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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

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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

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Baseline Calculations (continued)

No specified PTE, only concentration limit

Permitted During RECLAIM

- 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

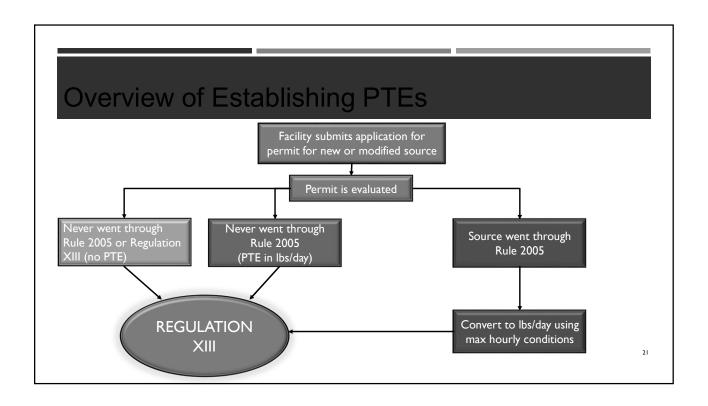
Baseline Calculations (continued)

Permitted During RECLAIM

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

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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

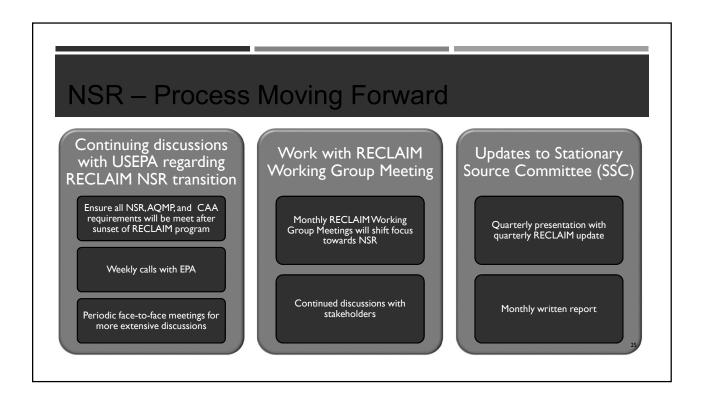
Summary

- 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

How will the SCAQMD ensure that sufficient offsets are available to satisfy NSR requirements

- 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?



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Proposed Amended Rule 1134

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Proposed Amended Rule 1110.2

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New Source Review

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