NOx RECLAIM WORKING GROUP MEETING

FEBRUARY 10, 2022
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MEETING ID: 983 4481 2021

TELECONFERENCE DIAL-IN: 1-669-900-6833

Agenda

- Rulemaking Status on Landing Rules
- NOx RECLAIM Trading Credit (RTC) Threshold Exceeded
- Ongoing Efforts and Next Steps

RULEMAKING STATUS ON LANDING RULES

Rules Under Development



PAR 1147 – Miscellaneous Combustion Sources

Public Hearing: April 1, 2022



PR 1147.2 – Metal Melting and Heating Furnaces

Public Hearing: April 1, 2022



PAR 1153.1 – Commercial Food Ovens

Public Hearing: August 5, 2022



PR 1159.1 – Nitric Acid Processing Tanks

Public Hearing: October 7, 2022

- Rule 429 Startup and Shutdown is being amended to address startup and shutdown provisions at U.S.
 EPA's request
- Rule 218.2 Continuous Emission Monitoring System: General Provisions and Rule 218.3 Continuous Emission Monitoring System: Performance Specifications are being amended to include provisions for monitoring mass emission limits

PAR 1147 – Miscellaneous Combustion Sources

- Working Group Meeting #11 held on January 5, 2022
- Preliminary drafts of staff report and rule language released on January 14, 2022
- Public Workshop held on January 27, 2022
- Stationary Source Committee: February 19, 2022
- Set Hearing : March 4, 2022
- Public Hearing: April 1, 2022



PR 1147.2 – Metal Melting and Heating Furnaces

- Public Workshop held on January 20, 2022
- Discussed background of PR 1147.2, proposed rule concepts, and costeffectiveness of staff's proposal
- Public Hearing: April 1, 2022



PR 1159.1 – Nitric Acid Processing Tanks

- First Working Group Meeting held on August 4, 2021
- Discussed background on RECLAIM and nitric acid tanks
- Public Hearing: October 7, 2022



https://tri-mer.com/tanks/polypro-tanks-case-study.html

PAR 1153.1 – Commercial Food Ovens

- First Working Group Meeting held on July 9, 2021
- Discussed current requirements under Rule 1153.1, BARCT process, and potential RECLAIM sources subject to PAR 1153.1
- Conducting meetings and site visits with stakeholders
- Next Working Group Meeting: February
- Public Hearing: August 5, 2022



Emission Reductions (Tons per Day*)



Rules 1146, 1146.1, 1146.2 – Boilers, Process Heaters, and Steam Generators

0.27



Rule 1135 – Electricity Generating Facilities

1.7



Rule 1118.1 – Non Refinery Flares

0

Rule 1110.2 – Liquid-Fueled and Gaseous Engines

0.29



Rule 1109.1– Refinery Equipment

7.7

Rule 1117 – Container Glass Melting/Sodium Silicate Furnaces

0.57



Rule 1134 – Gas Turbines

1.8



Rule 1147.1 – Aggregate Facilities

|0.04|

Total NOx Reductions = 12.37 tons per day*

^{*} Sum of NOx reductions from RECLAIM facilities only. Some NOx reductions may be attributed to the 2015 RECLAIM shave.

NOX RECLAIM TRADING CREDIT (RTC) THRESHOLD EXCEEDED

NOx and SOx Pricing Report

- Rule 2002 requires reporting of RECLAIM Trading Credit (RTC) pricing on a quarterly basis
 - Three-month and 12-month average RECLAIM Trading Credit prices
 - Pricing compared to thresholds in Rule 2002* and Rule 2015**
- No threshold exceedances reported for NOx or SOx RTC pricing for any category through December 2021
- SOx RTC pricing remains below thresholds in latest report

^{*} Rule 2002 - Allocations for Oxides of Nitrogen (NOx) and Oxides of Sulfur (SOx)

^{**} Rule 2015 - Backstop Provisions

NOx RTC Price Threshold Exceeded

- The Executive Officer is required to report current compliance year prices that exceed the thresholds established in Rule 2002
 - Rule 2002 12-month rolling average threshold is \$22,500* per ton
 - Rule 2002 3-month rolling average threshold is \$35,000* per ton
- January 2022 RTC Price Report shows that 12-month and the 3-month rolling average price thresholds were exceeded

| Compliance Year NOx RTCs | 12-Month Average (\$/ton) | 3-Month Average (\$/ton) |
|-----------------------------|------------------------------|-----------------------------|
| Threshold | 22,500 | 35,000 |
| 2021 | 18,846 | 20,636 |
| 2022 | 33,085 | 38,803 |

^{*} Thresholds established in 2015 and are based on the 2012 AQMP cost-effectiveness threshold of \$22,500 per ton of NOx 12

Factors Contributing to Increasing NOx RTC Price

RTC market is becoming more competitive due to the ongoing implementation of the 2015 NOx shave with the greatest shave (4 tons/day) in 2022

Reductions in emissions (and associated RTC demand) from projects to comply with RECLAIM landing rules have not been fully realized

Most compliance deadlines in landing rules begin in 2023

Unexpected RTC demand from RECLAIM audit program

- RECLAIM Facilities subject to annual audits
- Findings from audit program and reconciliation added demand for over 58 tons of Compliance Year 2022 NOX RTCs (~ \$1,900,000; ~ \$33,000/ton)
- NOx RTC prices pushed higher for future transactions

Rule 2002 Procedures to Address NOx RTC Price

Report to the Board that NOx RTC price threshold was exceeded

The Board will determine if Non-tradable/Non-usable NOx RTCs shall be converted to Tradable/Usable NOx RTCs*; Non-tradable/Non-usable NOx RTCs are not available after 2022

Conduct an assessment of the RECLAIM Program including control technology implementation and socioeconomic impacts

Complete the assessment before July 1, 2022

Make a report to the Board no later than 90 days from the completion of the assessment

Rule 2015 Procedures to Address NOx RTC Price

Forecasted price exceedance of Rule 2015 will be reported to Board in Annual RECLAIM Report in March 2022

Staff will complete an evaluation and review of the compliance and enforcement aspects of the RECLAIM program

Provide results of the evaluation to the Board

The Board will determine if Rule 2004 –Requirements* requires amendment

The results of the evaluation and recommendations regarding possible Rule 2004 amendment will be sent to CARB and U.S. EPA within six months

Summary of NOx RTC Price Threshold Exceedance

- Compliance Year 2022 NOx RTC price thresholds have been exceeded for Rule 2002, and forecasted to exceed Rule 2015 (to be reported in March)
- Staff will evaluate programmatic and socioeconomic impacts from threshold exceedance
- Staff will report to Board with results of assessments



Continue rulemaking activities

Ongoing Efforts and Next Steps



Continue working with U.S. EPA, CARB, and stakeholders



Monthly RECLAIM and Regulation XIII NSR Working Group Meetings



Quarterly Stationary Source Committee updates

Contacts – RECLAIM & New Source Review

| General Questions | Michael Krause | Assistant Deputy Executive Officer | 909-396-2706 | mkrause@aqmd.gov |
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To receive e-mail notifications for Regulation XX or Regulation XIII, sign up at: www.aqmd.gov/sign-up
To view proposed rules and supporting documentation, visit the South Coast AQMD Proposed Rules webpage at: http://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/proposed-rules

Contacts – Proposed Rules

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