NOx RECLAIM WORKING GROUP MEETING

JULY 23, 2021 JOIN ZOOM WEBINAR MEETING <u>HTTPS://SCAQMD.ZOOM.US/J/98344812021</u> MEETING ID: 983 4481 2021 TELECONFERENCE DIAL-IN: 1-669-900-6833

Agenda

- Rulemaking Status on Landing Rules
- Pending Permit Application Inventory Update
- Western States Petroleum Association (WSPA) Bridge Proposal and Staff's Response
- Ongoing Efforts and Next Steps

RULEMAKING STATUS ON LANDING RULES



Rules Under Development



PR 1147.1 – Aggregate Facilities

Public Hearing: August 6, 2021



PR 1147.2 – Metal Melting and Heating Furnaces

Public Hearing: October 1, 2021



PR 1109.1 – Refinery Equipment

Public Hearing: November 5, 2021



PR 1159.1 – Nitric Acid Processing Tanks

Public Hearing: Second Quarter 2022



PAR 1147 – Miscellaneous Combustion Sources

Public Hearing: January 7, 2022



PAR 1153.1 – Commercial Food Ovens

Public Hearing: February 4, 2022

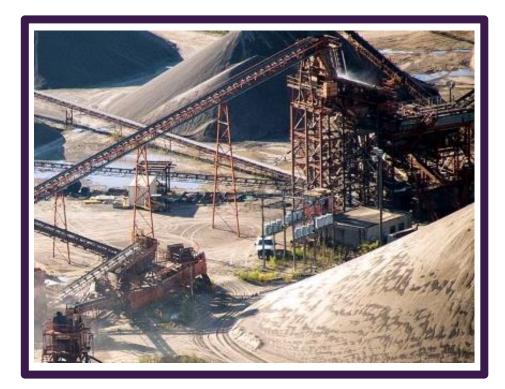
PAR 1147 – Miscellaneous Combustion Sources

- Working Group Meeting #9 held on July 14, 2021
- Staff proposed interim limits for former RECLAIM facilities
- Staff discussed BARCT analysis for autoclaves
- Staff working on completing BARCT analysis for remaining equipment categories
- Next Working Group Meeting: August/September
- Public Hearing: January 7, 2022



PR 1147.1 – Aggregate Facilities

- 30-day Draft Proposed Rule and Staff Report posted on July 2, 2021
- Staff working on Board Package
- Public Hearing: August 6, 2021



PR 1147.2 – Metal Melting and Heating Furnaces

- Working Group Meeting #8 held on July 8, 2021
- Discussed proposed NOx limits for metal heat treating and metal heating and forging
- Staff is re-assessing implementation paths and working with stakeholders regarding radiant tube burner data
- Next Working Group Meeting: Early August
- Public Hearing: October 1, 2021



PR 1109.1 – Refinery Equipment

- Working Group Meeting #23 held on July 14, 2021
- Staff proposed BARCT near limits for FCCUs with existing SCRs, large heaters, and vapor incinerators
- Staff released the third version of proposed rule
- Next Working Group Meeting: July 28, 2021
- Public Hearing: November 5, 2021



PR 429.1 – Start-up and Shutdown of Refinery Equipment

- Working Group Meetings for PR 429.1 are incorporated in the PR 1109.1 Working Group Meetings
- Discussed revised provisions at the May 27, 2021 PR 1109.1 Working Group
- Conducting meetings with stakeholders to address issues and concerns
- Public Hearing: November 5, 2021 (with PR 1109.1)



PR 1159.1 – Nitric Acid Processing Tanks

- Addresses NOx emissions from nitric acid processing tanks
- First Working Group Meeting scheduled for August
- Public Hearing: 2nd Quarter 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
- Public Hearing: February 4, 2022



Adopted/Amended Rules for RECLAIM Transition and NOx Reductions



Total NOx Reductions = 4.63 tons per day*

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

Landing Rules Staff is Revisiting

- Staff is proposing amendments for landing rules that have been adopted or amended to address:
 - Ammonia slip limits
 - Startup and shutdown provisions
 - References to Rules 218.2 and 218.3 for CEMS
- The following rules are scheduled for amendments:
 - Proposed Amended Rule 1134 Emissions of Oxides of Nitrogen from Stationary Gas Turbines (December 2021)
 - Proposed Amended Rule 1135 Emissions of Oxides of Nitrogen from Electricity Generating Facilities (November 2021)
 - Proposed Amended Rule 429 Start-Up and Shutdown Exemption Provisions for Oxides of Nitrogen (Rule 1146 and 1134 units; December 2021)
 - Proposed Rule 429.2 Startup and Shutdown Exemption Provisions for Oxides of Nitrogen (Rule 1135 units; November 2021)

PAR 1304 Preliminary Draft Rule Language Available



Draft rule language for PAR 1304 is available on the Proposed Rule Page for Regulation XIII¹



Staff is seeking feedback and comments on the draft rule language for the proposed amendments to Rule 1304 by August 5th



There will be additional opportunities to comment as the rule development progresses

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¹ <u>http://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/proposed-rules/regulation-xiii/documents</u>

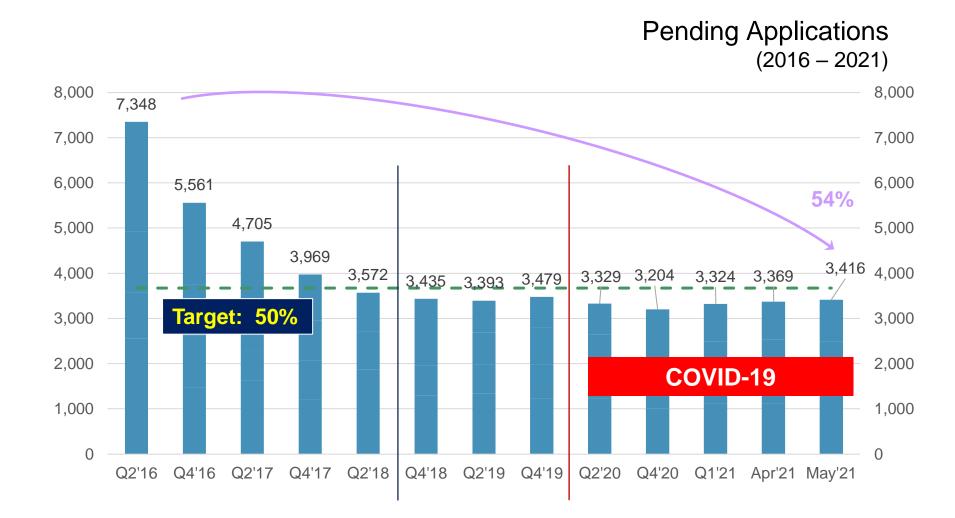
PENDING PERMIT APPLICATION INVENTORY UPDATE

JULY 23, 2021



Permit Processing

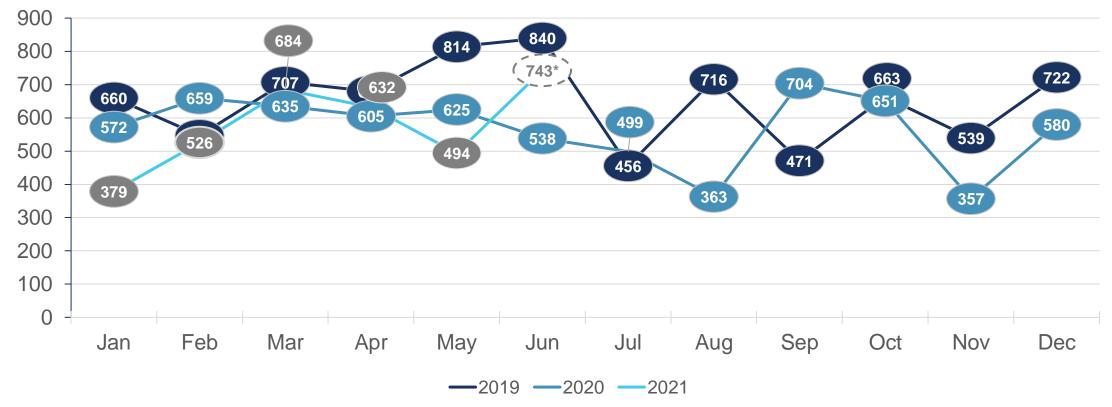
2016 Inventory Reduction Initiative



Achieved and continue to maintain 50% reduction goal set in 2016

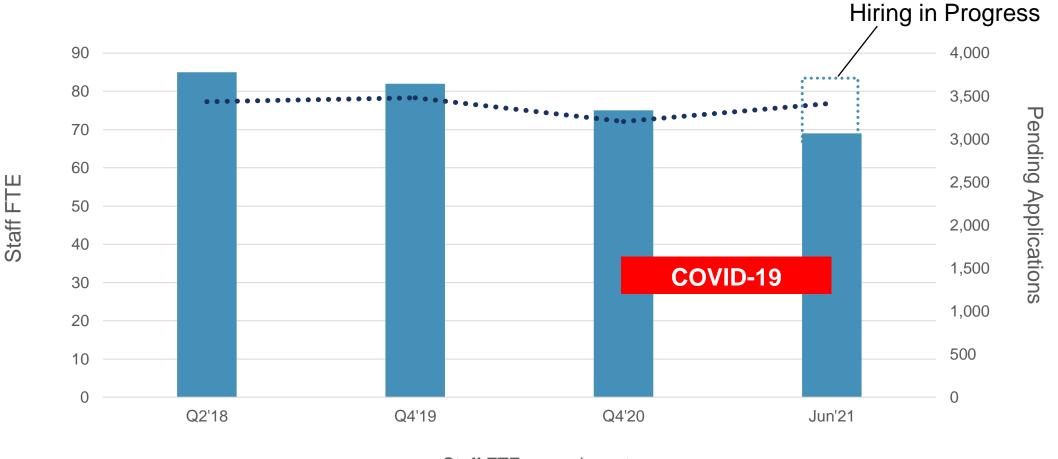
Permit Application Activity

Number of Applications Received per Month

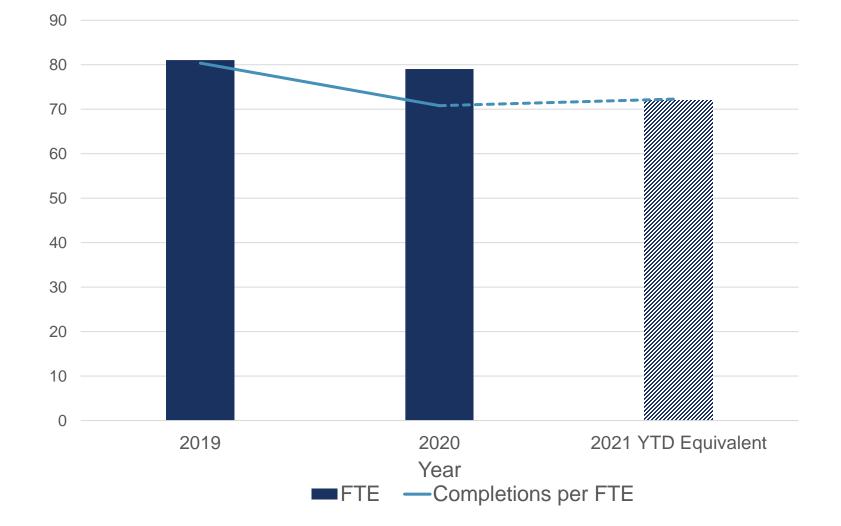


* As of June 29, 2021, Preliminary

Permitting Staffing Trends

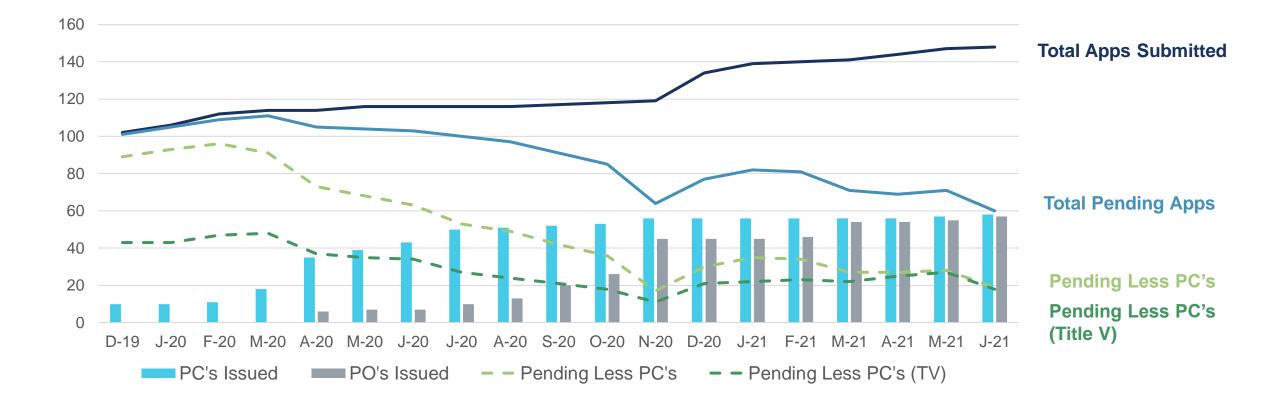


Staff Permit Production



Production per FTE remains consistent

RECLAIM Landing Rule Applications



Actions

Staffing

- Summer recruitment
- Interdivisional Resource Sharing

Strategies

- Ensure complete application packages
- Prioritization
- Distribution of workload
- Continual improvement
 - Staff and Supervisor Training
 - Permit Processing Handbook
 - Management tools (Dashboard)
 - Automation efforts



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WESTERN STATES PETROLEUM ASSOCIATION (WSPA) BRIDGE PROPOSAL AND STAFF'S RESPONSE



WSPA's "Bridge" Concept Proposal

- On June 2nd, WSPA presented an option for a "bridge" that would generally retain the RECLAIM structure
- Summary of WSPA "Bridge" Concept:
 - Use Regulation XX as the "bridge" to deliver BARCT-equivalent NO_X emissions reductions
 - Complete remaining BARCT assessments
 - Adjust (i.e., shave) BARCT-equivalent facility allocations starting in 2023-2025
 - Restrict new purchases of Infinite Year Block (IYB) NOx RECLAIM Trading Credits (RTCs) starting in 2023
 - Allow facilities to exit RECLAIM under certain criteria
 - At the end of the last compliance year for which adjusted allocations are established, transition remaining facilities to Landing Rules and fully sunset RECLAIM program

Staff's Key Responses to WSPA Proposal

Use of RTCs to comply with BARCT is contrary to AB 617

2016 AQMP resolution directed staff to transition RECLAIM facilities to command-and-control

WSPA's proposal weakens implementation of command-and-control rules and delays emission reductions

Not consistent with commitment for NOx emission reductions for AB 617 communities of Wilmington, Carson, and West Long Beach

Proposal is inequitable for non-refinery facilities

Challenges to RECLAIM approvability under 2001 Economic Incentive Program (EIP) guidance

Use of RTCs to Comply with BARCT is Contrary to AB 617

AB 617 does not allow for use of RTCs in lieu of BARCT, as suggested in the WSPA proposal

- AB 617 requires the implementation of BARCT level controls for industrial sources subject to a market-based compliance mechanism (RECLAIM) and does not allow the use of RTCs to substitute for BARCT level controls
- Staff received a comment letter on May 18, 2021, from Latham & Watkins on behalf of the Regulatory Flexibility Group and WSPA that argues that the use of RTCs to implement BARCT requirements is allowed under Health and Safety Code Section 40920.6
- Based on statutory language, legislative history, and purpose of the bill, BARCT must be met by installation of controls and not by use of RTCs

Based on Statutory Language, Legislative History, and Purpose of the Bill, BARCT Must Be Met by Installation of Controls and Not By Use of RTCs

Section 40920.6 (c)(2) and 40920.6 (e) are not mutually exclusive

- Legislature recognized that **RECLAIM** was sunsetting when AB 617 was written
- Section 40920.6 (c)(1) gave districts until December 31, 2023 to establish an expedited BARCT schedule

No evidence in the legislative history to Histol support that various versions were circulated

- Two of the examples are egislative documents that were never presented to the legislature
 - Analysis prepared by California Environmental Protection Agency was prepared after the bill's enactment and is marked "confidential"

The Assembly was provided an analysis that clearly stated the intent of the bill is to require real emission reductions at the affected sources, rather than the use of RTCs

Bill

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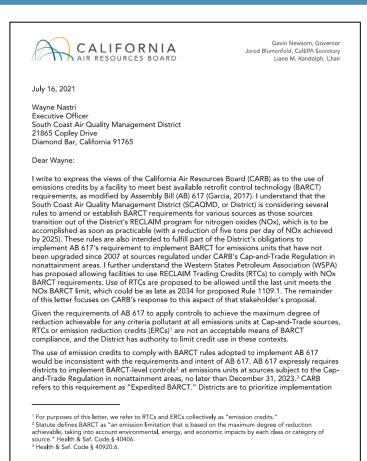
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State's Interpretation of Use of RTCs Under AB 617

- Staff discussed AB 617 requirements with CARB regarding the use of RTCs to comply with BARCT requirements
- CARB provided a comment letter supporting staff's interpretation of AB 617 requirements
- Comment letter is available on the proposed rules webpage¹
- State legislative staff also agreed that RTCs could not be used in lieu of BARCT



2016 AQMP Resolution Directed Staff to Transition RECLAIM Facilities to Command-and-Control

- Control Measure CMB-05 and adopting Resolution called for further NOx reductions from an assessment of the RECLAIM program, including:
 - A 5 ton per day NOx reduction to be achieved no later than 2025; and
 - Sunsetting the RECLAIM program and transitioning facilities to a command-and-control regulatory structure that requires BARCT level controls
 - 2016 AQMP was SIP approved by U.S. EPA

WSPA proposal is not consistent with the Governing Board's direction

2016 Final AQMP Resolution

"BE IT FURTHER RESOLVED, that the SCAQMD Governing Board does hereby direct staff to modify the 2016 AQMP NOx RECLAIM measure (CMB-05) to achieve the five (5) tons per day NOx emission reduction commitment as soon as feasible, and no later than 2025, and to transition the RECLAIM program to a command and control regulatory structure requiring BARCT level controls as soon as practicable, and to request staff to return in 60 days to report feasible target dates for sunsetting the RECLAIM program."

WSPA's Proposal Weakens Implementation of Command-and Control Rules and Delays Emission Reductions

Allowing operators to use RTCs will delay installation of BARCT and is not consistent with state and federal law

- No assurance under WSPA's proposal that any sources will install pollution controls until the final compliance of last unit – which can be post-2034 for Proposed Rule 1109.1
- Health and Safety Code Section 40920.6(c)(1) requires implementation of BARCT by the earliest feasible date, but not later than December 31, 2023
 - Some equipment categories need additional time to meet BARCT, but potentially delaying all BARCT requirements to final compliance of the last unit is in violation of state law
- NOx reductions needed for the 1997 and 2008 federal ozone air quality deadlines in 2023 and 2031
 - Emission reductions could be delayed until after the 2031 deadline

WSPA's Proposal is Not a Bridge

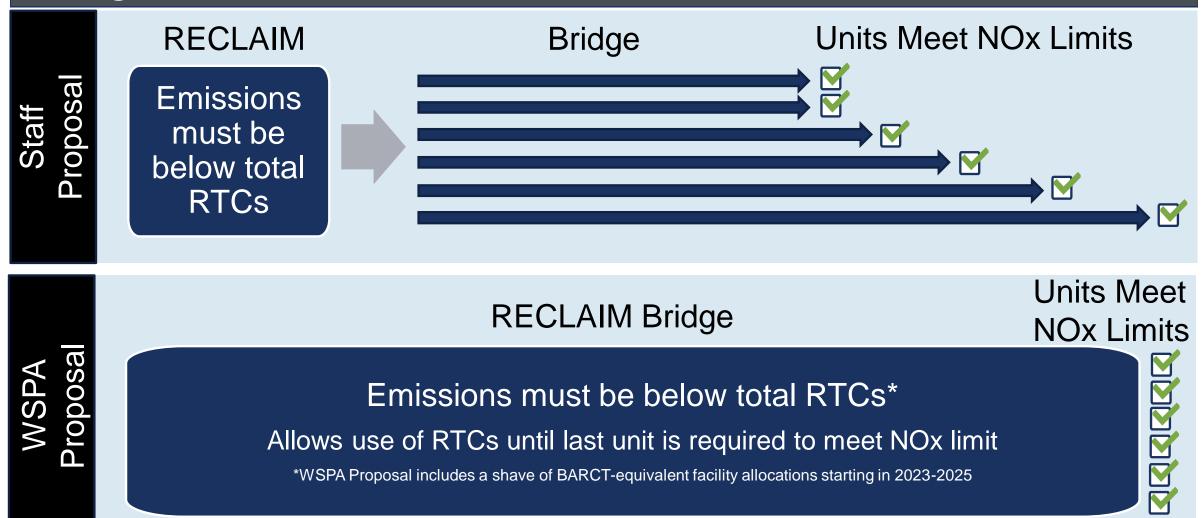
WSPA's proposal goes beyond the needs of the bridge

- WSPA's bridge ends when the last unit meets the NOx limit
- A "bridge" is the enforceable mechanism after facilities transition out of RECLAIM and until each unit meets the NOx limits in command-and-control rule
 - Purpose of the bridge is to ensure that there is some enforceable mechanism after the overall RECLAIM cap is removed

Staff's Bridge Proposal

- Staff's proposal is to establish interim limits up until a unit meets the NOx limit in a command-and-control rule
- Does not delay installation of pollution controls or delay emission reductions
- Does not allow use of RTCs in lieu of BARCT
- Interim bridge limits are reflective of current operating conditions
 - Designed to hold the line
 - No additional emission reductions will be required from interim limits
 - Interim limits ensure no backsliding under Clean Air Act Section 110(I)

Comparison of Staff's and WSPA's Proposals for a Bridge

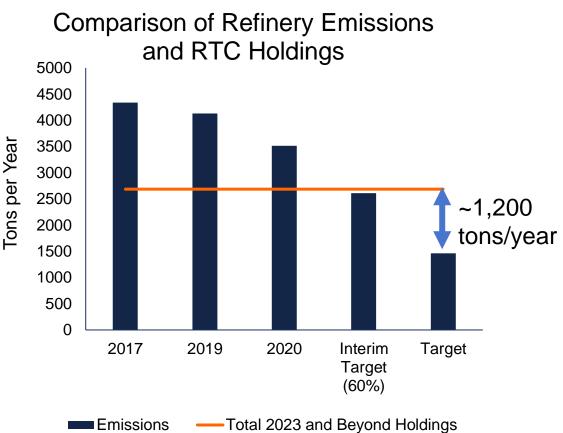


High Risk with Serious Concerns for Further Delays

- WSPA proposal potentially backloads projects and implementation with no assurance pollution controls will be installed before last compliance date
 - For the 2015 shave, only nine permits submitted for emission reduction projects at five major petroleum refineries
 - Three refineries collectively have eight permits for emission reduction projects
 - Two refineries have collectively one permit for an emission reduction project
 - There are no interim milestones to ensure operators will meet NOx emission limits upon final implementation which can be post-2034
 - Concern that as final implementation dates near, facilities will request extensions
 - Final implementation could be further delayed if facilities insist that installation of control equipment coincides with turnarounds or other business-timing objectives
- WSPA proposal does not restrict use of Infinite Year Block (IYB) RTCs or discrete year RTCs
 - WSPA proposal only restricts purchase of IYB RTCs starting in 2023
 - Allows facilities to delay installation of pollution controls to the very end

Potential for Significant NOx Reductions Deferred

- Three refineries hold RTCs that are less than 11% below their 2020 emissions
- All refineries have sufficient RTCs to delay installation of pollution controls
- Based on current RTC holdings for refineries, over 1,200 tons/year of NOx reductions could be deferred until the last unit meets the NOx limit



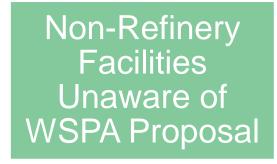
Not Consistent with Commitment for NOx Emission Reductions for AB 617 Communities of Wilmington, Carson, and West Long Beach

WSPA Proposal Conflicts with Obligations for AB 617 and Commitments to Sunset RECLAIM

- AB 617 Community Emissions Reduction Plan (CERP) for the Wilmington, Carson, and West Long Beach communities commits to:
 - A 50% reduction in NOx by the refineries
 - Requiring the installation of BARCT through the adoption of Proposed Rule 1109.1
 - Requiring refineries to demonstrate compliance with NOx emission limits by December 31, 2023
- Compliance to a legal commitment
 - Joint stipulation to stay a lawsuit by environmental organizations representing affected communities requires the sunsetting of the RECLAIM program

Proposal Is Inequitable for Non-Refinery Facilities

- WSPA proposal impacts all NOx RECLAIM facilities, including non-refinery facilities
- WSPA introduced proposal to staff on June 2nd
 - Staff discussed WSPA proposal at the PR 1109.1 Working Group Meeting
 - Today's Working Group Meeting is first discussion of proposal to non-refinery facilities
- Three key areas where the WSPA proposal is inequitable to non-refinery facilities:



Use of RTCs for Interim Requirements Refineries Hold the Majority of RTCs

Inequities to Non-Refinery Facilities

Non-Refinery Facilities Unaware of WSPA Proposal

 Creates disadvantage to non-refinery facilities that purchase discrete RTCs each year or are looking for IYB RTCs

Use of RTCs for Interim Requirements

- Inequitable to allow WSPA facilities and facilities with later compliance dates to use RTCs
- Non-refinery facilities are already installing or have installed pollution controls to meet NOx BARCT limits

Refineries Hold the Majority of RTCs

- Reconciliation will become more difficult as facilities exit RECLAIM and RTCs are removed from the market
- Possible that power plants and refineries will exit before other non-refinery facilities
 - Power plants and refineries hold over 75% of RTCs

Challenges to RECLAIM Approvability Under 2001 Economic Incentive Program (EIP) Guidance

- WSPA's proposal includes:
 - Allowing facilities to exit RECLAIM under certain criteria
 - Use of RTCs for compliance with a separate emission reduction program
- U.S. EPA initially commented that if there are substantial changes, RECLAIM would need to be reapproved under the U.S. EPA's 2001 EIP guidance, which:
 - Requires an environmental benefit of increased reductions or reductions achieved more rapidly
 - Requires a 10% environmental benefit
 - Restricts use of credits from shutdowns to be used towards emission reduction obligations
 - Ensures that the program achieves RACT in aggregate as facilities and RTCs exit RECLAIM
 - May require the NSR component be re-evaluated to ensure it meets federal NSR requirements
- Staff is continuing to discuss these issues with U.S. EPA

Summary of Staff's Response to WSPA Proposal

- Staff identified several issues with the WSPA proposal including AB 617 requirements and Governing Board direction to sunset RECLAIM as soon as practicable
- Staff's bridge proposal establishes interim limits up until a unit meets the NOx limit in a command-andcontrol rule
 - Interim bridge limits are reflective of current operating conditions
 - Does not delay installation of pollution controls or delay emission reductions
 - Does not allow use of RTCs in lieu of BARCT

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Challenges to RECLAIM approvability under 2001 Economic Incentive Program (EIP) guidance



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

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To receive e-mail notifications for Regulation XX or Regulation XIII, sign up at: <u>www.aqmd.gov/sign-up</u> To view proposed rules and supporting documentation, visit the South Coast AQMD Proposed Rules webpage at: <u>http://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/proposed-rules</u>

Contacts – Proposed Rules

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Proposed Amended Rule 1147	Gary Quinn, P.E.	Program Supervisor	909-396-3121	gquinn@aqmd.gov
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Proposed Rule 1147.2	Rodolfo Chacon	Program Supervisor	909-396-2726	rchacon@aqmd.gov
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Proposed Rule 1159.1	Neil Fujiwara	Program Supervisor	909-396-3512	nfujiwara@aqmd.gov
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Proposed Amended Rule 1153.1	Uyen-Uyen Vo	Program Supervisor	909-396-2238	uvo@aqmd.gov
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Contacts – Amended/Adopted Rules

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