



Regulation XIII – New Source Review

Working Group Meeting
February 10, 2022

Join Zoom Webinar Meeting

<https://scaqmd.zoom.us/j/98344812021>

Webinar Meeting ID: 983 4481 2021

Teleconference Dial-In: 1-669-900-6833

Agenda



Previous Working Group Summary

Status of NSR Issues

Proposed Banks for Offsets Post-RECLAIM

Ensuring Availability of Offsets Post-RECLAIM

Previous Working Group Meetings

January 2021

- Capacity Utilization for Quantification of Offsets w/o Records
- Regulation XIII Comment Letters
- PAR 1304

February 2021

- PAR 1304
- Overall Structure and Implementation for Offsets

March 2021

- RECLAIM Transition

April/May 2021

- PAR 1304

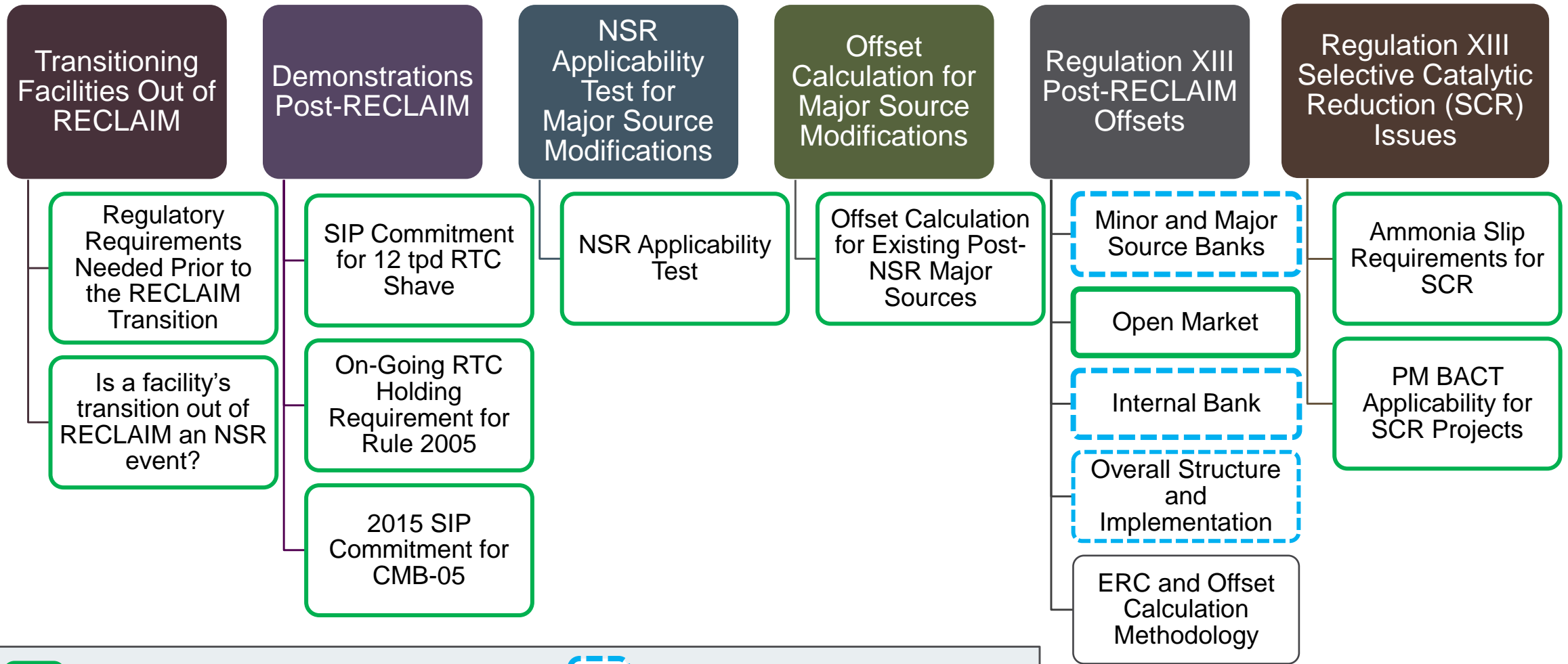
June 2021

- PAR 1304
- Federal NSR Applicability – Project Aggregation

July 2021

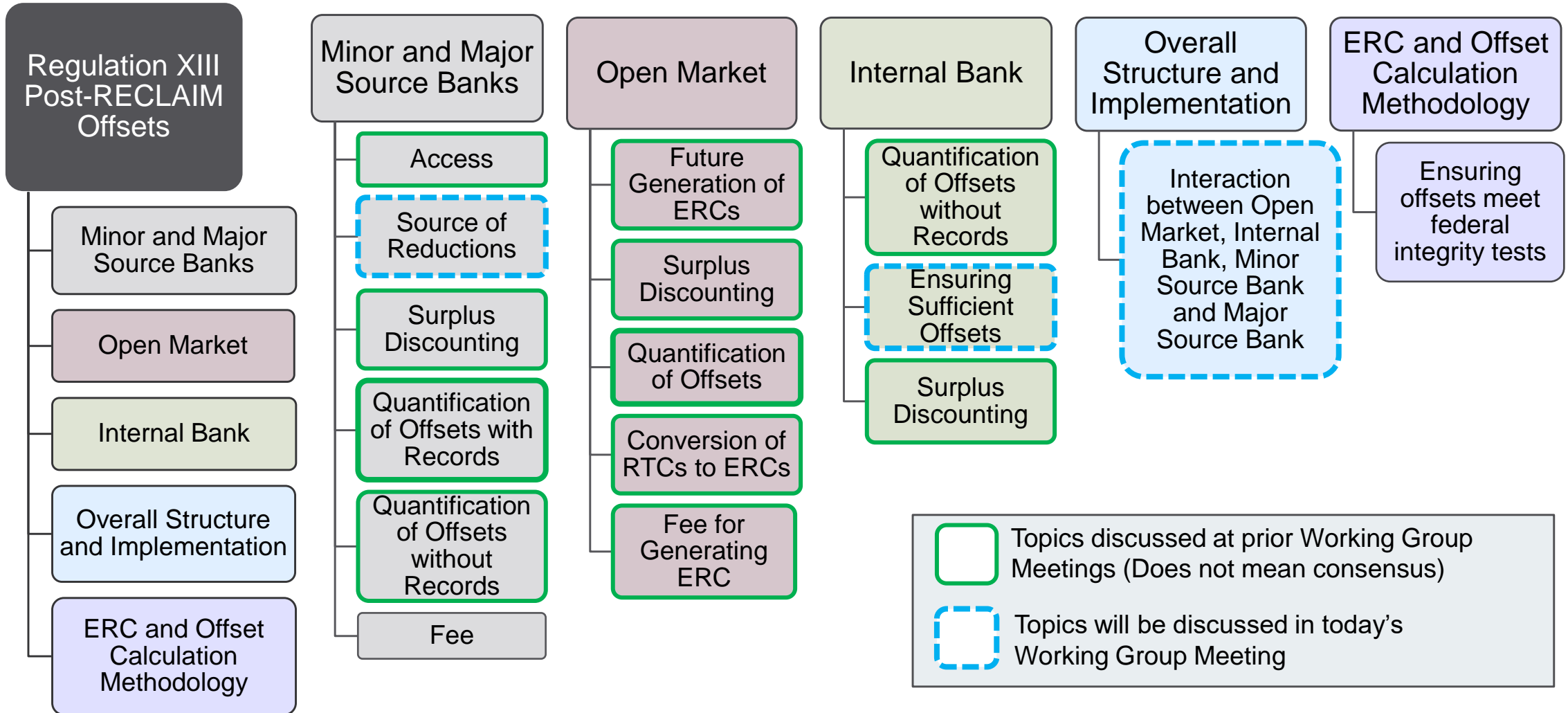
- RECLAIM Transition
- PAR 1304

Overview of NSR Issues

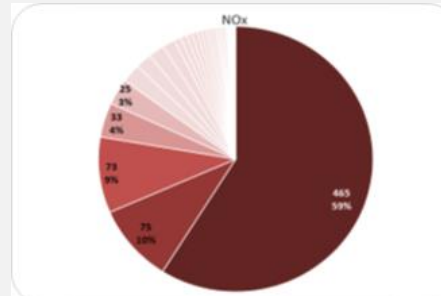
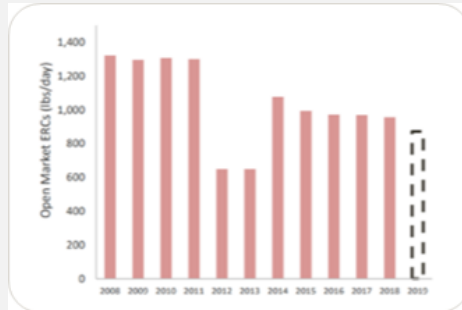


 Topics discussed at prior Working Group Meetings (Does not mean consensus)
 Topics will be discussed in today's Working Group Meeting

Regulation XIII Post-RECLAIM Offsets



Concerns for Availability of Open Market ERCs



Pollutant	Average Cost (\$/ton per year)
VOC	\$30,000
NOx	\$151,000
PM10	\$680,000
SOx	\$376,000

RECLAIM
Facilities Can
Deplete Supply
of NOx ERCs in
One Year¹

5 owners hold
75% of NOx
ERCs

Average NOx
ERC cost is
\$151,000/ton
per year²

¹ Average RECLAIM demand (2011 – 2015) = 0.65 tons per day; NOx ERCs currently in the Open Market = 0.43 tons per day

² Based on ERC transactions with purchase cost in 2008 – 2020

Need for Minor and Major Source Banks



Based on current availability and price of ERCs, the Open Market is not a viable source of offsets post-RECLAIM



As facilities transition out of RECLAIM, critical that sufficient offsets are available to avoid a permit moratorium



Ensure the price of ERCs does not inhibit the decision to modernize a facility



Creating a Minor Source Bank and Major Source Bank provides better assurance offsets are available, and available at a reasonable price



Staff is seeking feedback and input from stakeholders on initial concepts for proposed Minor and Major Source Banks; U.S. EPA and CARB still considering initial concepts

Concepts for Minor and Major Source Banks

- Banks will be managed by South Coast AQMD
- Banks will provide NO_x, SO_x, and PM₁₀ offsets
- Staff will develop new provisions to ensure offsets for the banks meet state and federal requirements
- Future emission reductions will be used to seed the banks
 - Will be directed based on how they were quantified
 - Only reductions with supporting records will be used for the Major Source Bank



Minor Source Bank for minor source projects



Major Source Bank for major source projects

Access to Offsets Managed by South Coast AQMD

Internal Bank (I-ERCs)



Eligible **Minor and Major Source Projects** 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 year¹

Minor Source Bank (Mi-ERCs)



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

Major Source Bank (Ma-ERCs)



Only **Major Source Projects** will access Major Source Bank Ma-ERCs

- Projects not eligible to use I-ERCs or Mi-ERCs:
 - A new Major Polluting Facility
 - Modifications that are Major Sources at a Minor or Major Polluting Facility

¹ Facilities w/ PTE ≥ 4 tons per year with projects listed under a category in Rule 1304 also qualify for offsetting exemptions

Interaction between Open Market, Internal Bank, Minor Source Bank, and Major Source Bank



Access:

- Available to all sources

Usage fee:

- ERC cost based on market value

Access:

- Sources exempt from offsetting (Rule 1304)
 - Facilities w/ PTE <4 tpy
- Priority Reserve (Rule 1309.1)
 - Essential Public Services

Usage fee:

- No Fee*

PROPOSED

Access:

- Minor Source Projects not eligible to use I-ERCs
- Includes minor modifications at Major Polluting Facilities

Usage fee:

- Fee to be determined

PROPOSED

Access:

- Major Source Projects not eligible to use I-ERCs or Mi-ERCs

Usage fee:

- Fee to be determined

*Except for Electrical Generating Facilities (EGFs) that use the offset exemption in Rule 1304(a)(2), must pay fee according to Rule 1304.1

Ensuring Availability of Offsets Post-RECLAIM

- Staff is proposing to direct future offsets that would normally go to the Internal Bank to be used for the Minor and Major Source Banks
- Stakeholders have concerns about depleting the Internal Bank and requested further analysis
- Staff evaluated the historical use and projected offset balances to ensure future offset availability

Approach for Ensuring Availability of Offsets

- Staff analyzed the federal offset accounting for the Internal Bank presented in the annual status reports for Regulation XIII¹
- Federal offset accounting for the Internal Bank is formalized in Rule 1315 – Federal NSR Tracking System
 - Tracks offsets used for federal major sources to demonstrate that sufficient offsets were provided by South Coast AQMD as required by Federal NSR

BOARD MEETING DATE: September 4, 2020 AGENDA NO. 29

REPORT: Status Report on Regulation XIII – New Source Review

SYNOPSIS: This report presents the state and federal Final Determination of Equivalency for January 2018 through December 2018. As such, it provides information regarding the status of Regulation XIII – New Source Review in meeting state and federal NSR requirements and shows that South Coast AQMD's NSR program is in final compliance with applicable state and federal requirements from January 2018 through December 2018.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:
Receive and file.

Wayne Nastri
Executive Officer

AD:JA:DO:GISKT

SUMMARY

South Coast AQMD's New Source Review (NSR) rules and regulations are designed to comply with state and federal Clean Air Act requirements and ensure that emission increases from new and modified sources do not interfere with efforts to attain and maintain the state and federal air quality standards, while economic growth in the South Coast region is not unnecessarily impeded. Regulation XIII - New Source Review, regulates and accounts for all emission changes (both increases and decreases) from the permitting of new, modified, and relocated stationary sources within the South Coast AQMD, excluding NO_x and SO_x sources that are subject to Regulation XX – Regional Clean Air Incentives Market (RECLAIM)¹.

¹ While the RECLAIM program is different than command and control rules for NO_x and SO_x and provides greater regulatory flexibility to businesses, its NSR requirements, as specified in Rule 2005, are designed to comply with the governing principles of NSR contained in the federal Clean Air Act (CAA) and the California State Health and Safety Code.

¹ Status report of the NSR offset accounts for Regulation XIII is presented annually during the September Governing Board Meeting

Analysis for Ensuring Availability of Offsets

- Assessed actual NOx offset balance in the existing Internal Bank for the past 10 years (2010 – 2019)
- Evaluated averages over the most recent 5 years available (2015 – 2019)

Credits (Offsets Deposited)

- Emission reduction credits from orphan shutdowns

Debits (Offsets Withdrawn)

- Offsets provided to federal major sources for eligible projects pursuant to Rule 1309.1 (Priority Reserve) and Rule 1304 (Offsetting Exemptions)

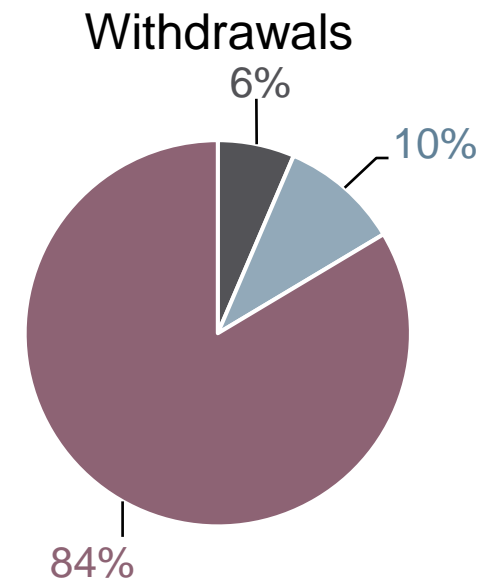
BARCT Discount

- Entire balance for each specific pollutant is discounted annually to BARCT
- Discount is to ensure offsets meet federal criteria and are surplus at the time of use

Assumptions for Withdrawal of I-ERCs

- Used historical averages to estimate future demand from federal major sources currently eligible to access the Internal Bank pursuant to Rules 1304 and 1309.1
- Annual average debits and annual BARCT discount for the Internal Bank from 2015 to 2019:

Annual Average Withdrawals	
Average NOx Debits ^{1,2}	0.23 tons per day
Debits for Rule 1309.1 Sources	0.09 tons per day
Debits for Rule 1304 Sources	0.14 tons per day
Annual BARCT Discount	1.17 tons per day (4.6% balance reduction)



■ 1309.1 ■ 1304 ■ BARCT Discount

¹ Includes 1.2-to-1 offsetting ratio

² Growth factor from 2016 Air Quality Management Plan (AQMP) applied to the projected debits

Approach to Redirect Offsets



- Staff is proposing to temporarily stop deposits into the Internal Bank and redirect all credits to the proposed banks
- 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
- Assumed 0.9 tons per day of NO_x offsets deposited into the Internal Bank annually, based on:
 - Emission decreases deposited between 2015 – 2019
 - 70% of the source's potential to emit (PTE) to estimate actual emissions

¹ Currently, offsets are deposited based on 80% of the source's PTE according to Rule 1315 (c)(3)(B)(i). Based on discussion with U.S. EPA, staff is proposing to use a conservative Capacity Utilization rate of 70% to quantify offsets without records

Assumptions for Credits (Initial Seeding)

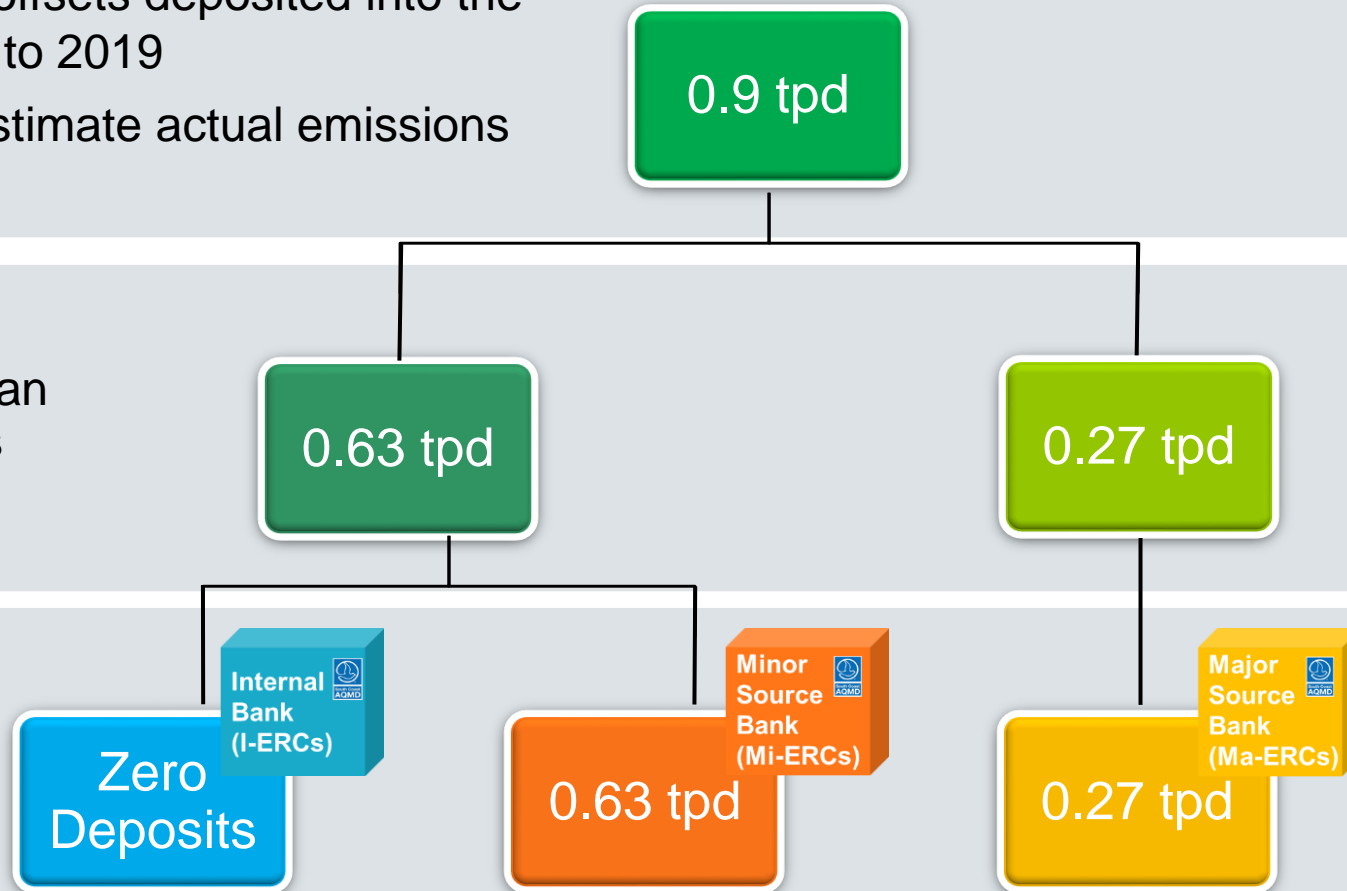
- Annual average of NOx offsets deposited into the Internal Bank from 2015 to 2019
- Assumed 70% PTE to estimate actual emissions

Estimating 70% from orphan reductions without records

Estimating 30% from orphan reductions with records

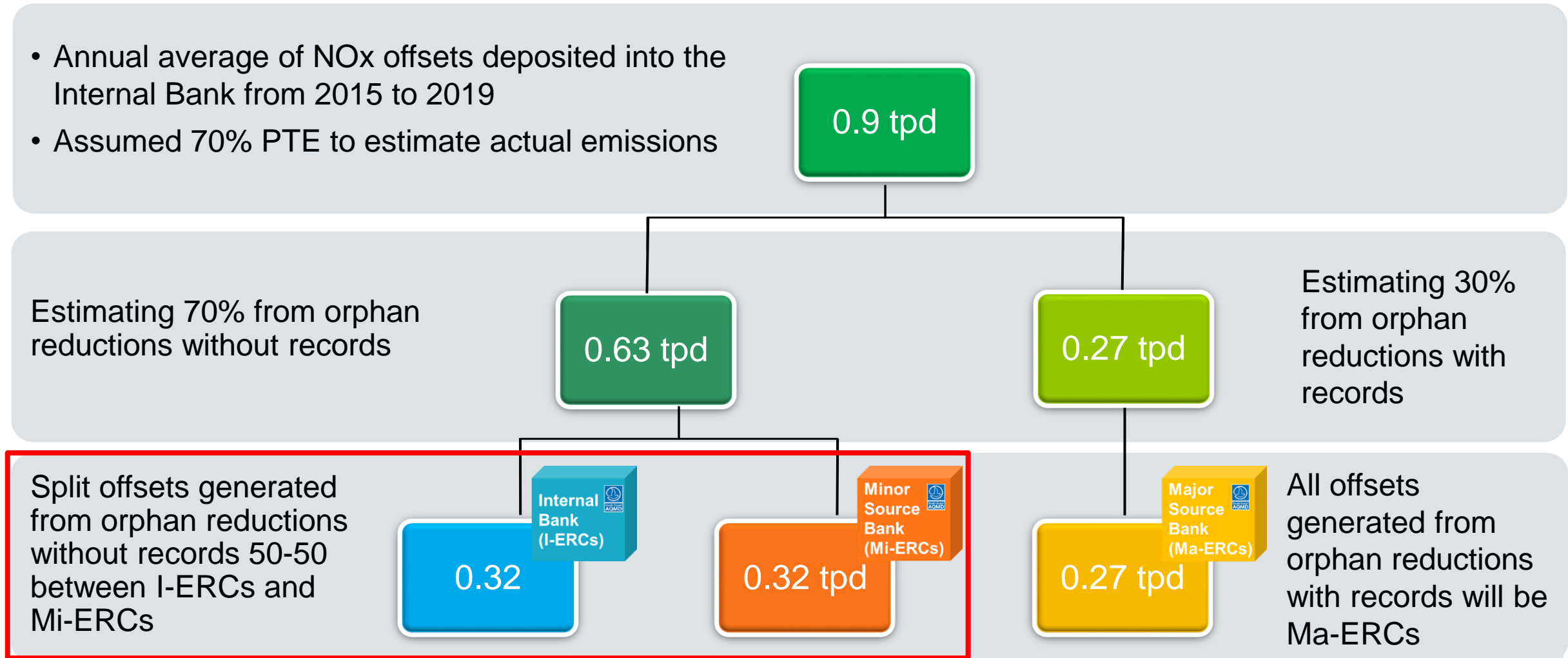
All offsets generated from orphan reductions without records will be Mi-ERCs

All offsets generated from orphan reductions with records will be Ma-ERCs



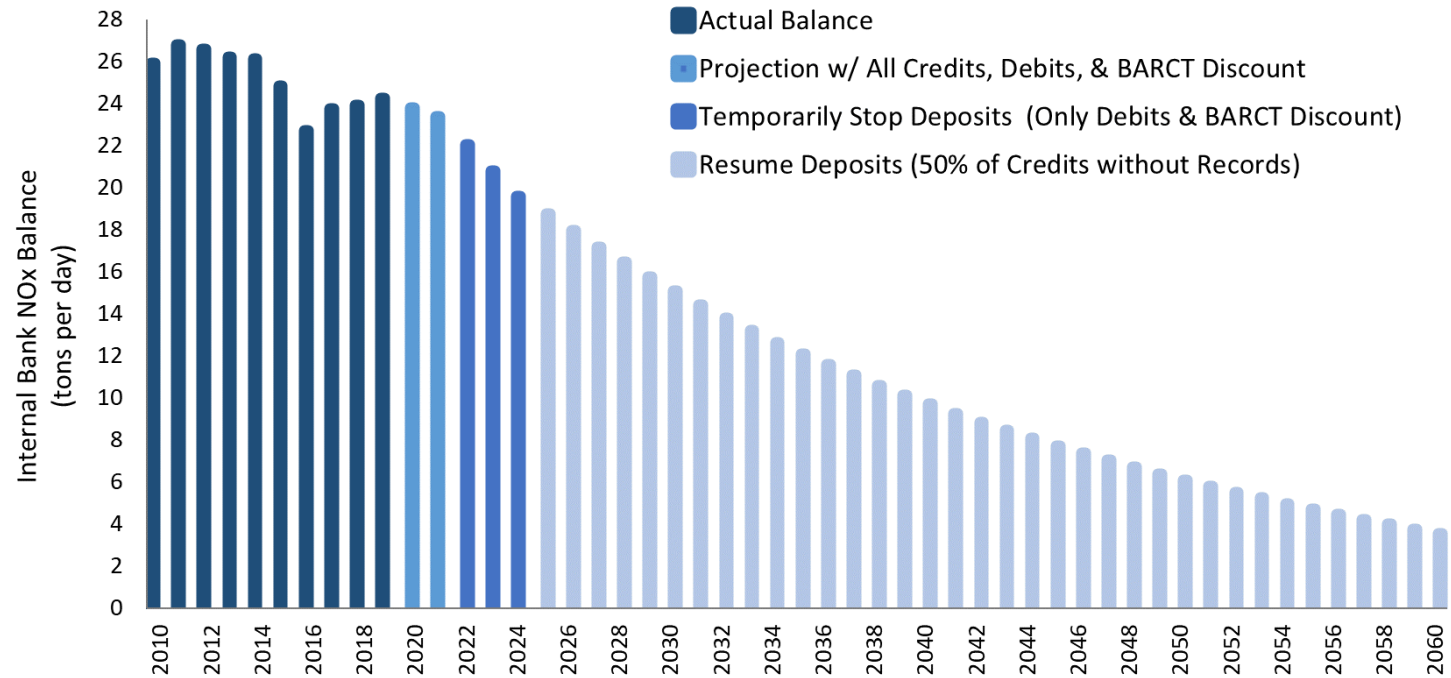
Assumptions for Credits (After Seeding)

- Annual average of NOx offsets deposited into the Internal Bank from 2015 to 2019
- Assumed 70% PTE to estimate actual emissions



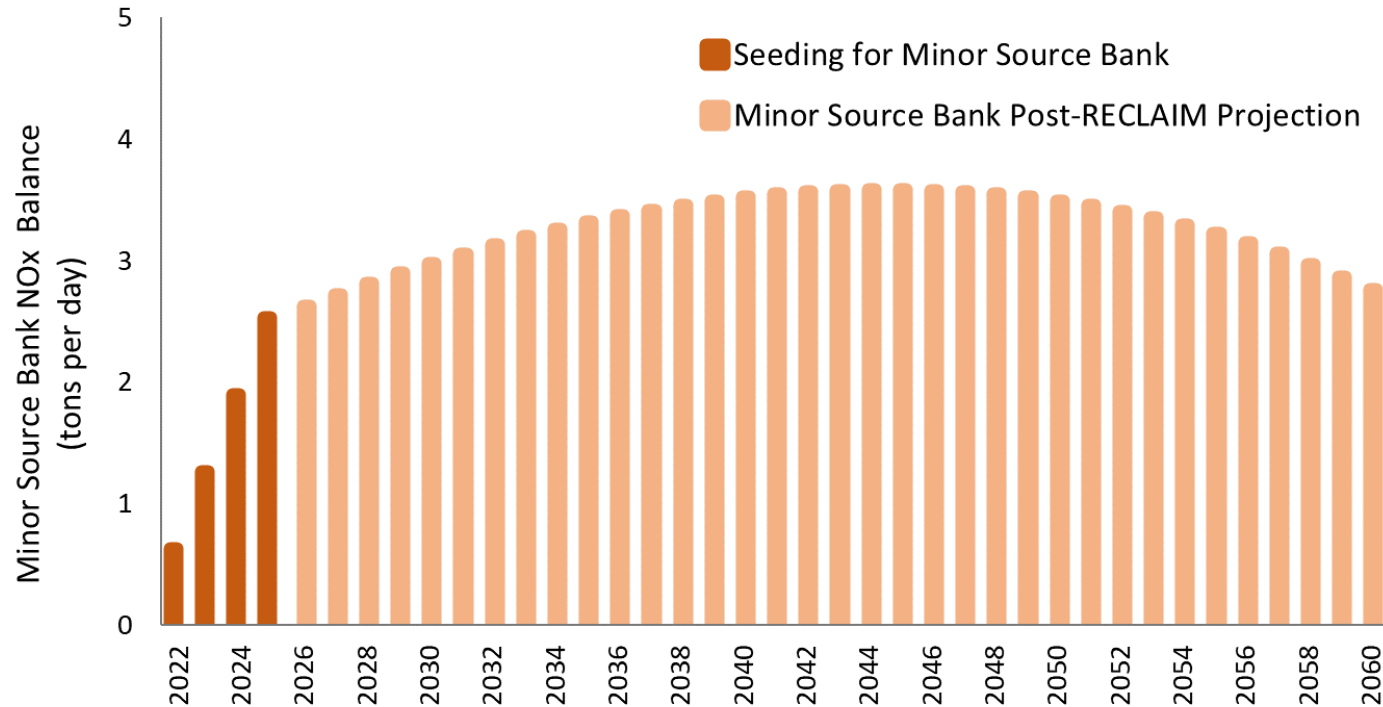
Internal Bank Projected Balance

- Used 5-year average credits, debits, and percent BARCT discount
- Assumed deposits temporarily stopped 2022 through 2025
 - Only debits and BARCT discount
- Assumed deposits resumed in 2026
 - 50% credits without records deposited = 0.32 tons per day
- Projected balance in 2060 is 3.5 tons per day



Minor Source Bank Projected Balance

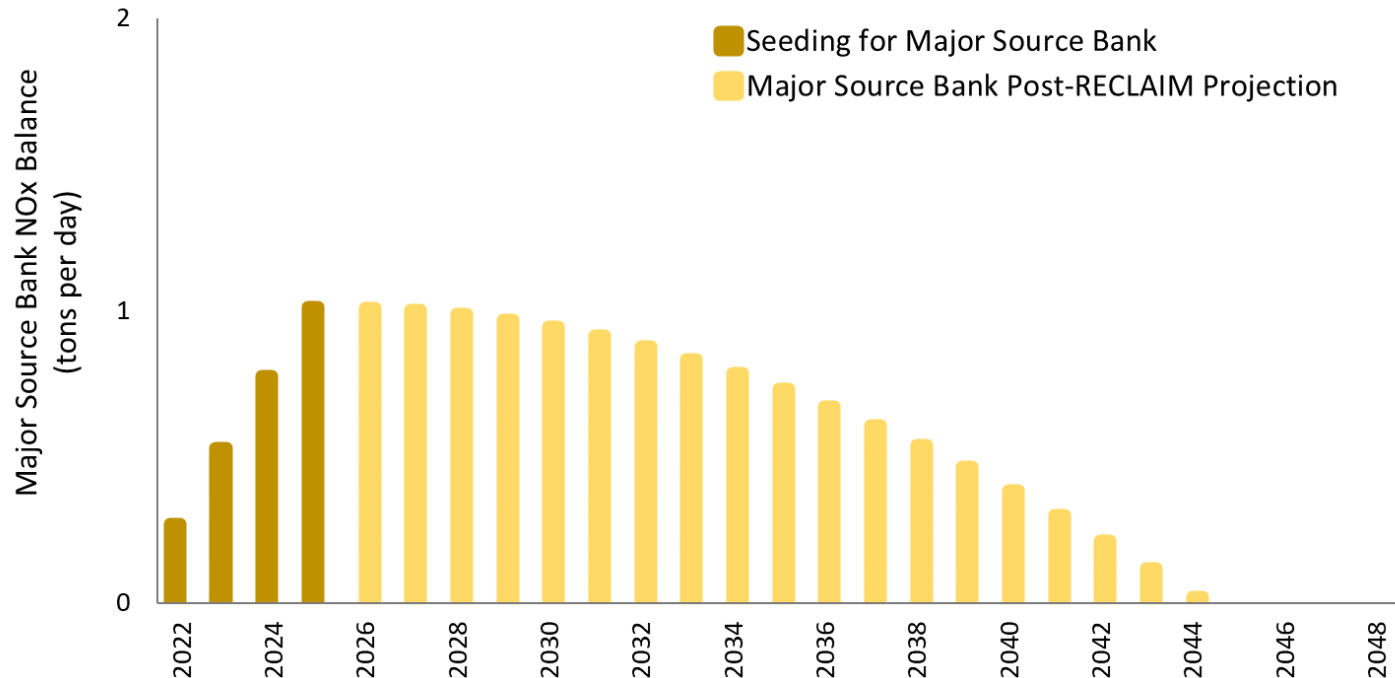
- During 2022 through 2025, all credits without records directed to the Minor Source Bank
- Post-RECLAIM starting in 2026, credits without records split 50-50 between I-ERCs and Mi-ERCs
- Projection assumed:
 - 50% credits without records deposited = 0.32 tons per day
 - Offset demand for minor sources = 0.3 tons per day*
 - 0.8-to-1.0 offset ratio
 - No BARCT discount
- Projected balance in 2060 is 3.6 tons per day



*Assumed half of the RECLAIM demand (0.65 tons per day) would be minor sources

Major Source Bank Projected Balance

- During 2022 through 2025, all credits with records directed to the Major Source Bank
 - 1 ton per day available by 2025
- Post-RECLAIM projection starting in 2026 assumed:
 - All credits with records = 0.27 tons per day
 - 0.1 tons per day of future shutdowns deposited annually from former RECLAIM sources
 - Offset demand for major sources = 0.3 tons per day*
 - 5-year average BARCT discount = 4.6%
- Offset balance projected to decline to zero in 2045



*Assumed half of the RECLAIM demand (0.65 tons per day) would be major sources

Projected Supply and Demand for Offsets

- After 2026, approximately 2.6 tons per day will be available in the Minor Source Bank
 - Supply projected to remain steady as debit demand is similar to credit generation
- After 2026, approximately 1 ton per day will be available in the Major Source Bank
 - Offsets likely to only be available for ~15 years as debit demand currently exceeds credit generation
 - Will act as a temporary safe harbor while Open Market ERCs are being generated by former RECLAIM sources
 - Eventually, major sources will be fully reliant on Open Market ERCs

Working Group Meeting Summary

- Discussed initial concepts proposing a Minor Source Bank and Major Source Bank for post-RECLAIM offsets
- Staff is seeking feedback and input on initial concepts:
 - Proposed banks for NO_x, SO_x, and PM₁₀ offsets will be managed by South Coast AQMD
 - Credits from the Internal Bank will be temporarily redirected to seed the future banks
 - After the seeding period, offsets without supporting data will be split between the Minor Source Bank and the Internal Bank
 - All offsets with supporting data will be used for the Major Source Bank
- Presented analysis projecting future balances to ensure availability of offsets post-RECLAIM

Ongoing Efforts and Next Steps



Continue Working Group Meetings



Continue rulemaking activities



Continue work with U.S. EPA, CARB, and stakeholders to resolve NSR issues

Contacts – RECLAIM & New Source Review

General Questions	Michael Krause	Assistant Deputy Executive Officer	909-396-2706	mkrause@aqmd.gov
RECLAIM	Michael Morris	Planning and Rules Manager	909-396-3282	mmorris@aqmd.gov
	Rudy Chacon	Program Supervisor	909-396-2726	rchacon@aqmd.gov
	Isabelle Shine	Air Quality Specialist	909-396-3319	ishine@aqmd.gov
New Source Review	Michael Morris	Planning and Rules Manager	909-396-3282	mmorris@aqmd.gov

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>