NOx RECLAIM WORKING GROUP MEETING

DECEMBER 10, 2020 – 9:00 AM

JOIN ZOOM MEETING

HTTPS://SCAQMD.ZOOM.US/J/99818399486

MEETING ID: 998 1839 9486

PASSCODE: 540420

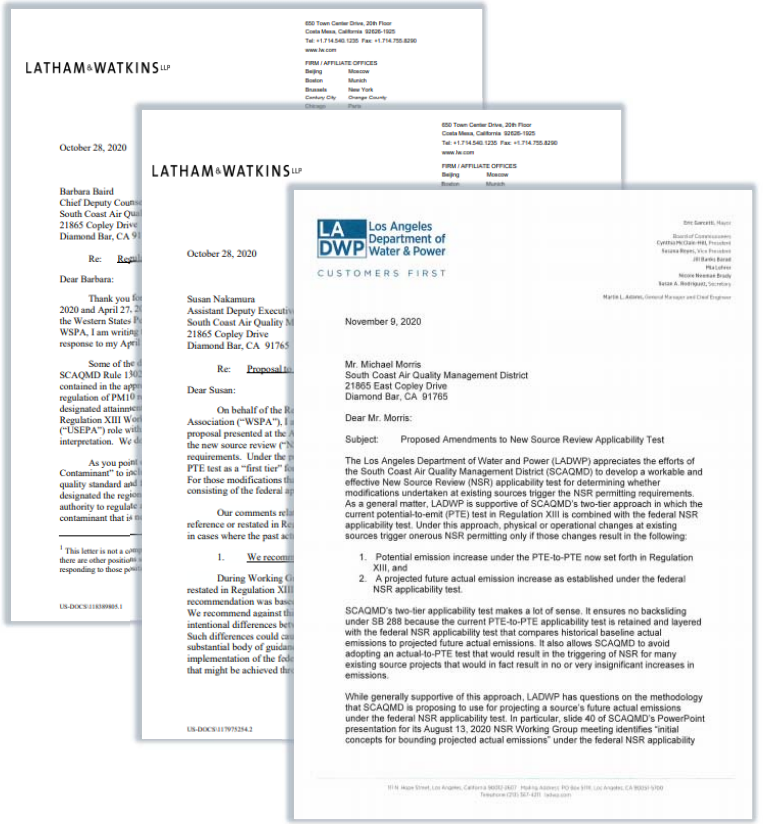
TELECONFERENCE DIAL-IN: 1-669-900-6833

Agenda

- Received three letters from stakeholders
  - Posted on Proposed Rules webpage
  - Will discuss at future Working Group Meeting
- RECLAIM Transition Plan, Version 2.0
- Ongoing Efforts and Next Steps

Comment Letters

- Comment letters were received from:
  - Latham & Watkins on behalf of the Regulatory Flexibility Group (RFG) and the Western States Petroleum Association (WSPA)
  - Los Angeles Department of Water and Power
- Comments focus on Regulation XIII:
  - Whether federal requirements should be incorporated by reference or restated in Regulation XIII
  - Permit limits for federal applicability test for projected future actual emissions
  - Regulation of PM10 under South Coast AQMD's Reg XIII
- Staff will provide responses at the next Regulation XIII Working Group Meeting
- Comment letters are available on the proposed rules webpage


LATHAM & WATKINS LLP

October 28, 2020

Barbara Baird

Dear Barbara:

LATHAM & WATKINS LLP

October 28, 2020

Susan Nakamura
Assistant Deputy Executive
South Coast Air Quality M
21865 Copley Drive
Diamond Bar, CA 91765

Dear Susan:

LA DWP Los Angeles Department of Water & Power

CUSTOMERS FIRST

November 9, 2020

Mr. Michael Morris
South Coast Air Quality Management District
21865 East Copley Drive
Diamond Bar, CA 91765

Dear Mr. Morris:

Subject: Proposed Amendments to New Source Review Applicability Test

The Los Angeles Department of Water and Power (LADWP) appreciates the efforts of the South Coast Air Quality Management District (SCAQMD) to develop a workable and effective New Source Review (NSR) applicability test for determining whether modifications undertaken at existing sources trigger the NSR permitting requirements. As a general matter, LADWP is supportive of SCAQMD's two-tier approach in which the current potential-to-emit (PTE) test in Regulation XIII is combined with the federal NSR applicability test. Under this approach, physical or operational changes at existing sources trigger onerous NSR permitting only if those changes result in the following:

1. Potential emission increase under the PTE-to-PTE now set forth in Regulation XIII, and
2. A projected future actual emission increase as established under the federal NSR applicability test.

SCAQMD's two-tier applicability test makes a lot of sense. It ensures no backsliding under SB 288 because the current PTE-to-PTE applicability test is retained and layered with the federal NSR applicability test that compares historical baseline actual emissions to projected future actual emissions. It also allows SCAQMD to avoid adopting an actual-to-PTE test that would result in the triggering of NSR for many existing source projects that would in fact result in no or very insignificant increases in emissions.

While generally supportive of this approach, LADWP has questions on the methodology that SCAQMD is proposing to use for projecting a source's future actual emissions under the federal NSR applicability test. In particular, slide 40 of SCAQMD's PowerPoint presentation for its August 13, 2020 NSR Working Group meeting identifies "initial concepts for bounding projected actual emissions" under the federal NSR applicability

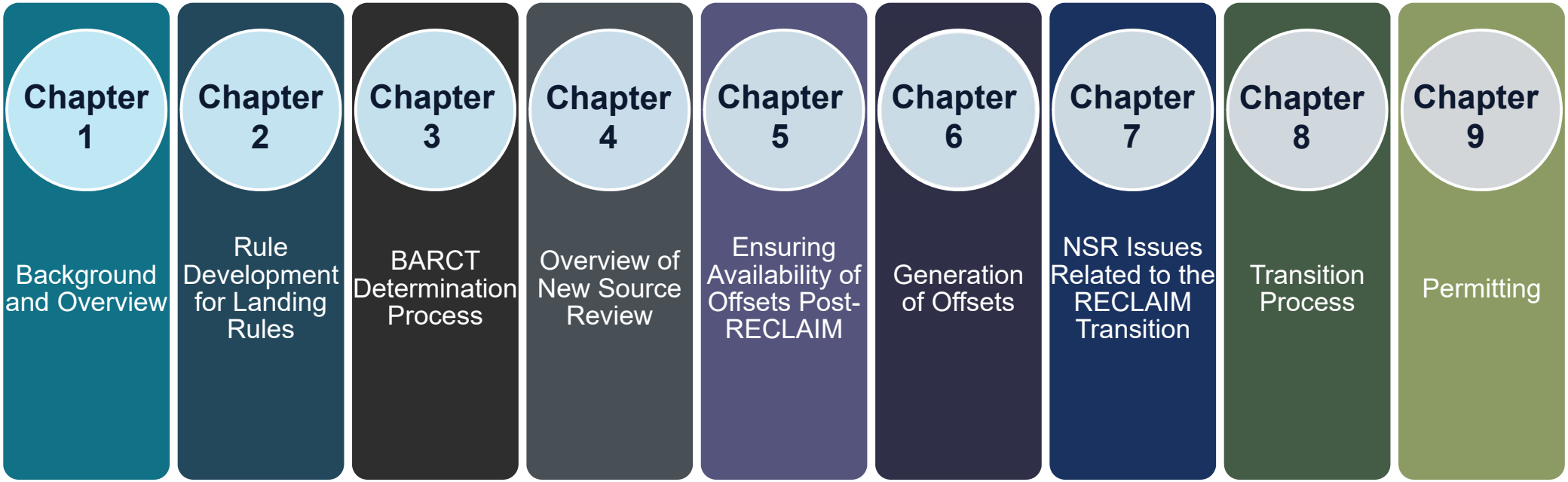
RECLAIM Transition Plan

- Presenting an overview of Version 2.0 of the RECLAIM Transition Plan
- RECLAIM Transition Plan will be available on the website today
- Stakeholders can review and provide comments by January 11, 2021
- Will discuss revisions based on stakeholder input at the January RECLAIM Working Group Meeting which will be held on January 21, 2021
- RECLAIM Transition Plan is a living document and staff anticipates additional versions

Chapter 1: Background and Overview

- Chapter provides an overview of the RECLAIM Transition Plan
- Version 2.0 of the Transition Plan incorporates
  - More detailed discussion of the BARCT analysis process
  - Expanded discussion of New Source Review
  - Revised transition process based on input from U.S. EPA
- Many of the issues and topics have been discussed in the RECLAIM and/or the New Source Review Working Group Meetings
- Incorporates the public process used for rule development and discussion of policy issues related to the RECLAIM transition

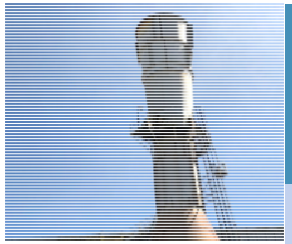
Overview of RECLAIM Transition Plan



Chapter 2: Rule Development for Landing Rules

- Chapter provides an overview of the rule development needed for the RECLAIM transition
  - Provides a summary of rules adopted or amended and the schedule for rulemaking
  - Two rules added since first transition plan
    - Rule 1159.1 – Control of NOx Emissions from Nitric Acid Units
    - Rule 1153.1 – Commercial Food Ovens
- Discusses other issues related to rule development
  - Start-up and shutdown provisions (Will discuss in more detail at next Working Group Meeting)
  - Implementation approaches
- Summarizes emission reductions to date

Rules Under Development



PAR 218/218.1 and PR 218.2/218.3 – Continuous Emissions Monitoring Systems

Public Hearing: March 5, 2021

PR 1147.1 – Aggregate Facilities

Public Hearing: October 1, 2021

PR 1109.1 – Refinery Equipment

Public Hearing: June 4, 2021

PAR 1147 – Miscellaneous Combustion Sources

Public Hearing: June 4, 2021

PR 1147.2 – Metal Melting and Heating Furnaces

Public Hearing: August 6, 2021

PR 1159.1 – Nitric Acid Processing Tanks

Public Hearing: November 5, 2021

PAR 1153.1 – Commercial Food Ovens

Public Hearing: To-Be-Determined

Estimated NOx Reductions for Landing Rules Adopted or Amended

	Rules 1146, 1146.1, 1146.2 – Boilers, heaters, and steam generators	0.27
	Rule 1118.1 - Non Refinery Flares	0
	Rule 1134 - Gas Turbines	1.8
	Rule 1135 - Electric Generating Facilities	1.7
	Rule 1110.2 - Gaseous- and Liquid-Fueled Engines	0.29
	Rule 1117 – Container Glass Melting/Sodium Silicate Furnaces	0.57

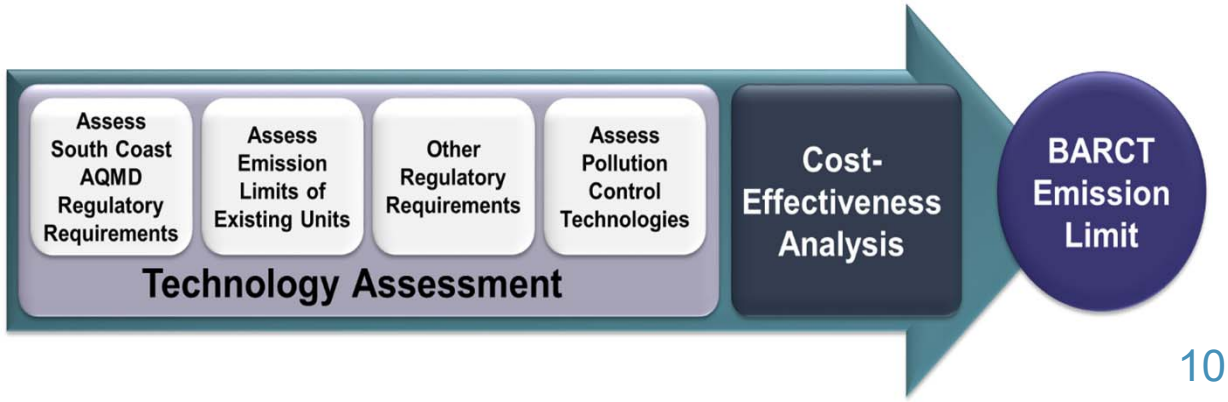
Total NOx Reductions = 4.63 tons per day

Chapter 3: BARCT Determination Process

- BARCT emission limits represent the maximum degree of reduction achievable[1]
- Must include a technology and cost-effectiveness analysis for each class and category of equipment[1]
- Applicable to equipment retrofits and replacements
- Using 2016 AQMP cost-effectiveness of $50,000 per ton of NOx reduced as guidance

[1] Health and Safety Code Section 40406

- Chapter includes details of BARCT analysis process used in NOx landing rules
- Incorporates discussion of South Coast AQMD's authority to base a BARCT emission limit on equipment replacement
  - South Coast AQMD's statutory authority of BARCT
  - Statutory definition of BARCT
  - Dictionary definitions of "retrofit"



Chapter 4: Overview of New Source Review

Regulatory Overview

South Coast AQMD's NSR Programs
- Regulation XIII
- Rule 2005 – RECLAIM NSR

State NSR Requirements
- California Clean Air Act
- SB 288 – "Protect California Air Act of 2003"

Federal NSR Requirements
- Federal Clean Air Act
- 2002 NSR Reform

Current Supply of Offsets

Open Market (ERCs)

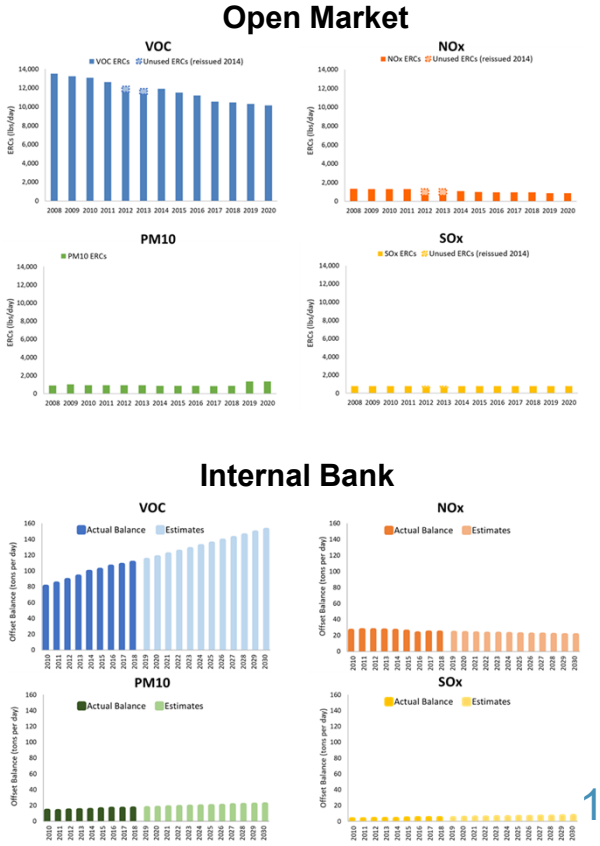
Current Supply and Availability of Offsets in the Open Market and Internal Bank

Internal Bank (I-ERCs)

Current Availability of Offsets in the Internal Bank and Use Post-RECLAIM

Summary of Supply of Offsets

- Current supply of NOx ERCs in the Open Market are not sufficient to support facilities when they transition out of RECLAIM
- Supply, distribution and price of SOx and PM10 ERCs in the Open Market are also a concern
- Although there are sufficient NOx credits in the Internal Bank, these offsets cannot be used for facilities that transition out of RECLAIM
  - U.S. EPA commented that the Rule 1315 approach of assuming actuals equals 80 percent of the Potential to Emit is allowed because of the limited use of those offsets for Rule 1304 and 1309.1 sources



Chapter 5: Ensuring Availability of Offsets Post-RECLAIM

Developed new nomenclature for offsets:

- ERCs (Open Market)
- I-ERCs (Internal Bank)
- L-ERCs (Large Source Bank)

- Introduces the concept of the Large Source Bank
- Discusses the relationship between the three potential sources for offset post-RECLAIM
- Highlights key issues related to the Open Market, Internal Bank, and Large Source Bank
- Seeding the Large Source Bank
- Ensuring sufficient Offsets for the Internal Bank

Key Features of the Open Market, Internal Bank, and Proposed Large Source Bank

	Open Market (ERCs)	Internal Bank (I-ERCs)	Large Source Bank (L-ERCs)
Offset Name	ERCs	I-ERCs	L-ERCs
Pollutants	VOC, NOx, SOx, and PM10	VOC, NOx, SOx, and PM10	NOx, SOx, and PM10
Access	All Sources	• Facilities with a PTE < 4 tons/year • Sources exempt from offsets (Rule 1304) • Essential Public Services (Rule 1309.1)	Facilities with a PTE ≥ 4 tons/year
Generation Fee	$4,800 for non-Title V $6,000 for Title V	No Fee	No Fee
Use Fees	Market price of ERC	No Fee	Fee (to be established)
How Offsets are Accessed	Open Market w/ buyers & sellers	Provided by South Coast AQMD	Provided by South Coast AQMD
How Offset Generated	ERC Application	Orphan Reductions and Shutdowns	New Orphan Reductions and Shutdowns w/ supporting data

Proposed Approach for Seeding the Large Source Bank

- Consistent with comments from U.S. EPA, only emission decreases with supporting data such as an Annual Emissions Report will be used to seed the Large Source Bank
- Based on emission decreases deposited in the Internal Bank between 2014-2018
  - An average of 1 ton per day of NOx I-ERCs are deposited into the Internal Bank annually
  - Approximately 30 percent of orphan reductions are from facilities with Annual Emissions Reports
- Within 5 years, the Large Source Bank is projected to have approximately 1.5 tons per day of NOx L-ERCs (does not include annual BARCT discount)
- Staff is also exploring suspending generation of NOx ERCs for five years to further seed the Large Source Bank

Market	First Five Years	After First Five Years
Open Market	Suspend generation of ERCs	Allow generation of ERCs
Internal Bank	Orphan reductions from facilities without Annual Emissions Report	
Large Source Bank	Orphan reductions from facilities with Annual Emissions Report	

Other Sources of Emission Decreases

- Anticipated demand for NOx offsets from RECLAIM facilities is expected to be about 0.6 ton per day
- Other considerations:
  - As facilities transition out of RECLAIM, emission decreases from these facilities will be an additional source of ERCs for the Open Market or Large Source Bank
  - Using a BARCT discount that is specific to the source of the emission decrease will be more accurate than a programmatic BARCT discount
  - Staff is exploring additional options with U.S. EPA such as
    - Further separation of offsets based on major and non-major sources and
    - Other alternative quantification methods for facilities that do not have Annual Emissions Reports
  - Staff will explore lowering the reporting threshold for Annual Emissions Reports

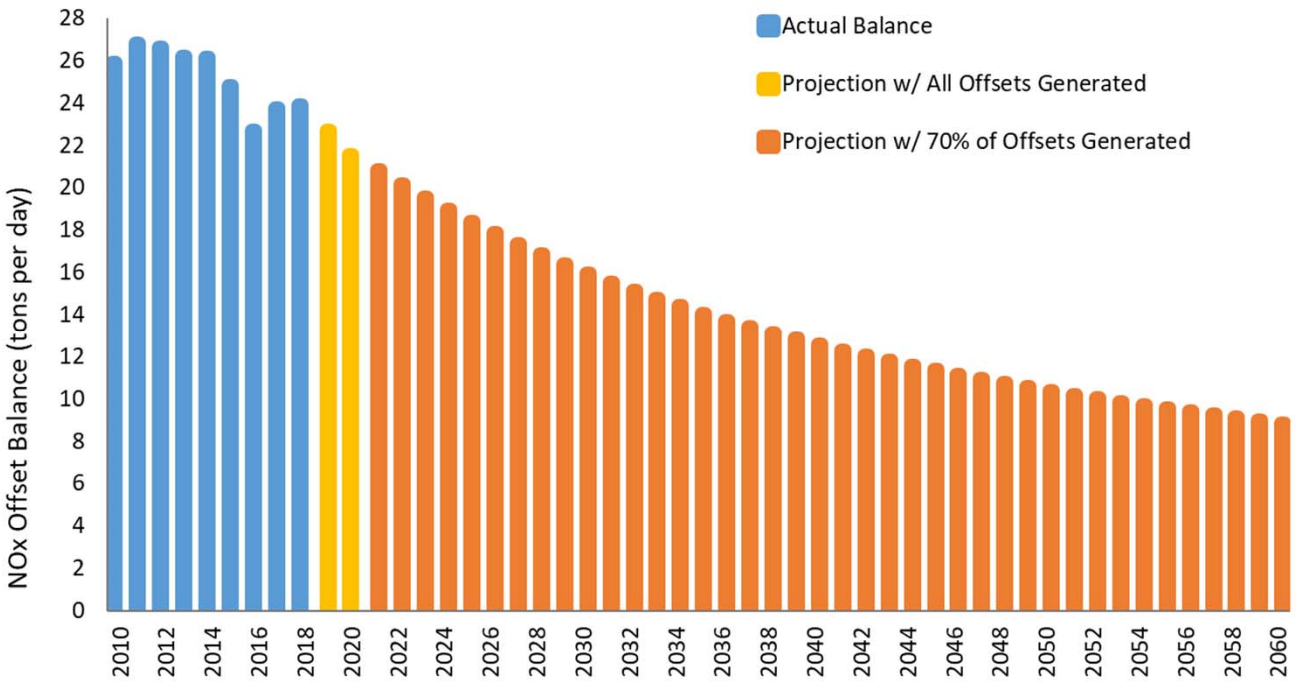
Analysis to Ensure Sufficient I-ERCs for the Internal Bank Sources

- Staff conducted an analysis to ensure that there are sufficient I-ERCs in the Internal Bank for Rule 1304 and Rule 1309.1 sources if a portion of the emission decreases are directed to the Large Source Bank
- Staff projected the supply of I-ERCs in the Internal Bank if 30 percent of the emission decreases are directed to the Large Source Bank
- Analysis was based on annual average credits, debits, and annual BARCT discount for the Internal Bank from 2014 to 2018
  - 70% of credits to the Internal Bank: 0.7 tons per day
  - Debits Rule 1309.1 Sources (Essential Public Services): 0.09 tons per day[1]
  - Debits Rule 1304 Sources (Facilities < 4 tons/year and others): 0.13 tons per day[1]
  - Annual BARCT discount: 5.4%

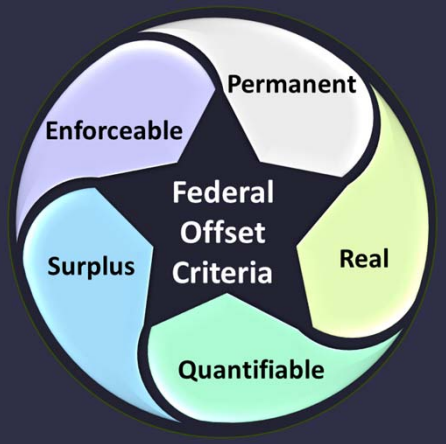
[1] Includes 1.2 to 1 offset ratio

Ensuring Sufficient I-ERCs for the Internal Bank

- Nearly 9 tons per day of NOx I-ERCs available in the Internal Bank through 2060
- Annual net credits and debits is: 0.48 tons per day
- Annual average BARCT discount of 5.4% results in an annual net debit
  - Expected that actual BARCT discount post 2030 will be much lower as many BARCT rules will be fully implemented
- **Finding:** Internal Bank will have sufficient I-ERCs if 30% of emission reductions are directed to the Large Source Bank



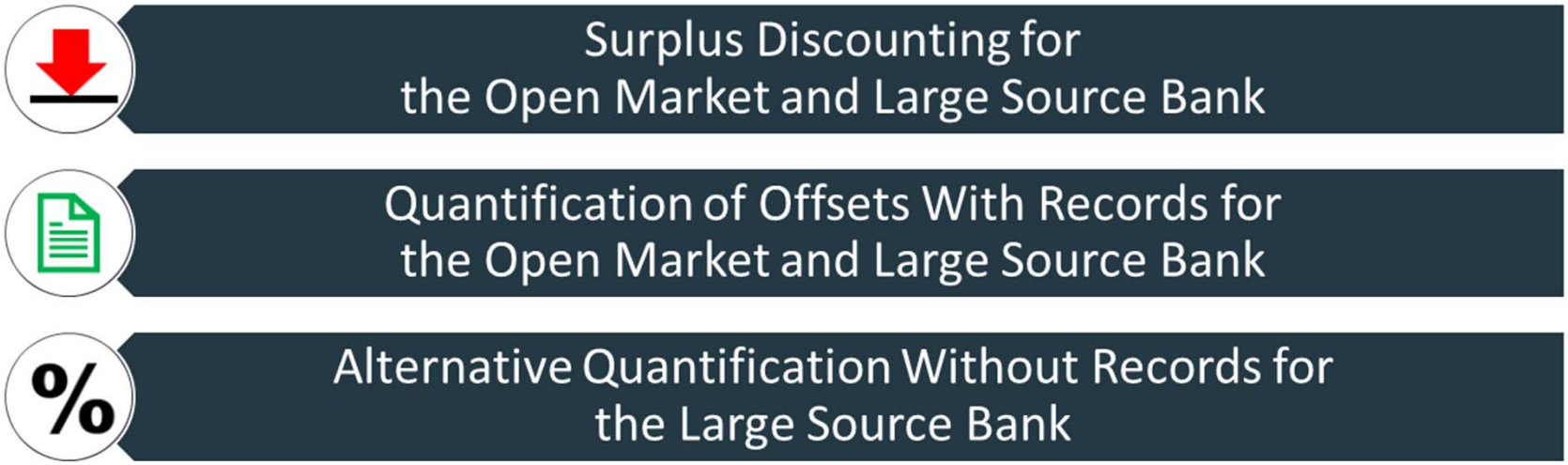
Chapter 6: Generation of Offsets



- Chapter 6 discusses quantification of offsets for the Open Market, Internal Bank, and proposed Large Source Bank
- Requirements to ensure offsets are real, permanent, and enforceable are the same for the Open Market, Internal Bank, and the proposed Large Source Bank
- Staff is proposing different surplus and quantification approaches for the Open Market, Internal Bank, and Proposed Large Source Bank

Key Topics for Quantification of Offsets

- Chapter focuses on three key topics regarding quantification of offsets for the Open Market and proposed Large Source Bank

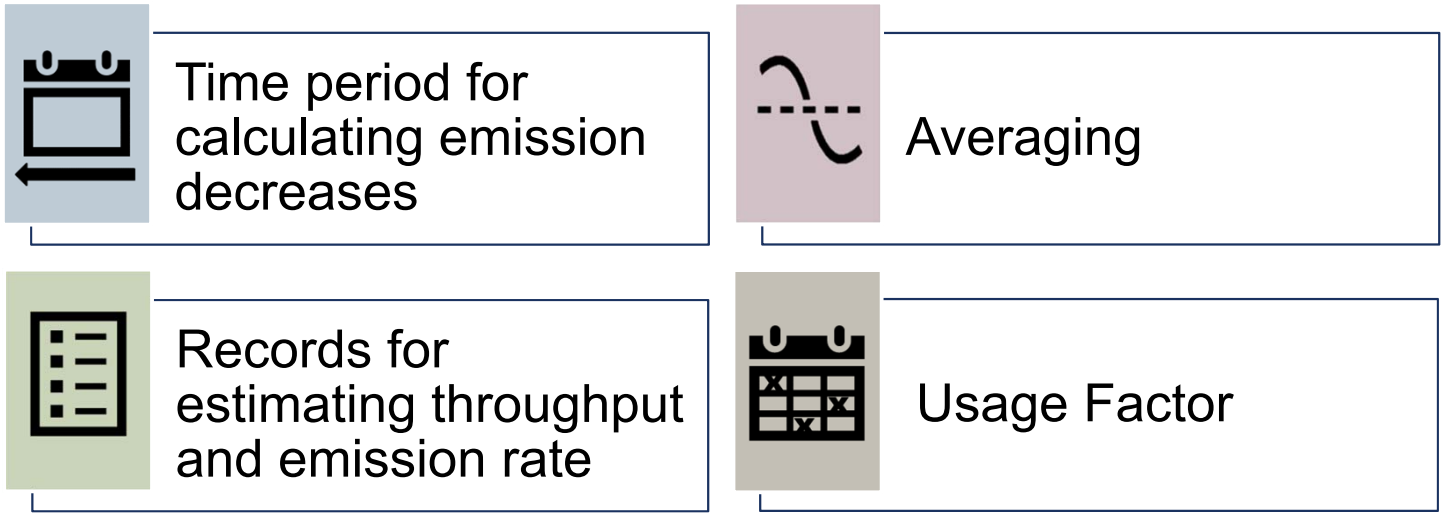


Surplus Discounting for the Open Market and the Proposed Large Source Bank

- Staff is exploring streamlining surplus discounting for generated offsets for the Open Market and Large Source Bank
- Staff is proposing that ERCs and L-ERCs will be discounted to BARCT at time of generation and at time of use, if needed
  - L-ERCs will be annually discounted to provide an accurate annual balance of L-ERCs in the Large Source Bank
- Since ERCs are currently discounted to BACT at time of generation, must ensure there are no backsliding issues per SB 288

Quantification of ERCs When Records are Available

- Staff is proposing that ERCs for the Open Market and Large Source Bank use the same quantification approach for determining emission decreases when records are available
- Staff is re-assessing the following areas of the current quantification approach for calculating daily emission decreases for ERCs under Rule 1306:



Time Period, Averaging, and Records for Quantification of Emission Decreases

Time period for calculating emission decreases	• Last 2 consecutive calendar years or other 2 calendar years that are more representative of normal operations over the previous 5 calendar years, immediately preceding the emission decrease • Operator must have sufficient records for the 2 consecutive years; shorter time period allowed if 2 consecutive years are not available (no less than 12 consecutive months)
Averaging	• Rule 1306 (c)(4) states that "the average value shall be calculated for those two years or other approved period" • Staff is recommending to clarify that the "other approved period" (no less than 12 consecutive months) is allowed if two consecutive calendar years of operating data is not available

Records for estimating throughput and emission rate	• Clarification in Rule 1306 to provide the following records:
	  • Emission rate
	  • Throughput
	  • Days of operation
	  • Load factor, if applicable
	• Require operator to provide additional information if requested by EO

Usage Factor

- Staff initially proposed to remove the Usage Factor (October 2020 WGM) for quantifying offsets for the Open Market and Large Source Bank
- U.S. EPA and CARB have commented that removing the Usage Factor may be an issue for seasonal or periodic operations
- Additional time is needed to work with U.S. EPA, CARB, and stakeholders regarding whether the Usage Factor will be retained or removed when quantifying emissions decreases
- Staff is also exploring generating offsets using an annual basis which would eliminate the need for a Usage Factor and the number of operating days

Alternative Quantification of Offsets Without Records

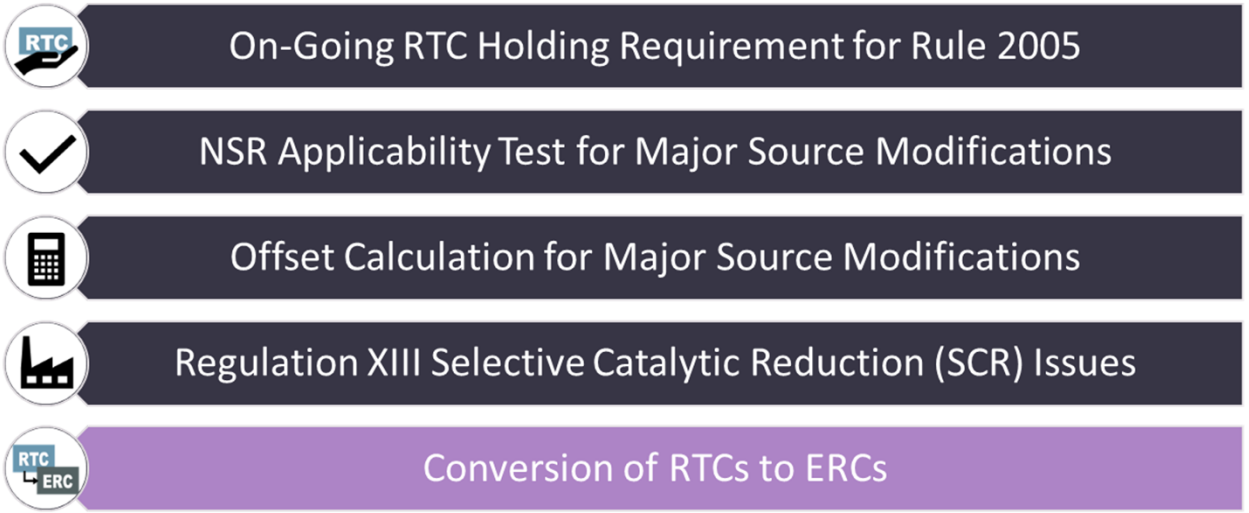
- When records are unavailable, staff has been exploring a quantification approach for L-ERCs generated from orphan reductions or shutdowns
- Staff discussed with U.S. EPA if the Large Source Bank could use a similar approach to the Internal Bank that is based on 80% of the Permit to Emit (PTE)
  - U.S. EPA expressed doubts about allowing a percentage of the PTE approach for L-ERCs, particularly if the L-ERCs are used by Major Polluting Facilities
- Staff is continuing to work with U.S. EPA regarding use of an alternative quantification approach if records are not available for emission decreases for the Large Source Bank

Comparison of Generation of Offset Requirements

			
Real	Actual emissions	Same	Same
Permanent	Physical modification, cease operation, or equipment removal	Same	Same
Enforceable	Permit conditions or surrender permit	Same	Same
Surplus Discounting	Current: Source-specific BACT discount	Current: Annual programmatic BARCT discount	N/A
	Proposed: Source-specific BARCT discount	Proposed: No change	Proposed: Source-specific BARCT discount
Quantification with Records	Current: Actual reduction w/ supporting information	Current: 80% of PTE	N/A
	Proposed: No change	Proposed: 80% of PTE (Possibly lower)	Proposed: Actual reduction w/ supporting information
Quantification without Records	Current: No ERC issued	Current: 80% of PTE	N/A
	Proposed: No change	Proposed: 80% of PTE (Possibly lower)	Proposed: TBD

Chapter 7: NSR Issues Related to the RECLAIM Transition

- Chapter discusses five key issues related to the RECLAIM transition
- All issues have been discussed in NSR Working Group Meetings
- Staff will discuss recent comments on NSR applicability test at next Working Group Meeting
- Staff has additional information regarding conversion of RTCs to ERCs



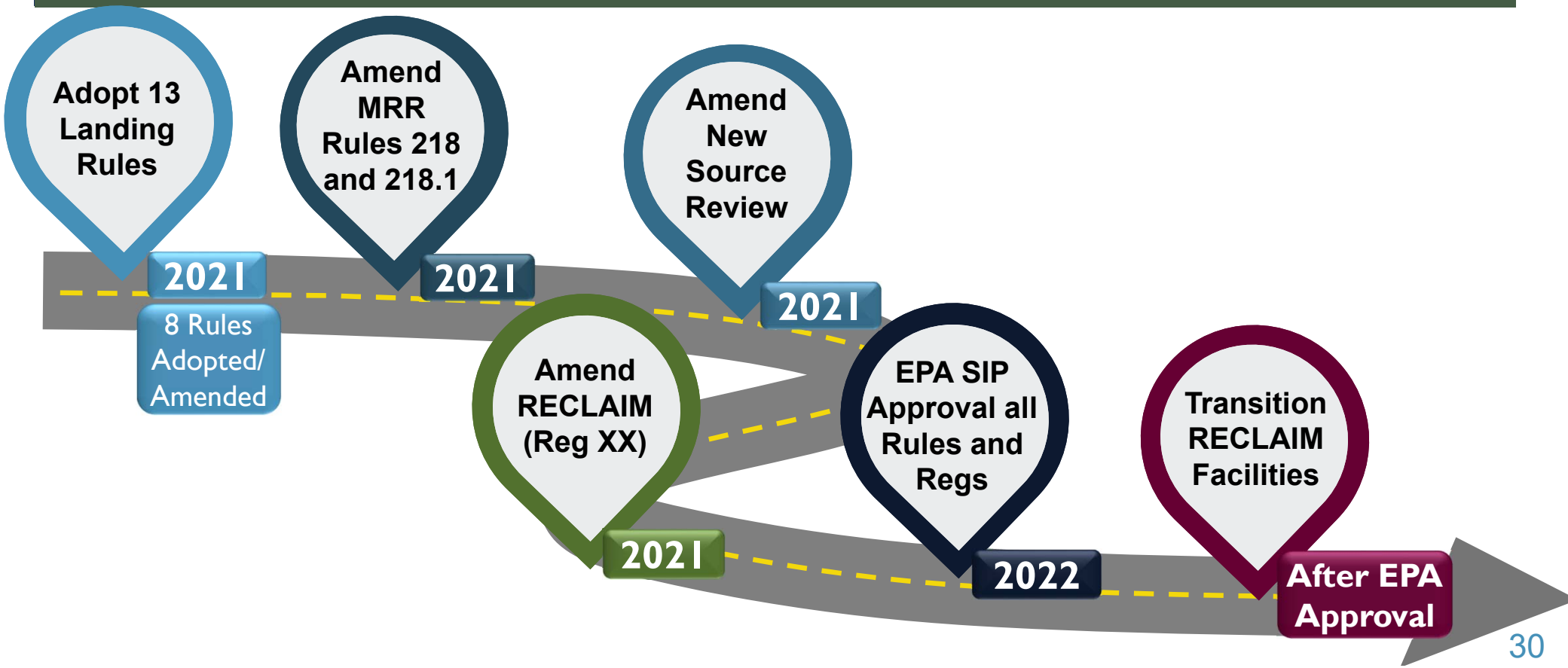
Conversion of RTCs to ERCs

- At October Working Group Meeting staff discussed the conversion of ERCs that were required to be converted to RTCs to explore if those RTCs could be converted back to ERCs
- U.S. EPA commented that the conversion of RTCs back to ERCs is not possible
  - No mechanism to sort out and track the unused RTCs that were reissued from ERCs since RTCs
  - Conversion of RTCs to ERCs would require ongoing obligations post-RECLAIM, such as emissions caps
- Based on comments from U.S. EPA, staff will no longer pursue the conversion of RTCs to ERCs

Chapter 8: Transition Process

- Chapter discusses the transition process
- Incorporates U.S. EPA's current recommendation that facilities do not transition out of RECLAIM until the following are SIP approved:
  - Landing rules for all RECLAIM equipment, including monitoring rules;
  - Regulation XX – RECLAIM; and
  - Regulation XIII – New Source Review
- Staff incorporated the transition process that was discussed in Version 1.0 of the RECLAIM Transition Plan which includes
  - Initial and Final Determination Notifications
- Staff is still working on specifics for the transition (details will be discussed at a future working group meeting)

Overview of RECLAIM Transition



Demonstrations with SIP Submittal

- To ensure the RECLAIM transition is consistent with Section 110(l) of the federal Clean Air Act and revisions to the SIP would not interfere with attainment and reasonable further progress U.S. EPA suggested and staff agreed to a one-time programmatic equivalency demonstration with the SIP submittal package for the RECLAIM transition
  - Objective is to ensure SIP commitment for 12 tpd RTC shave has been achieved
  - Staff will verify that actual emissions from RECLAIM facilities are ≤ 14.5 tons per day
  - If actual emissions are > 14.5 tons per day, then emission projections with implementation of landing rules with future effective dates can be used to project actual emissions
- Regarding the 2016 SIP commitment for CMB-05, U.S. EPA concurred that no demonstration was needed for the additional 5 tons per day that will be achieved through implementation of command-and-control rules

Chapter 9: Permitting

- Chapter discusses permitting considerations related to the RECLAIM Transition
- Since the Version 1.0, staff has amended Rule 301 to incorporate a fee schedule for permit fees related to the RECLAIM transition
- Provided additional clarification regarding staff's approach for calculate a pre-modification Potential to Emit for permits that do not have a permit limit or the permit limit is not in pounds per day

Ongoing Efforts and Next Steps

- Encourage stakeholders to provide comments on RECLAIM Transition Plan by January 11, 2021
- Next Working Group Meeting will be January 21, 2021 at 10 AM
- Staff will continue to provide updates to Stationary Source Committee
- Continue monthly Working Group Meetings
- Continue working with U.S. EPA, CARB and stakeholders on addressing RECLAIM and NSR issues related to the RECLAIM transition

Contacts

General Questions	Susan Nakamura Assistant Deputy Executive Officer 909-396-3105 snakamura@aqmd.gov
General RECLAIM Questions	Gary Quinn, P.E. Program Supervisor 909-396-3121 gquinn@aqmd.gov
New Source Review	Michael Morris Planning and Rules Manager 909-396-3282 mmorris@aqmd.gov
	Uyen-Uyen Vo Program Supervisor 909-396-2238 uvo@aqmd.gov
	Lizabeth Gomez Air Quality Specialist 909-396-3103 lgomez@aqmd.gov

To receive e-mail notifications for Regulation XX or Regulation XIII, sign up at: www.aqmd.gov/sign-up

Rule Contacts – Proposed Amended/Adopted

Proposed Rule 1109.1	Heather Farr	Program Supervisor	909-396-3672	hfarr@aqmd.gov
	Sarady Ka	Air Quality Specialist	909-396-2331	ska@aqmd.gov
Proposed Amended Rule 1147	Gary Quinn, P.E.	Program Supervisor	909-396-3121	gquinn@aqmd.gov
	Shawn Wang	Air Quality Specialist	909-396-3319	swang@aqmd.gov
Proposed Rule 1147.1	Gary Quinn, P.E.	Program Supervisor	909-396-3121	gquinn@aqmd.gov
	Steve Tsumura	Air Quality Specialist	909-396-2549	stsumura@aqmd.gov
Proposed Rule 1147.2	Gary Quinn, P.E.	Program Supervisor	909-396-3121	gquinn@aqmd.gov
	James McCreary	Assistant Air Quality Specialist	909-396-2451	jmccreary@aqmd.gov
Proposed Amended Rules 218 & 218.1 Proposed Rules 218.2 & 218.3	Gary Quinn, P.E.	Program Supervisor	909-396-3121	gquinn@aqmd.gov
	Yanrong Zhu	Air Quality Specialist	909-396-3289	yzhu1@aqmd.gov

Rule Contacts – Amended/Adopted

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	Rudy Chacon	Air Quality Specialist	909-396-2729	rchacon@aqmd.gov
Rule 1110.2	Uyen-Uyen Vo	Program Supervisor	909-396-2238	uvo@aqmd.gov
	Rudy Chacon	Air Quality Specialist	909-396-2729	rchacon@aqmd.gov
Rules 1134 & 1135	Michael Morris	Planning and Rules Manager	909-396-3282	mmorris@aqmd.gov
	Uyen-Uyen Vo	Program Supervisor	909-396-2238	uvo@aqmd.gov
Rules 1146, 1146.1, & 1146.2	Gary Quinn, P.E.	Program Supervisor	909-396-3121	gquinn@aqmd.gov
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	Shawn Wang	Air Quality Specialist	909-396-3319	swang@aqmd.gov
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