



# RECLAIM Transition/BARCT Implementation Update

A&WMA WCS 2023 ANNUAL CONFERENCE

OCTOBER 19, 2023

# Agenda



RECLAIM Transition

New Source Review (NSR)

BARCT Implementation Update



# RECLAIM TRANSITION

# Background

- REgional CLean Air Incentives Market (RECLAIM) was adopted in 1993
  - Includes NO<sub>x</sub> and SO<sub>x</sub> markets for facilities with historical emissions  $\geq$  4 tons per year
  - Facilities were initially issued an allocation of RECLAIM Trading Credits (RTCs)
  - Facilities must hold RTCs that are equal to or greater than their actual emissions
- 2016 AQMP resolution directed staff to transition RECLAIM to a command-and-control regulatory structure requiring Best Available Retrofit Control Technology (BARCT) level controls
- AB 617 also required adoption of BARCT



# General Overview of RECLAIM Transition Process

Adopt 14 landing rules applicable to over 2,200 units



Amend an estimated eight New Source Review (Reg XIII) and RECLAIM (Reg XX) rules



Submit all landing rules, Reg XIII, and Reg XX to CARB and U.S. EPA for approval into the SIP



Update permits to include new rule requirements

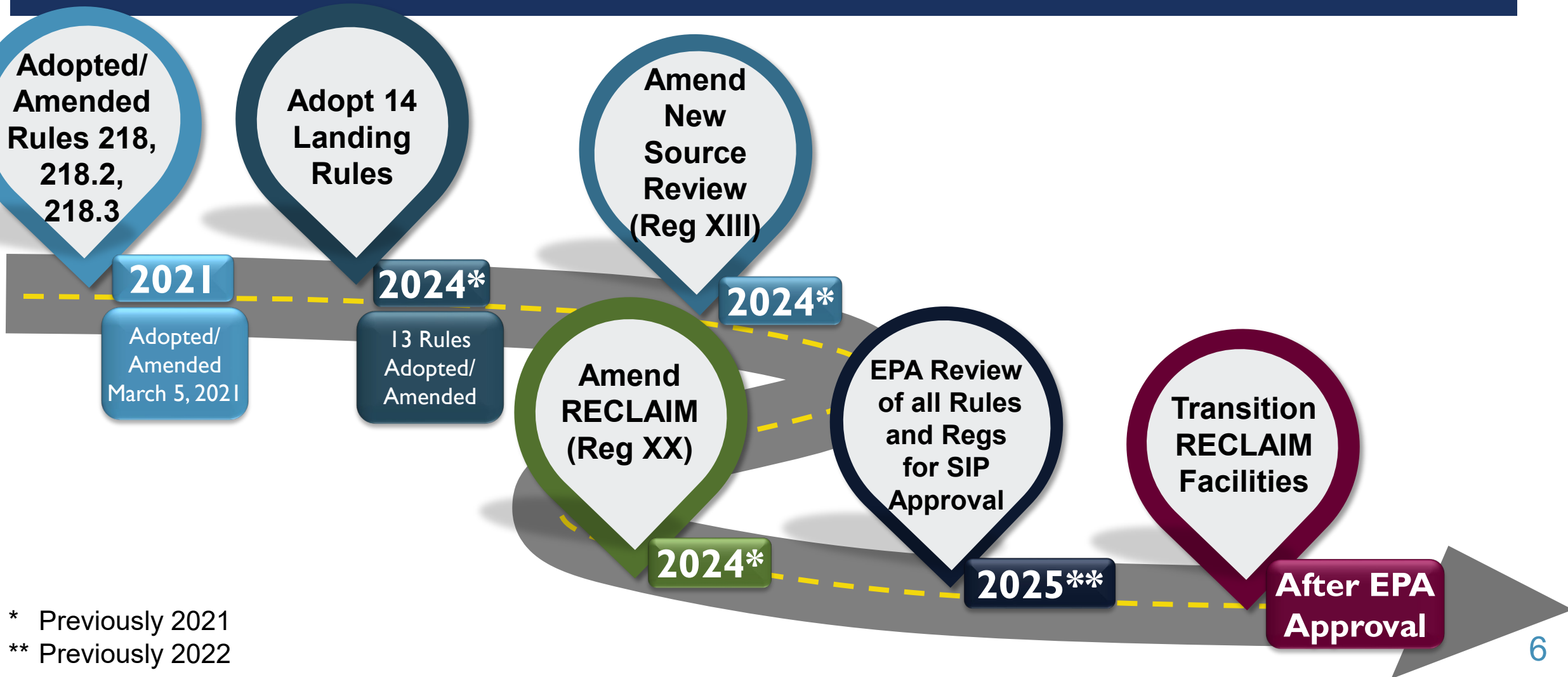


U.S. EPA SIP Approval of landing rules, Regulation XIII, and Regulation XX



Transition RECLAIM Facilities (revise permits at 235 facilities)

# Overview of RECLAIM Transition



# Landing Rule 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



Rule 1147 –  
Miscellaneous  
Combustion Sources

0.54



Rule 1147.2 – Metal  
Melting and Heating  
Furnaces

0.47



Rule 1153.1–  
Commercial Food Ovens

0.11

**Total NOx Reductions = 13.49 tons per day\***

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

# Landing Rule Under Development



PR 1159.1 – Nitric Acid Processing  
Tanks

Public Hearing: First Quarter 2024

BARCT analysis being reviewed due to updated  
cost-effectiveness threshold in 2022 AQMP

# Proposed Amendments To Rules 2011 And 2012

Contains requirements related to CEMS shutdowns and validates the emission hours as zero value data points

Describes acceptable methods to demonstrate non-operation of equipment

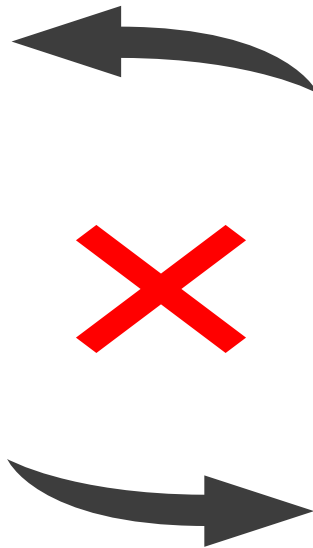
Expands the alternative CEMS performance requirements to include a three-point linearity test

Other minor changes for clarification and consistency

Scheduled for a Public Hearing on November 3, 2023



Monitored equipment is non-operational and disconnected for an extended period (at least 168 consecutive hours)



The CEMS has no emission source to monitor (emissions are verified as zero) so it may be offline while the monitored equipment is shutdown

# Status of Regulation XX Rule Development to Transition RECLAIM

- Preliminary rule language for Regulation XX amendments was released in July 2022<sup>1</sup>
- All NOx RECLAIM facilities will exit at a fixed date
  - Tentative NOx RECLAIM transition date is January 1, 2026
  - Compliance Year 2025 ends on December 31, 2025, for all NOx RECLAIM facilities
- U.S. EPA supports a fixed date approach to exit NOx RECLAIM facilities
- Facilities will still be required to reconcile Compliance Year 2025 emissions and be subject to RECLAIM annual audits for 2024 and 2025 compliance years

<sup>1</sup> <http://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/proposed-rules/regulation-xx>

# Challenge of Transitioning RECLAIM Facilities

- Facilities will be subject to Regulation XIII for New Source Review upon exiting NOx RECLAIM
  - NOx RTCs will no longer be available to offset emission increases
- Open Market Emission Reduction Credits (ERCs) will be the only external source of offsets for most RECLAIM facilities\*
  - Concurrent facility modifications resulting in emission decreases may be used to offset emission increases from new projects if a facility chooses not to purchase Open Market ERCs
- If emission increases cannot be offset through ERCs, a permit cannot be issued
- Based on historic demand from RECLAIM facilities, staff found that there could be insufficient NOx ERCs in the Open Market after RECLAIM transitions
- All facilities will find it challenging to generate NOx ERCs

*\*Some former RECLAIM facilities may qualify for credits in the Internal Offset Account because their permitted emissions are < 4 tons/year or are exempt from providing offsets pursuant to Rule 1304*



# NEW SOURCE REVIEW

## Availability of Open Market ERCs

- Historic demand of NOx offsets from RECLAIM facilities is 0.5 tons per day
- Open Market NOx ERCs would be depleted within one year based on historic demand
  - Demand may change due to recent BARCT/BACT determinations and cost of Open Market ERCs

Open Market ERCs	
Generation	Over-control or shutdowns
Discount	Individual equipment ERC discounted to BACT at time of issuance
Issuance	Issued to individual owners for future use or sale
Pollutant	2019 Balance (tons per day)
VOC	5.1
NOx	0.4
PM10	0.7
SOx	0.4

# Status of Regulation XIII (New Source Review) Rule Development

Preliminary New Source Review rule language is being developed to:

Transition NO<sub>x</sub> RECLAIM facilities into command-and-control program

Reconcile Regulation XIII with 2002 NSR Reform

Ensure compliance with Protect California Air Act of 2003 (SB 288)

Provide a long-term solution for offset availability post-RECLAIM

- Preliminary rule language for Regulation XIII amendments was released in November 2022<sup>1</sup>
  - Reflects working group discussions held over the past three years
  - Further amendments may be necessary
  - Continuing to work with CARB and U.S. EPA on possible flexibility on ERC generation

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

# Planned Changes to New Source Review<sup>1</sup>

Rule	Title	Status
1302	Definitions	Update and clarify terms
1306	Emission Calculations	Update NSR applicability and offsetting calculation methodology for major source modifications
1309	Emission Reduction Credits (ERCs) and Short Term Credits	Sunset use of Short Term Emission Reduction Credits; remove ozone precursors from interpollutant offset trading

<sup>1</sup> Does not include grammatical or stylistic changes (i.e. changing “District” to South Coast AQMD)

# Key Proposed Amendments to Rule 1306 – Emission Calculations

Required by U.S. EPA to reconcile Regulation XIII with 2002 NSR Reform

Two-tier test to determine NSR applicability for Major Source Modifications

- PTE-to-PTE and Federal test (Actual Emissions-to-PTE)

In certain instances, PTE-to-PTE calculation allowed for determining amount of required offsets for Major Source Modifications

- Actual emissions are at least 80 percent of pre-modification PTE; or
- Past emission increases were fully offset less than five years ago

Actual-to-PTE calculation for all other Major Source Modifications to determine amount of required offsets

Calculations for all new equipment and Minor Source Modifications are unchanged

# Key Proposed Amendments to Rule 1309 – Emission Reduction Credits and Short Term Credits

17

Use of Short Term Emission Reduction Credits (STERCs) will not be allowed

- STERCs are underutilized; and
- U.S. EPA has not approved

Ozone precursors not allowed for interpollutant offset trading

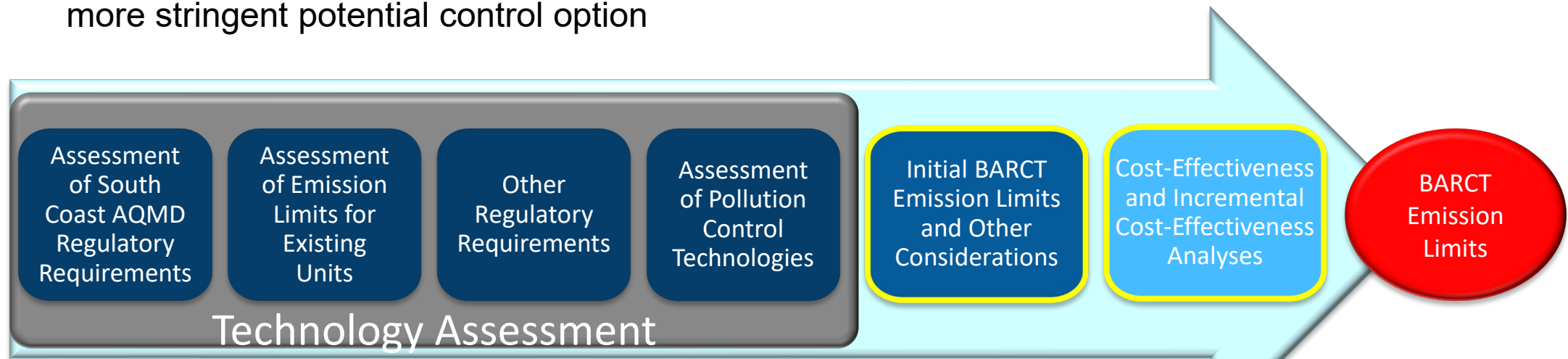
- Recent court ruling prohibits trades of ozone precursors



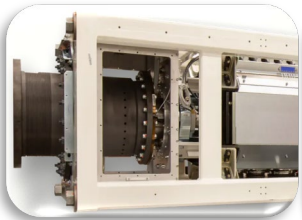
# BARCT IMPLEMENTATION UPDATE

# BARCT Assessment

- Health and Safety Code Section 40406 defines BARCT as “...an emission limitation that is based on the maximum degree of reduction achievable, taking into account environmental, energy, and economic impacts by each class or category of source.”
- BARCT emission limits represent the maximum degree of reduction achievable
- BARCT levels must adhere to Health and Safety Code Section 40920.6
  - Must include a technology and cost-effectiveness analysis for each class and category of equipment
  - Cost-effectiveness and incremental cost-effectiveness must be determined for each progressively more stringent potential control option



# NOx BARCT Rules Under Development



Rules 1110.3 –  
Linear Generators

November  
2023



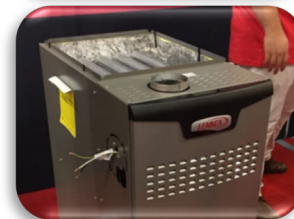
Rule 1110.4 –  
Emergency Engines

4<sup>th</sup> Quarter  
2024



Rule 1135 –  
Electricity Generating  
Facilities

1<sup>st</sup> Quarter  
2024



Rule 1111 –  
Fan-Type Central  
Furnaces

4<sup>th</sup>  
Quarter  
2024



Rule 1146.2 –  
Larger Water  
Heaters and Small  
Boilers

1<sup>st</sup> Quarter  
2024



Rule 1121 – Residential  
Water Heaters

4<sup>th</sup>  
Quarter  
2024



Rule 1165 –  
Incinerators

3<sup>rd</sup> Quarter  
2024

Focus on zero emission and near-zero  
emission technologies

# VOC BARCT Rules Under Development



Rules 1151 –  
Automotive  
Refinishing

3<sup>rd</sup> Quarter  
2024



Rule 1113 –  
Architectural  
Coatings

4<sup>th</sup> Quarter  
2024



Rule 1171 – Solvent  
Cleaning

4<sup>th</sup> Quarter  
2024

- Implementing AQMP Control Measure FUG-01
- Focus on addressing exemption status of parachlorobenzotrifluoride (PCBTF) and tert-Butyl acetate (TBAC)

# VOC BARCT Rules Under Development (Smart LDAR)



Rules 1148.1 – Oil  
and Gas Wells

1<sup>st</sup> Quarter  
2024



Rule 463 – Storage  
Tanks

2<sup>nd</sup>  
Quarter  
2024



Rule 1173 – Leaks  
from Valves and  
Fittings

4<sup>th</sup> Quarter  
2024



Rule 1176 –  
Wastewater Systems

4<sup>th</sup> Quarter  
2024

- Focus on implementing advance leak detection and repair technologies
- Implementing AQMP Control Measure FUG-01
- Addressing AB 617 Community Emission Reduction Plan actions

# VOC BARCT Rules Under Development (Other)



Rules 1118 –  
Refinery Flares

1<sup>st</sup> Quarter  
2024

Focus on addressing AB 617  
Community Emission Reduction Plan  
actions



Rule 1133.3 –  
Greenwaste  
Composting

4<sup>th</sup> Quarter  
2024

Seek additional VOC and ammonia  
emission reductions from greenwaste  
and foodwaste composting



Rule 1102 –  
Dry Cleaning

4<sup>th</sup> Quarter  
2024

Focus on zero emission technologies  
for new dry cleaning systems

# Conclusion

Staff continues working on RECLAIM landing rules, amendments to NSR to transition RECLAIM to command-and control regulatory structure, and other BARCT rules

For more information about a specific proposed rule, go to: <https://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/proposed-rules>

To receive e-mail notifications for proposed rules, sign up at: [www.aqmd.gov/sign-up](http://www.aqmd.gov/sign-up)

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