### NOx RECLAIM WORKING GROUP MEETING

OCTOBER 12, 2017 SCAQMD DIAMOND BAR, CA

## Agenda

- September 14, 2017 working group meeting highlights
- Proposed Amended Rule 2001
- Proposed Amended Rule 2002
- Notifications for facilities currently achieving BARCT (early exit)
- New Source Review (NSR) considerations and discussion
- Rulemaking Schedule
- Update on Transition Plan
- Next Steps

## September 14, 2017 Working Group Meeting

- Initial analysis for facilities with 6 pieces of equipment or greater
- Evaluation of landing rules outside of RECLAIM
  - Rules not representative of BARCT
  - Rules where further analysis is required
  - Rules which reflect current BARCT, but require assessment of implementation schedules
- New Source Review general topics for discussion
- AB 617 Implementation

PROPOSED AMENDED RULE 2001

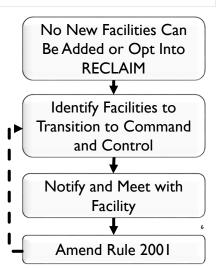
## Rule 2001 - Background

- Rule 2001 specifies inclusion criteria into RECLAIM for new and existing facilities, as well as for facilities electing to enter RECLAIM
- The Executive Officer maintains a listing of facilities which are subject to RECLAIM
- The RECLAIM facility listing is amended when there are facility additions, deletions, or changes in designation

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## General Description of Amendments to Rule 2001 Through Transition Process

- As facilities are identified for transitioning to command and control
  - SCAQMD will notify and meet with facility
  - Amend Rule 2001
- Over the next 18 months, anticipate multiple amendments to Rule 2001
- Other amendments and rule development efforts (BARCT rules, industry specific rules, etc.) will be simultaneous



## PAR 2001 – Upcoming Amendments

January 2018 Amendments to Rule 2001

Amendments to eliminate no new entry into RECLAIM

#### March 2018 Amendments to Rule 2001

First Group of Facilities that are at BARCT (No New BARCT Rule or Amendments to Existing BARCT Rules Needed)

General Opt-Out Provisions

July 2018 Amendments to Rule 2001

Second Group of Facilities that are not at BARCT with Rule 1146 Series Equipment Only (All Equipment is Rule 1146, 1146.1, and/or 1146.2)

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## PAR 2001 (January 2018)

- The proposed amendments would cease any future inclusions of facilities into RECLAIM:
  - Removal of Executive Officer approval of facility permits for new or existing RECLAIM facilities – subparagraphs (c)(1)(C) and (c)(1)(D); and
  - Removal of Executive Officer approval for a facility to elect to enter RECLAIM – subparagraph (c)(1)(E)
  - Removal of provisions for entry election subdivision (f):
    - "On and after (date of amendment), a non-RECLAIM facility may not elect to enter the NOx RECLAIM program."

### PAR 2001 (March 2018)

- The proposed amendments will identify facilities that will be transitioned out of RECLAIM
  - Equipment at these facilities meets BARCT
  - No new BARCT rules or amendments to existing BARCT rules needed
- Staff's initial analysis of all RECLAIM facilities identified 43 facilities with RECLAIM source equipment that meet BARCT
  - Total compliance year 2015 emissions: 0.2 tons per day
  - Total holdings as of September 15, 2017: 0.3 tons per day
- Analysis was based on comparing RECLAIM source equipment permit emission limits with emission limits in Regulation XI rules that reflect current BARCT (Presented at July 2017 Working Group)

## Initial Concepts for PAR 2002 (January 2018)

- Rule 2002 establishes provisions for Allocation or RECLAIM Trading Credits
- Amendments needed as facility transitions out of RECLAIM
- Proposed Amended Rule 2002 will add provisions to:
  - Address facilities that are required to exit or opt out of RECLAIM
  - Prohibit selling future compliance year RTCs upon notification from the Executive Officer that the facility will be transitioned out of RECLAIM (Different from "Initial Notification")
  - Specify that when a facility transitions out of RECLAIM, its holdings will be surrendered

INITIAL NOTIFICATIONS FOR FACILITIES CURRENTI ACHIEVING BARCT (FOR MARCH 2018 AMENDMEN OF RULE 2001)	

### **Initial Notifications Letters**

- SCAQMD staff is preparing initial notification letters for facilities that will be transitioned out of RECLAIM (43 facilities initially identified at BARCT)
- Notification letters are needed in preparation for the March 2018 amendments to Rule 2001
- Notification letters will include:
  - An equipment list of permitted RECLAIM source equipment will be included
  - Notification that SCAQMD staff will be scheduling meetings with each of these facilities, as well as site visits
  - Additional information and details requested for Rule 219 exempted equipment e.g., small boilers and process heaters less than or equal to 2 MMBTU/hr
- Initial notification letters will be sent out this month

NEW SOURC	E REVIEW (1	NSR)	
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## General Guiding Principles for Transition

- RTC Origin: RTCs were allocated at the beginning of RECLAIM
- Different New Source Review Requirements for RECLAIM and command and control (Regulation XIII)
- As RECLAIM facilities exit, RTC holdings will be retired
- RTCs are not property rights
- Supply of ERCs in command and control should not inhibit growth and facility modernization

#### NSR Provisions Under RECLAIM – Rule 2005

- Rule 2005 establishes New Source Review requirements for RECLAIM facilities that are new, modify, or increase their initial allocation
- Three requirements for RECLAIM to provide NSR programmatic equivalency
  - Prior to start of operation, facility must hold sufficient RTCs to offset the annual increase in potential emissions for the first year of operation at a 1-to-1 ratio
  - Demonstrate through modeling that there is no significant increase in NO<sub>2</sub> if a facility incurs an emission increase or increases its allocation to a level greater than the initial allocation plus non-tradable credits
  - Equipment causing emission increase must be at BACT

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# RECLAIM Compliance with Federal Offset Requirements

- RECLAIM complies with the federal 1.2-to-1 offset requirement for NOx on an aggregate basis
  - All unused allocations are available to provide offsets beyond the 1-to-1 offset ratio for NSR emission increases
  - Each year an annual program audit report is provided to assess NSR and verify programmatic compliance
  - Most recent Annual RECLAIM Audit Report for Compliance Year 2015
    - RECLAIM demonstrated federal equivalency with a programmatic offset ratio of 39-to-1
    - Overall, RECLAIM complies with the federal 1.2-to-1 offset requirement on aggregate

## New Source Review – Key Questions

- Question 1: Can ERCs that were Converted to RTCs be Converted Back to ERCs Post RECLAIM?
- Question 2: Can Equipment Permitted Pre-RECLAIM that is Shutdown in RECLAIM Create a Shutdown ERC Post RECLAIM?
- Question 3: Can Equipment Permitted During RECLAIM that is Shutdown Post RECLAIM Create a Shutdown ERC?
- Question 4: Can Equipment that is Shutdown During RECLAIM Generate a Shutdown ERC Post RECLAIM?
- Question 5: Is there a Sufficient Supply of NO<sub>x</sub> ERCs in the Open Market?

## Question 1: Can ERCs that were Converted to RTCs be Converted Back to ERCs Post RECLAIM?

#### **Background:**

- Rule 2002 establishes the formula for starting Allocations under RECLAIM
  - Allowed facilities to convert ERCs to RTCs at start of program
  - 6.8 tons per day converted at the beginning of the program (includes ERCs from active RECLAIM facilities, inactive RECLAIM facilities, broker, traders, etc.)

#### **Discussion:**

- Difficult to track where ERCs reside today with over 20 years of trades, use, and retirements (due to shaves)
- Once converted to RTCs, facility had opportunity to use or sell RTCs in RECLAIM

#### **Initial Recommendation:**

Do not allow conversion of RTCs to ERCs

## Question 2: Can Equipment Permitted Pre-RECLAIM that is Shutdown in RECLAIM Create a Shutdown ERC Post RECLAIM?

#### **Background:**

- New and modified equipment permitted prior to the start of RECLAIM surrendered ERCs when equipment permitted
- When equipment is shutdown, stream of "shutdown RTCs" available for use in RECLAIM
- As facilities exit RECLAIM, their holdings will be surrendered including streams of RTCs from an equipment shutdown

#### Discussion:

Origin of all RTCs is from the issuance of RECLAIM Allocation

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# Question 2: Can Equipment Permitted Pre-RECLAIM that is Shutdown in RECLAIM Create a Shutdown ERC Post RECLAIM? (Continued)

#### Discussion: (Continued)

- There is no creation of a "shutdown RTC"
- No ERC was generated, no ERC can be issued after facility transitions out of RECLAIM

#### **Initial Recommendation:**

 Any RECLAIM facility that transitions to command and control that has existing equipment prior to the start of RECLAIM and that piece of equipment is shutdown while in RECLAIM would not receive an ERC for that equipment shutdown during RECLAIM

## Question 3: Can Equipment Permitted During RECLAIM that is Shutdown Post RECLAIM Create a Shutdown ERC?

#### **Background:**

- New equipment permitted after the start of RECLAIM is required to secure RTCs each year to account for emissions increase
- As a RECLAIM facility transitions to command and control
  - Should the facility be required to surrender a stream of RTCs for that new source?
  - Can this be a programmatic demonstration?
  - If the equipment shutdown after the facility transitions to command and control can an ERC be generated?

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## Question 3: Can Equipment Permitted During RECLAIM that is Shutdown Post RECLAIM Create a Shutdown ERC? (Continued)

#### Discussion:

- While in RECLAIM, facility complied with RECLAIM NSR requirements (Rule 2005 which requires Sufficient RTCs, BACT, NO<sub>2</sub> modeling)
- Since all RTCs will be surrendered when the transition to command control is completed, RECLAIM will more than satisfy NSR offsetting requirements

#### **Initial Recommendation:**

- New equipment permitted after the start of RECLAIM that is shutdown after the facility transitions to command and control, can generate an ERC
  - Facility satisfied NSR requirements under RECLAIM
  - Any generation of the ERC in command and control would need to comply with Regulation XIII (BACT discounting)

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## Question 4: Can Equipment that is Shutdown During RECLAIM Generate a Shutdown ERC Post RECLAIM?

#### **Background:**

- When equipment is shutdown, stream of "RTCs" available for use in RECLAIM
- Can facility generate an ERC from equipment shutdown in RECLAIM?

#### **Discussion:**

- Origin of all RTCs is issuance of RECLAIM Allocation
  - There is no creation of a "shutdown RTC," no ERC was generated in RECLAIM

#### **Initial Recommendation:**

 Any equipment that is shutdown in RECLAIM cannot generate an ERC from that shutdown equipment post RECLAIM

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# Question 5: Is there a Sufficient Supply of $NO_x$ ERCs in the Open Market?

#### **Background:**

- As RECLAIM facilities transition to command and control, they will be subject to Regulation XIII – New Source Review (NSR) requirements
- Most RECLAIM facilities will need to access the open market for ERCs\*
- Key Regulation XIII requirements:
  - Must meet BACT (same as RECLAIM)
  - No significant increase in NO<sub>2</sub> (same as RECLAIM)
  - Offset ratio of 1.2 to 1 (1 to 1 offset ratio in RECLAIM)
  - BACT discounting (no discounting in RECLAIM)
  - Trading zone restrictions (same as RECLAIM)

\* Exception is Electric Generating Facilities under Rule 1309.1

## RTC and ERC Comparison

Characteristic	RTC	ERC
Type of Credit	Emission Allocation	Emission Reduction
Generation	No "generation" – Unused holdings	Overt action: Over-control or shutdown
How Issued	Initial issuance in Rule 2002	Overt action required such as shutdown or over-control
Discounting	Programmatic reductions over time are established in Rule 2002	Discount at time of generation, value issued in perpetuity (with exception of short-term ERCs)
Trading Restrictions	Trading Zones	Trading Zones

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# Question 5: Is there a Sufficient Supply of NO<sub>x</sub> ERCs in the Open Market? (Continued)

#### Discussion:

- Supply of NO<sub>x</sub> ERCs in the open market is: < 1,000 lbs/day (0.5 ton/day) available
  - Not all ERCs in the open market are available facilities hold on to ERCs for business growth
- Supply of NOx ERCs in the SCAQMD internal bank has 22 tons/day (Rule 1315 limited)
- Generation of ERCs is generally limited to shutdowns and to a lesser extent over-control
- More analysis needed to better understand potential demand and options for supply of ERCs

#### **Initial Recommendation:**

- As facilities transition to command and control they will need to comply with Regulation XIII
- Additional discussions are needed to ensure sufficient supply of ERCs for growth and facility modernization
- Further discussions with CARB and EPA needed
- Staff will return to RECLAIM Working Group

# RULEMAKING SCHEDULE (SHORT-TERM AMENDMENTS

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## Rulemaking Schedule (1st Quarter 2018)

- PAR 2001 January 2018
  - Provisions to prohibit new facilities entering RECLAIM
- PAR 2002 January 2018
  - Address allocation provisions for facilities that transition to command and control
- PAR 2001 March 2018
  - Provisions to exit facilities at BARCT
- Rule 1146 series March 2018
  - Provisions pertaining to RECLAIM will be amended
  - Implementation schedules for second wave of transitioning facilities

## **Next Steps**

- Begin development of high priority rules
  - AB 617 BARCT rule development/adoption by January 1, 2019
  - Reg XX, refineries, power plants, and monitoring, reporting, and recordkeeping requirements
  - Provide regulatory certainty as soon as possible (i.e., BARCT effective dates)
- Sub-topic working group meetings will be convened for:
  - Refineries
  - Electricity Generating Facilities
  - Rule 1146, 1146.1, and 1146.2
- Continue with the development of the RECLAIM Transition Plan
- Continue meeting with facilities

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## Next Steps (Continued)

- Summary of initial facility analysis to be posted online
- Working Group Meetings (monthly)
  - November 8, 2017 at 1:30 P.M.
     (Regular meeting date & time change due to rescheduling of Administrative Committee meeting to accommodate the Veteran's Day Holiday)
  - December 14, 2017

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