### NOx RECLAIM WORKING GROUP MEETING

NOVEMBER 8, 2018 SCAQMD DIAMOND BAR, CA

# Agenda

- Landing Rule Updates
  - PAR 1146 Series/PR 1100
  - PR 1118.1
  - PR 1109.1
  - PAR 1134
  - PAR 1135
  - PAR 1110.2
- New Source Review
  - Overview of Key Issues
  - Discussion of Key Issue #1 Offsetting obligations post-RECLAIM

### LANDING RULE UPDATES

## Command-and-Control BARCT Rulemaking Status

### PAR 1146, 1146.1 and 1146.2



### Boilers, steam generators, and heaters

- 7<sup>th</sup> Working Group Meeting: October 16, 2018
- Set Hearing: November 2018
- Public Hearing: December 2018

### PR 1118.1



Non-Refinery Flares

- Public Workshop: October 17, 2018
- Set Hearing: November 2018
- Public Hearing: December 2018

### **PAR 1134**



**Gas Turbines** 

- Public Workshop: December 2018 (tentative)
- Public Hearing: April 2019

### PAR 1135



Electrical Generating Facilities

- Public Hearing: November 2, 2018
- Amendments approved by the Board

# Command-and-Control BARCT Rulemaking Status

### PR 1109.1



#### Refineries

- Draft Request for Proposal for third party verification of BARCT analysis:
- Administrative Committee: November 9, 2018
- Governing Board Approval Release December 7, 2018
- · Continuing site visits
- Public Hearing: 2019

### PAR 1110.2



## Gaseous- and Liquid-Fueled Engines

- Initiated site visit, more to be scheduled
- Sent survey questionnaire
- Public Workshop: 1<sup>st</sup> Quarter 2018
- Public Hearing: 3<sup>rd</sup> Quarter 2019

### PR 113



## Monitoring, Reporting, and Recordkeeping

- Integrated MRR requirements for:
  - Former RECLAIM
  - Possibly non-RECLAIM
- · Initiated preliminary analysis
- Comparing District and Federal requirements
- · Conducted five site visits

### UPDATE ON NEW SOURCE REVIEW

## Update on New Source Review

- Guiding Principles
- Key Terms
- Three Key RECLAIM NSR Issues
- Presenting framework for Key Issue #1
  - Providing additional details and policy questions
  - No recommendations possible options
  - Continuing discussions with EPA no decisions yet

## Fundamental Guiding Principles for NSR Resolution

- For the RECLAIM transition, any changes or revisions to NSR requirements in RECLAIM and/or Regulation XIII must comply with State and Federal requirements
- Statutes for Prevention of Backsliding
  - Federal Clean Air Act
  - California State Health and Safety Code

## Federal Clean Air Act

- Section 110 (I) states:
  - "...The Administrator shall not approve a revision of a plan if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress...or any other applicable requirement of this chapter."

9

# California State Senate Bill 288 "Protect California Act of 2003"

- This law was developed in response to concerns regarding changes to Federal NSR and places restrictions on backsliding for California air districts
- Provisions contained in Health and Safety Code Section 42504 –
   Amending and Revising New Source Review Rules
  - "No air quality management district or air pollution control district may amend or revise its new source review rules or regulations to be less stringent than those that existed on December 30, 2002."
- CARB reviews SCAQMD rules to ensure no backsliding under State law

# Comparison Between RECLAIM and Command and Control – PTE, Allowable, and Actual Emissions

### **RECLAIM**

### **Command and Control**

### PTE

 Conditions in the permit – for example hours of operation and/or NOx or other criteria pollutant emission rate limits

### **Allowable Emissions**

• NOx RTC allocation (Mass emissions)

### **Actual Emissions**

· Actual NOx mass emissions

### PTE

 Conditions in the permit – for example hours of operation and/or NOx or other criteria pollutant emission rate limits

### **Allowable Emissions**

Command-and-control rule establishes
 NOx emission rate limit

#### **Actual Emissions**

· Actual NOx mass emissions

П

## Summary of Three Key NSR Issues

For new sources
that are permitted
in RECLAIM,
what are the
offset obligations
as facilities
transition out of
RECLAIM?

For permits
issued without a
NOx PTE, when
and how will a
baseline be
established to
determine if an
NSR event
occurs after
facilities transition
out of RECLAIM?

How will the SCAQMD ensure that sufficient offsets are available to satisfy NSR requirements

## Areas of General Agreement for Key Issue #1

- New and modified sources in RECLAIM must comply with Rule 2005 – New Source Review for RECLAIM
- New and modified sources outside of RECLAIM must comply with Regulation XIII – New Source Review
- The transition of a facility from RECLAIM to command-and-control is not a NSR event

13

## Framing the Issue

- Rule 2005 has specific holding requirements for offsetting for new or modified sources that were permitted during RECLAIM
- Rule 2005 (f)(2) allows RECLAIM facilities to sell unused RTCs during the reconciliation period for the fourth quarter of the applicable compliance year
- RECLAIM complies with federal offset ratio by demonstrating a programmatic offset ratio of 1.2-to-1 each year
- Unclear what is required for new and modified sources permitted during RECLAIM as they transition out of RECLAIM to ensure compliance with SB 288 which requires no backsliding of New Source Review programs approved before 2002

## Framing the Issue (Continued)

- When RECLAIM ends, offsetting emissions from new and modified sources that were permitted during RECLAIM needs to continue
  - Question 1: As facilities transition out of RECLAIM, should there be requirements to demonstrate that future holding requirements under Rule 2005 are continued?
  - Question 2: As facilities transition out of RECLAIM, should there be an ongoing demonstration for new and modified sources that were permitted during RECLAIM?
  - Question 3: Should current federal offsetting be demonstrated by individual facilities or programmatically?

Key Rule 2005 Requirements

- Rule 2005 establishes New Source Review requirements for RECLAIM facilities or sources that are new, modified, or increase their initial allocation
- Key RECLAIM NSR requirements
  - Must meet BACT
  - No significant increase in NO2
  - No BACT discounting of RTCs for shutdowns
  - Trading zone restrictions
  - RTC holding and offset requirements (next slide)

# Rule 2005 RTC Holding and Offsetting Requirements for Existing Facilities with New Sources and New Facilities

# **Existing Facilities** with New Sources

### **Holding Requirement**

Prior to start of operation for the first year, facility must hold RTCs to offset the annual increase in potential emissions

### **RECLAIM Obligation**

Must provide RTCs to cover <u>actual</u> <u>emissions each compliance year</u>

### **NSR Offset Ratio**

Programmatic demonstration showing 1.2 to 1

### **New Facilities**

### **Holding Requirement**

Prior to start of operation <u>for the first</u> <u>year and every year thereafter</u>, facility must hold RTCs to offset the annual increase in <u>potential emissions</u>

### RECLAIM Obligation

Must provide RTCs to cover <u>actual</u> <u>emissions each compliance year</u>

### **NSR Offset Ratio**

Programmatic demonstration showing 1.2 to 1

## Rule 2005 Offset Ratio Requirements

- RECLAIM complies with the federal 1.2-to-1 offset requirement for NOx on an programmatic basis
  - Each year an annual program audit report is provided to assess NSR and verify programmatic compliance
  - All unused allocations are available to satisfy the 1.2-to-1 offset ratio

# Key Regulation XIII Requirements

- Must meet BACT (same as RECLAIM)
- No significant increase in NO<sub>2</sub> (same as RECLAIM)
- BACT discounting (no discounting in RECLAIM)
- Trading zone restrictions (same as RECLAIM)
- Offsetting requirement
  - Provide offsets at time of permitting
  - Offsets provided to the Potential to Emit
  - Offsets are in perpetuity
  - Offset ratio requirements ratio of 1.2 to 1

19

# Offsetting Requirements Between Rule 2005 and Regulation XIII

Requirement	Rule 2005	Regulation XIII
Amount of offsets required	Holding requirement to potential to emit each year for new facilities, and for first year for existing facilities with new or modified sources	Potential to emit of new or modified source
When are offsets required	Only holding requirement (See above)	At time of permitting, in perpetuity
Offset ratio	Programmatic: I.2-to-I	Facility: 1.2-to-1

## **Initial Response to Question 1**

- Question 1: As facilities transition out of RECLAIM, should there be requirements to demonstrate that future holding requirements under Rule 2005 are continued?
- Initial Response: Yes, only for facilities that were permitted during RECLAIM
  - Pursuant to Rule 2005 (f)(1) and (b)(2), <u>new facilities</u> that entered RECLAIM are required to hold RTCs to offset the total facility emissions at the commencement of <u>each compliance year</u>
    - To ensure compliance state law (SB 288), some demonstration of future holding requirements for new facilities that entered into RECLAIM is needed
    - Demonstration can be done programmatically

## Initial Response to Question 1 (Continued)

- Initial Response: (Continued)
  - Pursuant to Rule 2005 (f)(1) and (c)(4)(B), existing facilities with new or modified sources permitted during RECLAIM are only required to hold RTCs to offset facility total emissions at the commencement of the first compliance year
    - Existing facilities with new or modified sources permitted during RECLAIM do not have an ongoing commitment
    - Compliance with state law (SB 288) demonstration of initial holding requirements for existing facilities with new or modified sources permitted during RECLAIM have been satisfied and no further demonstration is needed

## Initial Response to Question 2

- Question 2: As facilities transition out of RECLAIM, should there be an ongoing demonstration for new and modified sources that were permitted during RECLAIM?
  - Initial Response: No, because RECLAIM did not have an ongoing offsetting requirement for these facilities
  - Rule 2005 has a holding offsetting requirement for new facilities and existing facilities with new or modified sources permitted during RECLAIM
  - Rule 2004 requires that a RECLAIM facility holds sufficient RTCs equal to or greater than their annual emissions (actual)

23

## Initial Response to Question 3

- Question 3: Should current federal offsetting be demonstrated by individual facilities or programmatically?
  - Initial Response: Future offsetting should be demonstrated programmatically
    - Requiring individual facilities to provide RTCs annually will require facilities to secure RTCs after all facilities transition out of RECLAIM – Keeps the RTC market going for NSR purposes
    - A programmatic demonstration showing that RTC allocations post RECLAIM are sufficient to cover actual emissions from new and modified sources permitted under Rule 2005

## Update of Key Issue #2 - Establishing Baselines

For permits
issued without a
NOx PTE, when
and how will a
baseline be
established to
determine if an
NSR event
occurs after
facilities transition
out of RECLAIM?

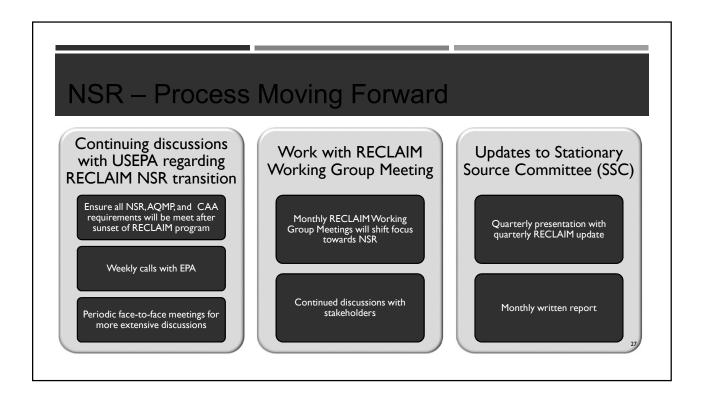
- Discussed permitting concept in April 2018
   Working Group Meeting
  - General recommendation is to retain existing NSR limits/conditions until next NSR triggering event
  - Follow methodology to establish baseline based on Rule 2005
- Further discussion at next meeting
  - What methodology will be used to establish a baseline to determine if a permitting action results in an emission increase occurs?
  - When will permits be evaluated to incorporate a NOx PTE?

25

## Update of Key Issue #3 - Ensuring Sufficient Offsets

How will the SCAQMD ensure that sufficient offsets are available to satisfy NSR requirements

- Discussed at October 2017 and April 2018 Working Group Meetings
  - Discussed concerns for availability of offsets in the open market
  - Discussed possible options for offsets
- Further discussion in subsequent meeting(s)
  - Identify potential sources of offsets after facilities transition out of RECLAIM?



### Contacts Proposed Amended Rules 1146, 1146.1, 1146.2 and General RECLAIM Questions Proposed Rule 1100 · Gary Quinn, P.E. · Gary Quinn, P.E. • Lizabeth Gomez Air Quality Specialist Program Supervisor Program Supervisor 909-396-3121 909-396-3121 909-396-3103 gquinn@aqmd.gov gquinn@aqmd.gov Igomez@aqmd.gov · Kalam Cheung, Ph.D. Kevin Orellana Shawn Wang Program Supervisor Program Supervisor Air Quality Specialist 909-396-3492 909-396-3281 909-396-3319 kcheung@aqmd.gov korellana@aqmd.gov swang@aqmd.gov

## Contacts

### Proposed Rule 1109.1

- Heather Farr
   Program Supervisor
   909-396-3672
   hfarr@aqmd.gov
- Jong Hoon Lee Air Quality Specialist 909-396-3903 jhlee@aqmd.gov
- Sarady Ka Air Quality Specialist 909-396-233 I ska@aqmd.gov

### Proposed Rule 1118.1

- •Heather Farr Program Supervisor 909-396-3672 hfarr@aqmd.gov
- •Steve Tsumura Air Quality Specialist 909-396-2549 stsumura@aqmd.gov

29

## Contacts

### Proposed Amended Rule 1135

- Michael Morris
   Planning and Rules Manager
   909-396-3282
   mmorris@aqmd.gov
- Uyen-Uyen Vo Air Quality Specialist 909-396-2238 uvo@aqmd.gov

### Proposed Amended Rule 1134

- Michael Morris
   Planning and Rules Manager
   909-396-3282
   mmorris@aqmd.gov
- Uyen-Uyen Vo Air Quality Specialist 909-396-2238 uvo@aqmd.gov

## Proposed Amended Rule 1110.2

- Kevin Orellana Program Supervisor 909-396-3492 korellana@aqmd.gov
- Rudy Chacon
   Air Quality Specialist
   909-396-2726
   rchacon@aqmd.gov

# Contacts

### New Source Review

 Kevin Orellana Program Supervisor 909-396-3492 korellana@aqmd.gov

•Lizabeth Gomez Air Quality Specialist 909-396-3103 Igomez@aqmd.gov •Melissa Gamoning Assistant Air Quality Specialist 909-396-3115 mgamoning@aqmd.gov