

BOARD MEETING DATE: June 2, 2017

AGENDA NO. 30

**PROPOSAL:** Certify Nonattainment New Source Review Compliance Demonstration for 2008 Ozone Standard

**SYNOPSIS:** The District has an existing federally-approved nonattainment New Source Review (NSR) program that covers the South Coast Air Basin and Coachella Valley, which are designated extreme and severe-15 nonattainment, respectively. The District program, which applies to new major stationary sources and major modifications to existing major sources, is at least as stringent as the requirements set forth by the U.S. Environmental Protection Agency (U.S. EPA). States must submit a nonattainment NSR plan or plan revision for the 2008 ozone standard certifying that the current SIP-approved nonattainment NSR program meets the requirements for the implementation of the 2008 ozone NAAQS. This action is to seek Board certification of the nonattainment NSR compliance demonstration for submittal to CARB for its approval and to submit to U.S. EPA for inclusion in the SIP.

**COMMITTEE:** Stationary Source, May 19, 2017, Reviewed

**RECOMMENDED ACTIONS:**

Adopt the attached Resolution:

1. Certifying the Nonattainment NSR Compliance Demonstration for the 2008 Ozone Standard; and
2. Directing the Executive Officer to submit the Nonattainment NSR Compliance Demonstration for the 2008 Ozone Standard to CARB for its approval and subsequent submittal to the U.S. EPA.

Wayne Nastri  
Executive Officer

## Background

Effective July 20, 2012, the U.S. EPA designated areas throughout the country as nonattainment for the 2008 Ozone National Ambient Air Quality Standards (NAAQS) and established classifications for the designated nonattainment areas. The South Coast Air Basin (Basin) was classified as “extreme” nonattainment and the Coachella Valley, located in Riverside County, was classified as “severe-15” nonattainment for the 2008 8-hour Ozone NAAQS.

Nonattainment NSR is a preconstruction review permit program that applies to new major stationary sources or major modifications at existing major sources located in a nonattainment area. The Clean Air Act (CAA) requires that areas classified as moderate nonattainment or higher must demonstrate emissions offsets for new or modified major stationary sources under the state’s nonattainment NSR program. Requirements are more stringent for each higher ozone nonattainment classification. The nonattainment NSR requirements for the 2008 ozone standard, set forth in § 182(e)(1) and (2) of the CAA for extreme nonattainment areas and § 182(d)(2) of the CAA for severe-15 nonattainment areas, have already been satisfied by the SCAQMD’s existing NSR rules as demonstrated in the attached Compliance Demonstration. The specific nonattainment NSR requirements for the 2008 ozone NAAQS are located in 40 CFR § 51.160–165. U.S. EPA’s rule entitled “Implementation of the 2008 NAAQS for Ozone State Implementation Plan Requirements,” 80 FR 12,264 (March 6, 2015) explained that, for each nonattainment area, a nonattainment NSR plan or plan revision was due no later than 36 months after the effective date of area designations for the 2008 standards (i.e., July 20, 2015). Based on prior experience, staff assumed that the existence of a U.S. EPA-approved NSR rule for extreme areas satisfied this requirement.

On February 3, 2017, in response to a lawsuit, the U.S. EPA found that 15 states and the District of Columbia failed to submit SIP submittals in a timely manner to satisfy various requirements of the 2008 8-hour Ozone NAAQS, including a nonattainment NSR SIP revision for the South Coast Air Basin and Coachella Valley.<sup>1,2</sup> Although the District has an existing federally-approved nonattainment NSR program that covers the South Coast Air Basin and Coachella Valley, and the 2016 AQMP provided an analysis to demonstrate compliance with nonattainment NSR requirements, U.S. EPA determined that the District needed to submit a SIP revision certifying that the current SIP-approved nonattainment NSR program meets the requirements for the implementation of the 2008 ozone NAAQS.

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<sup>1</sup> U.S. EPA also made findings of nonsubmittal, which have already been addressed. The clean fuels for boilers requirement for extreme nonattainment areas, set forth in § 182(e)(3) of the Clean Air Act (CAA), has already been satisfied by the SCAQMD’s Rule 1146, Rule 2002, and Rule 1303, which have been previously submitted as SIP revisions for the Basin. *See* 61 Fed. Reg. 57,775 (Nov. 8, 1996).

<sup>2</sup> Compliance with the VMT offset requirement, set forth in § 182(d)(1)(A) of the CAA, is demonstrated in Appendix VI-E of the 2016 AQMP for the Basin and in Chapter 7 (page 7-32 to 7-36) for Coachella Valley for the 2008 8-hour Ozone NAAQS.

If the U.S. EPA finds that a state has failed to make the required SIP submittal or that a submitted SIP is incomplete, then CAA § 179(a) establishes specific consequences including the imposition of mandatory sanctions for the affected area, within 18 months after the finding of nonsubmittal (August 2018 in this case).

The extreme nonattainment NSR requirements, set forth in § 182(e)(1) and (2) of the CAA, and the severe-15 nonattainment NSR requirements, set forth in § 182(d)(2) of the CAA, have already been satisfied by the SCAQMD's existing NSR rules, which have been approved by the U.S. EPA.<sup>3</sup> This action is to certify the attached Compliance Demonstration.

### **Proposal**

The extreme nonattainment NSR requirement, set forth in § 182(e)(1) and (2) of the CAA, requires that the offset ratio of total VOC emission reductions to total increased emissions of such air pollutant be at least 1.5 to 1. However, an exception exists when all existing major sources are subject to federal Best Available Control Technology (BACT), in which case the offset ratio should be at least 1.2 to 1. Modifications at major sources require an offset ratio of at least 1.3 to 1.

The severe nonattainment NSR requirement, set forth in § 182(d)(2) of the CAA, requires that the offset ratio of total VOC emission reductions to total increased emissions of such air pollutant shall be at least 1.3 to 1, except when all existing major sources are subject to BACT, in which case the offset ratio should be at least 1.2 to 1.

The SCAQMD's federally-approved NSR program covers the South Coast Air Basin and Coachella Valley, and both satisfy the more stringent extreme nonattainment area requirements except for the higher threshold for Lowest Achievable Emissions Rate (LAER) in severe areas, which is 25 tpy. Therefore, both areas are in compliance with nonattainment NSR requirements.

The SCAQMD's NSR rules were adopted in 1979, significantly amended in 1990 and in 1995, and were approved by U.S. EPA into the SIP in December 1996. U.S. EPA's approval concluded that the District's NSR program meets the requirements for extreme ozone areas. The SCAQMD rules require that any increase from a discrete unit be subject to LAER at major sources and state law BACT at minor sources. Rule 1303(a). With respect to offsets, unless exempt from offsets requirements pursuant to Rule 1304, emission increases shall be offset by either Emission Reduction Credits, or by allocations from the Priority Reserve, or allocations from the Offset Budget. Offset ratios shall be 1.2-to-1.0 for Emission Reduction Credits and 1.0-to-1.0 for allocations from the Priority Reserve. U.S. EPA's 1996 approval included the understanding that the SCAQMD would continue to implement a tracking system which will continuously

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<sup>3</sup> SCAQMD's NSR rules (Reg XIII) were approved by U.S. EPA into the SIP in December 1996. 61 Fed. Reg. 64,291. U.S. EPA's approval concluded that the District's NSR program meets the requirements for extreme ozone nonattainment areas. 61 Fed. Reg. at 64,292, *see also* 64 Fed. Reg. 13,514 (Mar. 19, 1999), 71 Fed. Reg. 35,157 (June 19, 2006).

show, in the aggregate, that the SCAQMD would meet the statutory offset ratios, and that the SCAQMD would mitigate emissions from those sources that are exempt from offsets under the SCAQMD's program but are not exempt under federal law. In accordance with the commitment to maintain a tracking system, the SCAQMD has submitted NSR equivalency reports covering the periods 1990-2014. SCAQMD's tracking system continues to show equivalency with federal offset requirements. Preliminary equivalency reports are presented to the Board each February, with final reports presented each September.

For RECLAIM sources subject to NSR, SCAQMD adopted RECLAIM regulations in 1993, which govern NO<sub>x</sub> and SO<sub>x</sub> emissions from RECLAIM sources. Rule 2005 implements the NSR requirements in the context of a cap and trade program. The purpose of the rule is to ensure that the RECLAIM program is equivalent to the federal and state NSR program requirements. Rule 2005 sets forth the pre-construction review requirements for new or modified equipment or processes at RECLAIM facilities. It provides three separate requirements to meet the NSR programmatic equivalency. Sources causing emissions increases must: (1) be equipped with Best Available Control Technology; (2) demonstrate by modeling that the operation will not result in a significant increase in the air quality concentration of nitrogen dioxide if the facility total emissions exceed its 1994 starting allocation plus non-tradable credits, and (3) hold sufficient RECLAIM Trading Credits to offset emission increases for one year prior to commencement of operation and at the beginning of every compliance year thereafter. Rule 2005 is currently in the SIP 76 *Fed. Reg.* 78,829 (*Dec. 20, 2011*).

With respect to the offset requirement, SCAQMD includes in its Annual RECLAIM Audit Report presented in March of each year to the Board an analysis of compliance with federal offset ratios. Most recently, the Annual RECLAIM Audit Report for Compliance Year 2015 was submitted to the Board and demonstrated compliance with federal offset requirements.

The Board action will be to certify compliance with the 2008 ozone NAAQS nonattainment NSR requirements based on the SCAQMD's existing approved NSR program.

### **Public Process**

A 30-day notice was published before holding the public hearing on the Nonattainment NSR Compliance Demonstration for the 2008 Ozone Standard. In addition, the SCAQMD's compliance was discussed in a public comment letter (dated January 6, 2017) that the SCAQMD submitted to the U.S. EPA, which is available for public viewing at <https://www.regulations.gov/document?D=EPA-HQ-OGC-2016-0693-0003>, and the Compliance Demonstration was presented to the Stationary Source Committee on April 21, 2017.

**Resource Impacts**

The Nonattainment NSR Compliance Demonstration for the 2008 Ozone Standard had nominal additional impact on SCAQMD resources. Staff is also committed to prepare any minor adjustments to SCAQMD rules if required by the U.S. EPA subsequent to SIP submittal to ensure compliance.

**California Environmental Quality Act (CEQA)**

Staff concludes that the Nonattainment NSR Compliance Demonstration for the 2008 Ozone Standard is not a “project” within the meaning of CEQA because it does not have the potential to result in either a direct physical change to the environment or a reasonably foreseeable indirect physical change to the environment pursuant to CEQA Guidelines § 15378(a), as it merely explains how existing rules satisfy federal requirements.

**AQMP and Legal Mandates**

The Nonattainment NSR Compliance Demonstration for the 2008 Ozone Standard is required by the federal Clean Air Act and 40 CFR § 51.1114. Compliance with NSR for nonattainment areas is part of the 2016 AQMP SIP and the attached compliance demonstration (Attachment B) is consistent with U.S. EPA guidelines.

**Attachments**

- A. Resolution
- B. Nonattainment NSR Compliance Demonstration
- C. Board Meeting Presentation

**ATTACHMENT A**  
**RESOLUTION NO. 17-\_\_\_\_\_**

**A Resolution of the South Coast Air Quality Management District (SCAQMD) Board certifying the Nonattainment New Source Review Compliance Demonstration for the 2008 Ozone Standard for the South Coast Air Basin and the Coachella Valley.**

**A Resolution directing staff to forward the certified Nonattainment New Source Review Compliance Demonstration to the California Air Resources Board (CARB) for review and submission to the United States Environmental Protection Agency (U.S. EPA) as a State Implementation Plan (SIP) revision.**

**WHEREAS**, U.S. EPA designated areas throughout the country as nonattainment for the 2008 Ozone National Ambient Air Quality Standards (NAAQS) and established classifications for the designated nonattainment areas; and

**WHEREAS**, the South Coast Air Basin (Basin) was classified as “extreme” nonattainment and the Coachella Valley, located in Riverside County, was classified as “severe-15” nonattainment with respect to the 2008 8-hour Ozone NAAQS, effective July 20, 2012; and

**WHEREAS**, the SCAQMD was required to submit a nonattainment NSR plan or plan revision for the 2008 ozone NAAQS no later than 36 months after the effective date of the area’s designation pursuant to 40 CFR § 51.1114; and

**WHEREAS**, in response to a consent decree in *Center for Biological Diversity v. McCarthy*, Case No. 4:16-cv-04092-PJH (N.D. Cal.), effective March 6, 2017, U.S. EPA found that 15 states and the District of Columbia failed to timely submit certain SIP revisions to satisfy various 2008 ozone NAAQS requirements that apply to nonattainment areas, including requirements for nonattainment New Source Review (NSR) for the Basin and Coachella Valley; and

**WHEREAS**, the SCAQMD Governing Board finds it necessary to certify the Nonattainment NSR Compliance Demonstration for the 2008 8-Hour Ozone NAAQS and submit it into the SIP; and

**WHEREAS**, based on the Clean Air Act (CAA) § 172 (c), 173 (c), and 182, and the California Health and Safety Code (H&SC) §§ 40460(a), 40913, and 40440, the SCAQMD is required and has the authority to adopt an Air Quality Management Plan (AQMP) as well as rules and regulations containing NSR requirements for nonattainment areas; and

**WHEREAS**, the CAA requires that areas classified as moderate nonattainment or higher must demonstrate emissions offsets for new or modified major stationary sources under the state's nonattainment NSR program, and requires more stringent obligations for each higher ozone nonattainment classification; and

**WHEREAS**, the nonattainment NSR requirements, set forth in § 182(e)(1) and (2) of the CAA for extreme nonattainment and § 182(d)(2) of the CAA for severe-15 nonattainment, have already been satisfied by the SCAQMD's existing NSR rules as demonstrated in the Nonattainment NSR Compliance Demonstration for the 2008 8-Hour Ozone NAAQS; and

**WHEREAS**, the SCAQMD Governing Board has determined that the Nonattainment NSR Compliance Demonstration for the 2008 8-Hour Ozone NAAQS provides the clarity needed to satisfy the failure to submit finding, is consistent with the CAA requirements, and is non-duplicative of any rule or regulation; and

**WHEREAS**, the SCAQMD Governing Board has determined that the Nonattainment NSR Compliance Demonstration for the 2008 8-Hour Ozone NAAQS is not considered a "project" pursuant to the California Environmental Quality Act (CEQA); and

**WHEREAS**, the SCAQMD Governing Board has determined that no socioeconomic impact will result from the Nonattainment NSR Compliance Demonstration for the 2008 8-Hour Ozone NAAQS; and

**WHEREAS**, the SCAQMD Governing Board has held a public hearing to consider approval of the Nonattainment NSR Compliance Demonstration for the 2008 8-Hour Ozone NAAQS in accordance with all provisions of law; and

**WHEREAS**, the SCAQMD specifies the manager of the Nonattainment NSR Compliance Demonstration as the custodian of the documents or other materials which constitute the record of proceedings upon which the approval is based, which is located at the SCAQMD, 21865 Copley Drive, Diamond Bar, CA 91765.

**NOW, THEREFORE, BE IT RESOLVED**, that the SCAQMD Governing Board certifies that the Nonattainment NSR Compliance Demonstration fulfills the CAA requirements for the 2008 8-Hour Ozone NAAQS for the Basin and the Coachella Valley.

**BE IT FURTHER RESOLVED**, that the SCAQMD Governing Board requests that the Nonattainment NSR Compliance Demonstration for the 2008 8-Hour Ozone NAAQS be submitted into the SIP.

**BE IT FURTHER RESOLVED**, that the SCAQMD Governing Board requests that submittal of the Nonattainment NSR Compliance Demonstration for the 2008 8-Hour Ozone NAAQS into the California SIP will avoid the triggering of sanctions or the promulgation of a Federal Implementation Plan (FIP).

**BE IT FURTHER RESOLVED**, that the Executive Officer is hereby directed to forward a copy of this Resolution and the certified Nonattainment NSR Compliance Demonstration (Attachment B) for the 2008 8-Hour Ozone NAAQS to CARB for approval and subsequent submittal to the U.S. EPA for inclusion into the SIP.

**Attachment**

Nonattainment NSR Compliance Demonstration

DATE: \_\_\_\_\_

\_\_\_\_\_  
Clerk of the Boards



## Attachment B

### Nonattainment NSR Compliance Demonstration

SCAQMD's New Source Review (NSR) program implements the federal statutory and regulatory requirements for NSR and ensures that construction and operation of new, relocated, and modified stationary sources does not interfere with progress towards attainment of the National Ambient Air Quality Standards (NAAQS). SCAQMD's NSR rules (Reg XIII), adopted in 1979, significantly amended in 1990, and again amended in 1995, were approved by EPA into the SIP in December 1996. 61 Fed. Reg. 64,291. EPA's approval concluded that the District's NSR program meets the requirements for extreme ozone areas. 61 Fed. Reg. at 64,292, *see also* 64 Fed. Reg. 13,514 (Mar. 19, 1999), 71 Fed. Reg. 35,157 (June 19, 2006). As such, the nonattainment NSR requirement, set forth in § 182(e)(1) and (2) of the Federal Clean Air Act (CAA) for extreme nonattainment areas and § 182(d)(2) of the CAA for severe-15 nonattainment areas, has already been satisfied by the SCAQMD's existing NSR rules. However, given the requirement in the Final Rule entitled *Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements*, 80 Fed. Reg. 12,264 (Mar. 6, 2015), that states must submit "a nonattainment NSR plan or plan revision for the 2008 ozone NAAQS," and EPA's February 2017 finding of nonsubmittal, the SCAQMD is submitting a plan revision certifying that the current SCAQMD NSR program meets the federal statutory and regulatory requirements. 40 CFR § 51.1114.

The following is a checklist of Nonattainment NSR (NNSR) plan requirements for the 2008 8-hour ozone NAAQS, developed based on the 1997 Ozone NAAQS Phase 2 Implementation Final Rule (70 FR 71612, November 29, 2005) and the 2008 Ozone NAAQS SIP Requirements Final Rule (80 FR 12264, March 6, 2015). The demonstration includes an analysis of the SCAQMD NSR rules (Reg III) and the NSR requirements under the District's RECLAIM (REgional CLean Air Incentives Market) program.

**Table 1**  
**2008 Ozone NAAQS Nonattainment NSR SIP Requirements**

<b>40 CFR 51.165 Checklist</b>		<b>Compliance Demonstration</b> SCAQMD Regulation XIII & Regulation XX
1.	(a)(1)(iv)(A)(I)(i)-(iv) and (2): Major source thresholds for ozone – VOC and NO <sub>x</sub>	SCAQMD Rule 1302(s), and Rule 2000(c)(45)
2.	(a)(1)(iv)(A)(3): Change constitutes a major source by itself	SCAQMD Rule 1302(x), Rule 1303(a)(1) & (b)(2), Rule 2000(c)(48), and Rule 2005 (b) & (c)
3.	(a)(1)(v)(E): Significant net emissions increase of NO <sub>x</sub> is significant for ozone	SCAQMD Rule 1302(x), (z) & (af), Rule 1303(a)(1) & (b)(2), and Rule 2005

## Attachment B (cont.)

**Table 1 (Concluded)**  
**2008 Ozone NAAQS Nonattainment NSR SIP Requirements**

40 CFR 51.165 Checklist		Compliance Demonstration SCAQMD Regulation XIII & Regulation XX
4.	(a)(1)(v)(F): Any emissions change of VOC in Extreme area triggers NNSR	SCAQMD Rule 1302(x), (z) & (af), and Rule 1303(a)(1) & (b)(2)
5.	(a)(1)(x)(A)-(C) and (E): Significant emissions rates for VOC and NOx as ozone precursors	SCAQMD Rule 1302(r), Rule 1303(a)(1), Rule 2000(c)(44), and Rule 2005
6.	(a)(3)(ii)(C)(1)-(2): Provisions for emissions reduction credits	SCAQMD Rule 1309, Rule 2002, and 2016 AQMP Appendix III
7.	(a)(8): Requirements for VOC apply to NOx as ozone precursors	SCAQMD 1302(z), and Rule 1303
8.	(a)(9)(ii)-(iv) <sup>1</sup> : Offset ratios for VOC and NOx for ozone nonattainment areas	Rule 1303(b)(2)(A), Rule 1315, and Rule 2005(b),(c) & (f)
9.	(a)(12): Anti-backsliding provision(s), where applicable	SCAQMD continues to implement the NSR program (Reg. XIII) at the major source threshold and offset requirements as an extreme nonattainment area for South Coast Air Basin (SCAB) and a severe nonattainment for Coachella Valley, including for revoked ozone standards, and therefore demonstrates compliance with the anti-backsliding provisions for the NSR program.

As outlined in Table 1, the requirements at 40 CFR 51.165 for ozone and its precursors are addressed in the SCAQMD's NSR (Reg XIII and Reg XX) program. The section below describes the provisions that demonstrate how the District's existing NSR program satisfies the requirements for implementing the 2008 ozone NAAQS.

1. 40 CFR 51.165 (a)(1)(iv)(A)(1)(i)-(iv) and (2) provide the definitions of "major stationary source" for ozone. In any extreme ozone nonattainment area, a stationary source that emits, or has the potential to emit, 10 tons per year (tpy) of VOC or NOx is considered a major stationary source. For severe ozone nonattainment areas, the thresholds are set at 25 tpy of VOC or NOx.

SCAQMD Rule 1302 (Definitions) consists of the definitions for all terms relating to pre-construction review requirements for new and modified sources in the District's NSR program.

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<sup>1</sup> Please note that subparagraphs (a)(9)(i)-(iii) were changed to (a)(9)(ii)-(iv) when the EPA added new subparagraph (a)(9)(i) under the 2008 PM2.5 Implementation Rule.

## Attachment B (cont.)

For the South Coast Air Basin (Basin) - an extreme nonattainment area, Rule 1302(s) defines “major polluting facility” as any facility in the Basin that emits or has the potential to emit  $\geq 10$  tpy of NO<sub>x</sub> or VOC. For the Coachella Valley - a severe-15 nonattainment area, Rule 1302(s) defines “major polluting facility” as any facility in the Riverside County portion of the Salton Sea Air Basin that emits or has the potential to emit  $\geq 25$  tpy of NO<sub>x</sub> or VOC. Major stationary source under the District’s RECLAIM program<sup>2</sup> is defined under Rule 2000(c)(45) as any facility which emits, or has the potential to emit 10 tons per year or more of NO<sub>x</sub>. These thresholds are consistent with the requirements in 40 CFR 51.165.

2. 40 CFR 51.165 (a)(1)(iv)(A)(3) continues to provide the definition of “major stationary source”, stating that it also includes “Any physical change that would occur at a stationary source not qualifying under paragraphs (a)(1)(iv)(A)(1) or (2) of this section as a major stationary source, if the change would constitute a major stationary source by itself.”

The District’s NSR program requires the Executive Officer to “deny the Permit to Construct for any relocation or for any new or *modified* source which results in an emission increase of any nonattainment air contaminant, any ozone depleting compound, or ammonia, unless BACT is employed for the new or relocated source or for the actual modification to an existing source.” Rule 1303(a)(1)(emphasis added). BACT is defined to be at least as stringent as LAER for major sources (Rules 1303(a), 1302(h)). It also requires that facilities with a net increase in emissions of any pollutant offset their emissions for that pollutant. Rule 1303(b)(2), unless they are and will remain under 4 tpy. SCAQMD Rule 1302 (Definitions) defines “modification” as “any physical change in equipment, change in method of operation, or an addition to an existing facility, which may cause the issuance of air contaminants.” Rule 1302(x). Thus, the applicability of the SCAQMD NSR program goes beyond the definition of “major stationary source” in 40 CFR 51.165.<sup>3</sup>

SCAQMD Rule 2005 – New Source Review for RECLAIM, sets forth pre-construction review requirements for new facilities subject to the requirements of the RECLAIM program, for modifications to RECLAIM facilities, and for facilities which increase their allocation to a level greater than their starting Allocation plus non-tradable credits. Rule 2005(b) and (c). Rule 2000(c)(48) defines “modification” as “any physical change or change in the method of operation of a source.” As such, the NSR requirements for the RECLAIM program satisfy 40 CFR 51.165 (a)(1)(iv)(A)(3).

3. 40 CFR 51.165 (a)(1)(v) concerns “major modifications” in an NSR program. Part (E) of this section requires that for purposes of “applying the requirements of (a)(8) of this section to modifications at major stationary sources of nitrogen oxides located in ozone

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<sup>2</sup> RECLAIM is an emissions cap and trade program that was developed to reduce NO<sub>x</sub> and SO<sub>x</sub> emissions in SCAQMD.

<sup>3</sup> Sources using the Priority Reserve and other exempt sources are discussed below.

## Attachment B (cont.)

nonattainment areas or in ozone transport regions, whether or not subject to subpart 2, part D, title I of the Act, any significant net emissions increase of nitrogen oxides is considered significant for ozone.”<sup>4</sup>

The District’s NSR program requires that any relocation, new, or *modified* source resulting in an emission increase of any nonattainment air contaminant apply BACT. Rule 1303(a)(1). BACT is defined as at least as stringent as LAER for major sources (*see* Rules 1303 and 1302(h)). It also requires that facilities with a net increase in emissions of any pollutant offset their emissions for that pollutant. Rule 1303(b)(2). SCAQMD Rule 1302 defines “modification” as “any physical change in equipment, change in method of operation, or an addition to an existing facility, which may cause the issuance of air contaminants.” Rule 1302(x). Rule 1302 defines the term “nonattainment air contaminant” to include “any air contaminant for which there is a national or state ambient air quality standard, or precursor to such air contaminant.” Rule 1302(z). VOC and NO<sub>x</sub> are identified as precursors of ozone in the NSR program. Rule 1302(af). As such, any net emissions increase of nitrogen oxides is subject to NSR, not just “significant” levels. (*See* Item 5 below.)

RECLAIM facilities are subject to SCAQMD Rule 2005 – New Source Review for RECLAIM, in accordance with a market-based approach. Specifically, RECLAIM facilities must provide (hold), prior to the start of operation, sufficient RECLAIM Trading Credits to offset the annual increase in potential emissions. Rule 2005(b)(2)(A) and (c)(2). All new RECLAIM facilities that received all District Permits to Construct on or after October 15, 1993, as well as all other RECLAIM facilities that increase their annual allocations above the level of their starting allocations plus non-tradable/non-usable credits, must provide sufficient RTCs to offset the annual potential emissions increase from new or modified source(s) at the commencement of each compliance year after the start of operation of the new or modified source(s). Rule 2005(c)(4)(B) and (f). Sources causing emissions increases must be equipped with BACT. Rule 2005(b)(1)(A), (c)(1)(A) and (c)(4).

4. 40 CFR 51.165 (a)(1)(v) concerns “major modifications” in an NSR program. Part (F) of this section requires that “Any physical change in, or change in the method of operation of, a major stationary source of volatile organic compounds that results in any increase in emissions of volatile organic compounds from any discrete operation, emissions unit, or other pollutant emitting activity at the source shall be considered a significant net emissions increase and a major modification for ozone, if the major stationary source is located in an extreme ozone nonattainment area that is subject to subpart 2, part D, title I of the Act.”

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<sup>4</sup> Section (a)(8) referenced above states that “the requirements of this section applicable to major stationary sources and major modifications of volatile organic compounds shall apply to nitrogen oxides emissions from major stationary sources and major modifications of nitrogen oxides in an ozone transport region or in any ozone nonattainment area, except in ozone nonattainment areas or in portions of an ozone transport region where the Administrator has granted a NO<sub>x</sub> waiver ....”

## Attachment B (cont.)

The District's NSR program requires that any relocation, new, or *modified* source resulting an emission increase of any nonattainment air contaminant apply BACT. Rule 1303(a)(1). It also requires that facilities with a net increase in emissions of any pollutant offset their emissions for that pollutant. Rule 1303(b)(2). SCAQMD Rule 1302 defines "modification" as "any physical change in equipment, change in method of operation, or an addition to an existing facility, which may cause the issuance of air contaminants." Rule 1302(x). Rule 1302 defines the term "nonattainment air contaminant" to include "any air contaminant for which there is a national or state ambient air quality standard, or precursor to such air contaminant." Rule 1302(z). VOC are identified as precursors of ozone. Rule 1302(af). As such, any relocation, new, or *modified* source resulting an emission increase of VOC triggers NNSR, including BACT and offsets, in South Coast Air Basin.

5. 40 CFR 51.165 (a)(1)(x) addresses what it means to be a "significant" net emissions increase in an NSR program. The significant emission rate outlined in § 51.165 (a)(1)(x)(A) for ozone is 40 tpy of VOC or NO<sub>x</sub> pollutant.

Notwithstanding the rate discussed above, per (a)(1)(x)(B), significant means "any increase in actual emissions of volatile organic compounds that would result from any physical change in, or change in the method of operation of, a major stationary source locating in a serious or severe ozone nonattainment area ... if such emissions increase of volatile organic compounds exceeds 25 tons per year."

Section (a)(1)(x)(C) states that for the purposes of applying the requirements of paragraph (a)(8) to modifications at major stationary sources of nitrogen oxides, "the significant emission rates and other requirements for volatile organic compounds ... shall apply to nitrogen oxides emissions."

Finally, per section (a)(1)(x)(E), notwithstanding the significant emissions rates for ozone discussed above, "any increase in actual emissions of volatile organic compounds from any emissions unit at a major stationary source of volatile organic compounds ... shall be considered a significant net emissions increase."

In the SCAQMD's program, any new or modified source which results in an emission increase of any nonattainment air contaminant (i.e. NO<sub>x</sub> / VOC) is subject to the BACT and offset (except for Priority Reserve and exempt sources, discussed below in Item 8) requirements, thus the threshold is anything greater than zero. Rule 1303(a)(1). Rule 1302 defines the term "major modification" to include any physical change in equipment, change in method of operation, or an addition to an existing facility that will cause an increase of one pound per day or more, of the facility's potential to emit NO<sub>x</sub> and VOC, provided the facility is located in SCAB. Rule 1302(r)(1). For an existing major polluting facility located in Coachella Valley, major modification means any modification that will cause an increase of 25 tons per year or more, of the facility's potential to emit NO<sub>x</sub> or VOC. Rule 1302(r).

## Attachment B (cont.)

For the RECLAIM NSR program, “major modification” is defined under Rule 2000 (c)(44) as any modification at an existing major polluting facility that will cause an increase of one or more pounds per day in the facility's potential to emit NO<sub>x</sub> or VOC, provided the facility is located in the South Coast Air Basin; or any modification that will cause an increase of 25 tons per year or more, in the facility's potential to emit NO<sub>x</sub> or VOC, provided the facility is located in the Coachella Valley.

Overall, the thresholds of “major modification” in Rule 1302 and Rule 2000 are equal to or lower than those listed in § 51.165 (a)(1)(x)(A). The District’s NSR program (Reg XIII and Rule 2005) applies to any new or modified source which results in an emission increase of NO<sub>x</sub> or VOC. Thus, the requirements in § 51.165 (a)(1)(x)(B), (C) and (E) are satisfied.

6. 40 CFR 51.165 (a)(3)(ii)(C)(1)-(2) describes provisions for emissions reduction credits.

Section (a)(3)(ii)(C)(1) provides that the SIP shall provide that emissions reductions achieved by shutting down an existing emission unit or curtailing production or operating hours may be credited for offsets if they meet the following requirements:

- Such reductions are surplus, permanent, quantifiable, and federally enforceable;
- The shutdown or curtailment occurred after the last day of the base year for the SIP planning process. A reviewing authority may choose to consider a prior shutdown or curtailment to have occurred after the last day of the base year “if the projected emissions inventory used to develop the attainment demonstration explicitly includes the emissions from such previously shutdown or curtailed emission units.”

Section (a)(3)(ii)(C)(2) provides that the emissions reductions that do not meet the requirements in paragraph (a)(3)(ii)(C)(1)(i) may be generally credited only if:

- The shutdown or curtailment occurred on or after the date the construction permit application is filed; or
- The applicant can establish that the proposed new emissions unit is a replacement for the shutdown or curtailed emissions unit, and the emissions reductions achieved by the shutdown or curtailment met the requirements of paragraph (a)(3)(ii)(C)(1)(i).

SCAQMD Rule 1309 addresses the application, eligibility, registration, use, and transfer of Emission Reduction Credits (ERCs) and Short Term Credits (STCs) that are used as offsets for emission increases at new or modified facilities subject to Rule 1303(b)(2). Under Rule 1309, all stationary and mobile source reductions must be demonstrated to be: (A) real; (B) quantifiable; (C) permanent; (D) federally enforceable, and (E) not greater than the equipment would have achieved if operating with current BACT to be eligible as ERCs (i.e. surplus). Rule 1309 (b)(4)(A)-(E). Thus, the provisions in Rule 1309 satisfy the federal statutory requirements for emission reduction credits in an NSR program.

## Attachment B (cont.)

Evaluation of the pre-base year offsets is found in the 2016 Air Quality Management Plan (Appendix III, Page III-2-74<sup>5</sup>). Shutdowns and curtailments that occurred prior to the last day of the base year are explicitly included in the projected emissions inventory as growth. As the AQMP explains, the growth of point and area sources subject to NSR offset requirements necessarily comes from pre-base year offsets that were shut down before the base year. This is because emissions offsets derived from sources that shutdown after the base year are accounted for in the baseline inventory. When those sources shut down, the most their offsets can do is replace the emissions from that shutdown source. Any growth above that base year is therefore supported from the offsets derived from the pre-base year reductions. Table III-2-20 shows that the growth projection for sources subject to NSR consists of emissions from pre-base year shutdowns. The District's NSR program is thus consistent with the requirements of 40 CFR 51.165(a)(3)(i)(C)(1)-(2).

SCAQMD Rule 2002 (Allocations for Oxides of Nitrogen (NO<sub>x</sub>) and Oxides of Sulfur (SO<sub>x</sub>)) addresses the treatment of emissions reduction credits for the RECLAIM program. Upon NO<sub>x</sub> RECLAIM facility shutdowns, RECLAIM Trading Credits (RTCs) are reduced to the equivalent to the average emissions of the highest 2 years from the previous 5 years of operation, less the emissions that would have occurred if the most stringent BARCT were applied. Additional provisions regarding RTC availability upon facility shutdowns can be found in Rule 2002(i).

7. 40 CFR 51.165 (a)(8) states that requirements applicable to “major stationary sources and major modifications of volatile organic compounds shall apply to nitrogen oxides emissions from major stationary sources and major modifications of nitrogen oxides.”

Any nonattainment air contaminant, including NO<sub>x</sub> and VOC as ozone precursors, are subject to SCAQMD Rule 1303 (NSR Requirements) provisions. Rule 1302(z). RECLAIM facilities are subject to RECLAIM NSR (Rule 2005) in accordance with a market-based approach. Thus, the NSR requirements applicable to major stationary sources and major modifications of VOC (including provisions regarding major modifications, significant emission rates, and offsets) also apply to NO<sub>x</sub> emissions.

8. 40 CFR 51.165 (a)(9)(ii)-(iv) describes the requirements of offset ratios for VOC and NO<sub>x</sub> for ozone nonattainment areas. For severe and extreme nonattainment areas, § 51.165 (a)(9)(ii) requires the offset ratio to be “at least 1.2:1 if the approved plan also requires all existing major sources in such nonattainment area to use BACT for the control of VOC”. § 51.165 (a)(9)(ii)(D) & (E).

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<sup>5</sup> <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/appendix-iii.pdf?sfvrsn=6>

## Attachment B (cont.)

The offset ratios for the District's NSR program are described in Rule 1303 (b)(2)(A). Unless a source is exempt from the offset requirements, it must offset its emission increase by either (1) ERCs (Rule 1309); or (2) allocations from the District's Priority Reserve (Rule 1309.1). Rule 1303(b)(2)(A). Offset ratios shall be 1.2-to-1.0 for ERCs, and 1.0-to-1.0 for allocations from the Priority Reserve. The SCAQMD requires that all existing major sources employ BARCT, which is defined similarly to federal BACT (Health & Saf. Code § 40406), therefore, sources within the District can use a 1.2-to-1 offset ratio for ozone precursors (i.e., NO<sub>x</sub> and VOC).

With respect to sources that are exempt from the SCAQMD's offset requirements pursuant to Rule 1304 or qualify for offsets from the SCAQMD's Priority Reserve, which has an emission offset ratio of 1.0-to-1.0, Rule 1315 – Federal New Source Review Tracking System, maintains the SCAQMD's ability to issue permits to these sources. (77 Fed. Reg. 31200 (May 25, 2012.)) The SCAQMD's computerized emission tracking system is utilized to demonstrate equivalence with federal offset requirements on an aggregate basis. Each year, a status report is prepared by the SCAQMD staff to demonstrate compliance with federal NSR requirements by establishing aggregate equivalence with federal offset requirements for sources that were not exempt from federal offset requirements, but were either exempt by the District from offsets or obtained their offsets from the Priority Reserve. Federal debit and credit accounting for SCAQMD's offset accounts is conducted pursuant to the same procedures previously agreed to by U.S. EPA and as delineated in Rule 1315. For federal equivalency demonstrations, an offset ratio of 1.2-to-1.0 is used for extreme non-attainment pollutants (ozone and ozone precursors, *i.e.*, VOC and NO<sub>x</sub>). That is, 1.2 pounds are deducted from SCAQMD's offset accounts for each pound of maximum allowable permitted potential to emit VOC or NO<sub>x</sub> increase at a federal source. More details about the debit and credit accounting, as well as the detailed listing of actual final withdrawals, deposits, and sum of withdrawals and deposits can be found in the yearly Status Report on Regulation XIII – New Source Review.<sup>6</sup> Overall, SCAQMD's NSR program is considered to provide equivalent or greater offsets of emissions as required by federal requirements for each subject pollutant provided the balance of offsets left in the SCAQMD's federal offset account for each pollutant remains positive, indicating that there were adequate offsets available.

SCAQMD Rule 2005 - New Source Review for RECLAIM, implements the NSR requirements in the context of a cap and trade program. There are three requirements for RECLAIM that provide NSR programmatic equivalency. First, RECLAIM facilities must provide (hold), prior to the start of operation, sufficient RECLAIM Trading Credits to offset the annual increase in potential emissions for the first year of operation at a 1-to-1 ratio. Rule 2005(b)(2)(A) and (c)(2). All new RECLAIM facilities that received all District Permits to Construct on or after October 15, 1993, as well as all other RECLAIM facilities that increase their annual allocations above the level of their starting allocations plus non-tradable/non-usable credits, must provide sufficient RTCs to offset the annual potential emissions increase from new or modified source(s) at a 1-to-1 ratio at the commencement of each compliance year after the start of operation of the new or modified source(s). Rule 2005(c)(4)(B) and (f). Second, the facility must demonstrate by modeling that the operation will not result in a significant increase in the air quality concentration of NO<sub>x</sub> if the facility's total emissions exceed its 1994 starting allocation plus non-

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<sup>6</sup> The most recent Status Report on Regulation XIII – New Source Review can be found at: <http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2017/2017-mar3-034.pdf?sfvrsn=4>



## Attachment B (concluded)

tradable credits. Rule 2005(b)(1)(B) and (c)(1)(B). Third, sources causing emissions increases must be equipped with BACT. Rule 2005(b)(1)(A), (c)(1)(A) and (c)(4). Although RECLAIM allows a 1-to-1 offset ratio for emissions increases, RECLAIM complies with the federal 1.2-to-1 offset requirement for NO<sub>x</sub> on an aggregate basis. If aggregate RECLAIM emissions do not exceed aggregate allocations, all unused allocations are available to provide offsets beyond the 1-to-1 ratio for NSR emission increases. Each year, an annual program audit report is provided to assess NSR permitting activities to verify that programmatic compliance of RECLAIM with federal and state NSR requirements has been maintained. In the most recent Annual RECLAIM Audit Report for Compliance Year 2015, RECLAIM demonstrated federal equivalency with a programmatic NO<sub>x</sub> offset ratio of 39-to-1 based on the compliance year's total unused allocations and total NSR emission increases for NO<sub>x</sub>.<sup>7</sup> Overall, RECLAIM complies with the federal 1.2-to-1 offset requirement for NO<sub>x</sub> on an aggregate basis, as verified yearly through the Annual RECLAIM Audit Report.

9. 40 CFR 51.165 (a)(12) states that the SIP shall require that the NSR requirements shall include the anti-backsliding requirements as described in § 51.1105(f). That provision requires that “an area designated nonattainment for the 2008 ozone NAAQS and designated nonattainment for the 1997 ozone NAAQS on April 6, 2015 remains subject to the obligation to adopt and implement the major source threshold and offset requirements for nonattainment NSR ... based on the highest of: (i) The area's classification under CAA section 181(a)(1) for the 1-hour NAAQS as of the effective date of revocation of the 1-hour ozone NAAQS; (ii) the area's classification under 40 CFR 51.903 for the 1997 ozone NAAQS as of the date a permit is issued or as of April 6, 2015, whichever is earlier; and (iii) the area's classification under § 51.1103 for the 2008 ozone NAAQS.”

Although the federal 1-hour ozone standard was revoked effective June 15, 2005 and the 1997 ozone standard was subsequently revoked effective July 20, 2013, nonattainment areas are still subject to anti-backsliding provisions. SCAB was designated as extreme nonattainment for both the 1997 and 2008 8-hour ozone standard, as well as the 1-hour ozone standard. Therefore, the highest classification among the three ozone standards remains at extreme for SCAB. Similarly, Coachella Valley was designated as severe-15 for both the 1997 and 2008 8-hr ozone standard, and the highest classification remains at severe-15. The SCAQMD continues to implement the NSR program (Reg. XIII) at the major source threshold and offset requirements as an extreme nonattainment area for SCAB and a severe nonattainment area for Coachella Valley, and therefore demonstrates compliance with the anti-backsliding provisions for the NSR program.

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<sup>7</sup> Annual RECLAIM Audit Report for 2015 Compliance Year  
<http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2017/2017-mar3-038.pdf?sfvrsn=4>



# Certification of Nonattainment NSR Compliance Demonstration for the 2008 8-hour Ozone NAAQS

June 2, 2017  
Governing Board Meeting

*Cleaning The Air That We Breathe...*

# BACKGROUND

- ❑ Clean Air Act NSR requirement applies to new major stationary sources and major modifications in nonattainment areas
- ❑ SCAQMD has a federally-approved Nonattainment NSR plan
- ❑ EPA's NAAQS Implementation Requirements for 2008 Ozone Standard calls for nonattainment NSR plans due 36 months after July 20, 2012 (effective date of designation)
- ❑ On February 3, 2017, EPA issued Finding of Failure to Submit the Nonattainment NSR demonstration for 2008 ozone standard for the South Coast Air Basin (SCAB) and Coachella Valley

# ACTION TAKEN

- ❑ Prepared demonstration of compliance with the following nonattainment NSR requirements for both RECLAIM and non-RECLAIM sources:
  - ✓ Definition of major stationary source
  - ✓ Any significant net emissions increase of NO<sub>x</sub> is considered significant for ozone
  - ✓ Any emissions change of VOC in “extreme” area triggers NNSR
  - ✓ Significant emissions rates for VOC and NO<sub>x</sub>
  - ✓ Provisions for emission reduction credits
  - ✓ Requirements applicable to VOCs shall apply to NO<sub>x</sub>
  - ✓ Offset ratios for VOC and NO<sub>x</sub>
  - ✓ Anti-backsliding requirements
- ❑ No change to SCAQMD NSR program or requirements for affected facilities

# PUBLIC PROCESS

- ❑ 2016 AQMP included a discussion of the nonattainment NSR requirement but not a detailed compliance demonstration requested by U.S. EPA
- ❑ SCAQMD submitted a public comment letter to U.S. EPA regarding a proposed consent decree on January 6, 2017 (*available online*)
- ❑ Compliance demonstration is not a “project” under CEQA and there is no socioeconomic impact
- ❑ 30-day public hearing notice published on May 2, 2017

# RECOMMENDED BOARD ACTION

- ❑ Certify the Nonattainment NSR Compliance Demonstration for the 2008 8-Hour Ozone NAAQS
- ❑ Expedite transmittal to CARB for approval and subsequent submittal to U.S. EPA
- ❑ Adopt the Resolution that directs submittal into the SIP (will avoid triggering sanctions)