

BOARD MEETING DATE: February 6, 2015

AGENDA NO. 21

REPORT: Status Report on Regulation XIII – New Source Review

SYNOPSIS: This report presents the federal preliminary determination of equivalency for January 2013 through December 2013. As such, it provides information regarding the status of Regulation XIII – New Source Review in meeting federal NSR requirements and shows that SCAQMD’s NSR program is in preliminary compliance with applicable federal requirements from January 2013 through December 2013.

COMMITTEE: Stationary Source, January 23, 2015, Reviewed

RECOMMENDED ACTION:  
Receive and file the attached report.

Barry R. Wallerstein, D.Env.  
Executive Officer

MN:WCT:GT:DRH

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## SUMMARY

SCAQMD’s NSR Rules and Regulations are designed to comply with federal and state Clean Air Act requirements and to ensure that emission increases from new and modified sources do not interfere with efforts to attain and maintain the federal and state air quality standards, while economic growth in the South Coast region is not unnecessarily impeded. Regulation XIII - New Source Review regulates and accounts for all emission changes (both increases and decreases) from the permitting of new, modified, and relocated stationary sources within SCAQMD, excluding NO<sub>x</sub> and SO<sub>x</sub> sources that are subject to Regulation XX – Regional Clean Air Incentives Market (RECLAIM)<sup>1</sup>.

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<sup>1</sup> While the RECLAIM program is different than command and control rules for NO<sub>x</sub> and SO<sub>x</sub> and it provides greater regulatory flexibility to businesses, its NSR requirements, as specified in Rule 2005, are designed to comply with the governing principles of NSR contained in the federal Clean Air Act (CAA) and the California State Health and Safety Code.

Rule 1315 – Federal New Source Review Tracking System, was most recently adopted by the Board on February 4, 2011 to maintain SCAQMD’s ability to issue permits to major sources that require offsets, but obtain offset credits from the SCAQMD’s Priority Reserve under Rule 1309.1, and/or that are exempt from offsets under SCAQMD Rule 1304. In addition, Rule 1315 requires that, commencing with calendar year 2010, and for each calendar year thereafter, the Executive Officer prepare a Preliminary Determination of Equivalency (PDE) and Final Determination of Equivalency (FDE) which cover NSR activities for twelve-month periods. The calendar year 2013 PDE and FDE are required to be reported to the SCAQMD Governing Board at the February and September 2015 Board meetings, respectively. Rule 1315 also requires the Executive Officer to aggregate and track offsets debited from and deposited to SCAQMD’s offset accounts for specified periods between October 1, 1990 and December 31, 2005 and each calendar year from 2006 through 2030 for purpose of making periodic determinations of compliance. The last annual report submitted to the SCAQMD Board on September 5, 2014 presented the FDE for calendar year 2012 and demonstrated that SCAQMD’s NSR program continued to meet the federal offset requirements for calendar year 2012.

This report, which presents the PDE covering the calendar year 2013 reporting period, demonstrates 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 from offsets or obtained their offsets from SCAQMD pursuant to Regulation XIII.

The PDE for the calendar year 2013 is summarized in Table 1. Additionally, the projections of SCAQMD’s federal offset account balances for January 2014 through December 2014 and January 2015 through December 2015, as specified and required pursuant to Rule 1315(e), are presented in Table 2. These results demonstrate that there were, and project that there will be, adequate offsets available to mitigate all applicable emission increases during these reporting periods. This report, therefore, demonstrates that, for calendar years 2013 through 2015, SCAQMD’s NSR program continues to meet and is projected to meet federal offset requirements and is equivalent to those requirements on an aggregate basis<sup>2</sup>. Although the United States Environmental Protection Agency (U.S. EPA) designated the SCAQMD as attainment with the federal CO standard effective June 11, 2007, SCAQMD will continue to track and report CO accumulated credits and account balances for informational purposes only.

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<sup>2</sup> SCAQMD’s NSR program is deemed to be equivalent to federal offset requirements because SCAQMD’s ending offset account balances remained positive, indicating there were adequate offsets during this reporting period.

**Table 1**  
**PDE for January 2013 through December 2013**

DESCRIPTION	VOC	NO <sub>x</sub>	SO <sub>x</sub>	CO	PM10
<b>2012 Actual Ending Balance<sup>a</sup> (ton/day)</b>	<b>88.82</b>	<b>26.60</b>	<b>3.22</b>	<b>18.90</b>	<b>13.59</b>
2012 Discount of Credits for Surplus Adjustment <sup>b</sup> (ton/day)	0	-1.25	0	0	0
<b>2013 Starting Balance (ton/day)</b>	<b>88.82</b>	<b>25.35</b>	<b>3.22</b>	<b>18.90</b>	<b>13.59</b>
2013 Actual Total Debits <sup>c</sup> (lb/day)	-1013	-14	0	-15,957	0
<b>2013 Actual Total Debits<sup>c</sup> (ton/day)</b>	<b>-0.51</b>	<b>-0.01</b>	<b>0</b>	<b>-7.98</b>	<b>0</b>
<b>2013 Preliminary Ending Balance<sup>d</sup> (ton/day)</b>	<b>88.31</b>	<b>25.34</b>	<b>3.22</b>	<b>10.92</b>	<b>13.59</b>

<sup>a</sup> “2012 Actual Ending Balance” is from Table 1 of the 2012 FDE report dated September 5, 2014.

<sup>b</sup> This adjustment is surplus at the time of use discount, which is also discussed in Rule 1315(c)(4).

<sup>c</sup> For an explanation of the sources of debits please refer to page 7 of this report, as well as Rule 1315(c) and the February 4, 2011 Rule 1315 staff report.

<sup>d</sup> “2013 Preliminary Ending Balance” equals the “2012 Actual Ending Balance” reduced by any surplus adjustments and the sum of actual debits. 2013 credits will be added in the Final Determination of Equivalency to be presented in September 2015.

**Table 2**  
**Projections of SCAQMD’s Federal Offset Account Balances for**  
**January 2014 through December 2014, and**  
**January 2015 through December 2015**

DESCRIPTION	VOC	NOx	SOx	CO	PM10
<b>2013 Preliminary Ending Balance<sup>a</sup> (ton/day)</b>	<b>88.31</b>	<b>25.34</b>	<b>3.22</b>	<b>10.92</b>	<b>13.59</b>
2014 Projected Discount of Credits for Surplus Adjustment <sup>b</sup> (ton/day)	-0.45	-1.28	0	-0.09	-0.02
<b>2014 Projected Starting Balance (ton/day)</b>	<b>87.86</b>	<b>24.06</b>	<b>3.22</b>	<b>10.83</b>	<b>13.57</b>
2014 Total Projected Credits <sup>c</sup> (lb/day)	11,680	2,420	460	4,220	1,680
2014 Total Projected Debits <sup>c</sup> (lb/day)	-520	-640	0	0	-180
<b>2014 Sum of Projected Credits/Debits<sup>c</sup> (lb/day)</b>	<b>11,160</b>	<b>1,780</b>	<b>460</b>	<b>4,220</b>	<b>1,500</b>
<b>2014 Sum of Projected Credits/Debits<sup>c</sup> (ton/day)</b>	<b>5.58</b>	<b>0.89</b>	<b>0.23</b>	<b>2.11</b>	<b>0.75</b>
<b>2014 Projected Ending Balance<sup>d</sup> (ton/day)</b>	<b>93.44</b>	<b>24.95</b>	<b>3.45</b>	<b>12.94</b>	<b>14.32</b>
2015 Projected Discount of Credits for Surplus Adjustment <sup>b</sup> (ton/day)	-0.47	-1.26	0	-0.11	-0.02
<b>2015 Projected Starting Balance (ton/day)</b>	<b>92.97</b>	<b>23.69</b>	<b>3.45</b>	<b>12.83</b>	<b>14.30</b>
2015 Total Projected Credits <sup>c</sup> (lb/day)	11,680	2,420	460	4,220	1,680
2015 Total Projected Debits <sup>c</sup> (lb/day)	-520	-640	0	0	-180
<b>2015 Sum of Projected Credits/Debits<sup>c</sup> (lb/day)</b>	<b>11,160</b>	<b>1,780</b>	<b>460</b>	<b>4,220</b>	<b>1,500</b>
<b>2015 Sum of Projected Credits/Debits<sup>c</sup> (ton/day)</b>	<b>5.58</b>	<b>0.89</b>	<b>0.23</b>	<b>2.11</b>	<b>0.75</b>
<b>2015 Projected Ending Balance<sup>d</sup> (ton/day)</b>	<b>98.55</b>	<b>24.58</b>	<b>3.68</b>	<b>14.94</b>	<b>15.05</b>

<sup>a</sup> “2013 Preliminary Ending Balance” is as shown in Table 1.

<sup>b</sup> This adjustment is surplus at the time of use discount, which is also discussed in Rule 1315(c)(4).

<sup>c</sup> For an explanation of the sources of debits and credits please refer to page 7 of this report, as well as Rule 1315(c) and the Rule 1315 staff report. Credits are shown as positive and debits as negative, while the sum of credits/debits are shown as positive or negative, as appropriate.

<sup>d</sup> “2014 Projected Ending Balance” equals the “2013 Projected Ending Balance” plus any projected surplus adjustments and the sum of projected credits and projected debits.

<sup>e</sup> “2015 Projected Ending Balance” equals the “2014 Projected Ending Balance” plus any projected surplus adjustments and the sum of projected credits and projected debits.

## **BACKGROUND**

SCAQMD originally adopted its New Source Review Rules and Regulations (NSR program) in 1976. U.S. EPA approved SCAQMD's NSR program into California's State Implementation Plan (SIP) initially on January 21, 1981 (46FR5965) and again on December 4, 1996 (61FR64291). U.S. EPA approved SCAQMD's May 3, 2002 Rule 1309.1 amendments into the SIP on June 19, 2006 (71FR35157). The original program has evolved into the current version of the Regulation XIII rules in response to federal and state legal requirements and the changing needs of the local environment and economy. Specific amendments to the NSR rules were adopted by SCAQMD's Board on December 6, 2002 to facilitate and provide additional options for credit generation and use. Rule 1315 was adopted and re-adopted on September 8, 2006 and August 3, 2007, respectively. Rule 1309.1 was amended and replaced on September 8, 2006 and August 3, 2007, respectively. On November 3, 2008, in response to a lawsuit filed by a group of environmental organizations, a California State Superior Court Judge in the County of Los Angeles invalidated the August 3, 2007 adopted Rule 1315 and amendments to Rule 1309.1, and prohibited SCAQMD from taking any action to implement Rule 1315 or the amendments to Rule 1309.1 until it had prepared a new environmental assessment under the California Environmental Quality Act (CEQA). On February 4, 2011 SCAQMD adopted a revised and enhanced version of Rule 1315, which included a new CEQA assessment. U.S. EPA has approved Rule 1315 (May 25, 2012; 77 FR31200) but that approval is currently under litigation.

One element of SCAQMD's NSR program design is to offset emission increases in a manner at least equivalent to federal and state statutory NSR requirements. To this end, SCAQMD's NSR program implements the federal and state statutory 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 and State Ambient Air Quality Standards. SCAQMD's computerized emission tracking system is utilized to demonstrate equivalence with federal and state offset requirements on an aggregate basis. Specific NSR requirements of federal law are presented below.

### **Federal Law**

The NSR requirements of federal law vary with respect to the area's attainment status and classification. Based on their classification, the South Coast Air Basin (SOCAB) and Salton Sea Air Basin (SSAB) must comply with the requirements for extreme and severe non-attainment areas, respectively, for ozone precursors (*i.e.*, VOC and NO<sub>x</sub>). During all or part of the equivalency period, both the SOCAB and the SSAB complied with the requirements for serious non-attainment areas for PM<sub>10</sub> and its precursors (*i.e.*,

VOC, NO<sub>x</sub> and SO<sub>x</sub>)<sup>3</sup>. SSAB is considered attainment for CO. Although effective June 11, 2007, U.S. EPA designated the SOCAB as attainment with federal CO standards, SCAQMD will continue to track and report CO accumulated credits and account balances for informational purposes only. Both SOCAB and SSAB are considered attainment for SO<sub>2</sub> and NO<sub>2</sub>, however SO<sub>x</sub> and NO<sub>x</sub> are precursors to pollutants for which both SOCAB and SSAB are designated as non-attainment<sup>4</sup>. The Mojave Desert Air Basin (MDAB) is currently classified as moderate non-attainment for ozone precursors (*i.e.*, VOC and NO<sub>x</sub>), and as attainment for NO<sub>x</sub>, SO<sub>x</sub>, and CO. Federal law requires the use of LAER and offsets for emissions of nonattainment pollutants (or their precursors) for new, modified, and relocated stationary sources, when the source is considered a major stationary source<sup>5</sup> for the nonattainment pollutants (or their precursors). Federal law requires the use of Lowest Achievable Emission Rate (LAER) and offsets for new, modified, and relocated major stationary sources. This report demonstrates compliance with the federal NSR offsets requirements.

## OVERVIEW OF ANALYSIS METHODOLOGY

The two most important elements of federal non-attainment NSR requirements are LAER and emission offsetting for major sources. As set forth in SCAQMD's *Best Available Control Technology (BACT) Guidelines*, SCAQMD's BACT requirements are at least as stringent as federal LAER for major sources. Furthermore, the NSR emission offset requirements that SCAQMD implements through its permitting process ensure that sources provide emission reduction credits (ERCs) to offset their emission increases in compliance with federal requirements. As a result, these sources each comply with federal offset requirements by providing their own ERCs. However, certain sources are exempt from SCAQMD's offset requirements pursuant to Rule 1304 or qualify for offsets from SCAQMD's Community Bank (applications received between October 1, 1990 and February 1, 1996 only) or Priority Reserve, both pursuant to Rule 1309.1. SCAQMD has determined that providing offset exemptions and the Priority Reserve (as

<sup>3</sup> As of July 26, 2013, SOCAB was redesignated as attainment for the federal 24-hour PM<sub>10</sub> standard and U.S. EPA approved a PM<sub>10</sub> maintenance plan; however, Rule 1303 still requires offsets for PM<sub>10</sub> since SOCAB is considered non-attainment for state PM<sub>10</sub> Ambient Air Quality Standards, so that pollutant continues to be tracked. Although the Clean Air Act no longer requires offsets for PM<sub>10</sub> major sources in the SOCAB. PM<sub>2.5</sub> is not covered by Rule 1315 or Rule 1304 and is subject to its own NSR Rule, 1325.

<sup>4</sup> SO<sub>x</sub> is a precursor to PM<sub>10</sub> and NO<sub>x</sub> is a precursor to both PM<sub>10</sub> and ozone.

<sup>5</sup> The major source thresholds for SOCAB, SSAB and MDAB, based on their attainment status during the calendar year 2007 through 2010 reporting periods, are summarized below:

Pollutant	SOCAB	SSAB	MDAB
VOC	10 ton/year	25 ton/year	100 ton/year
NO <sub>x</sub>	10 ton/year	25 ton/year	100 ton/year
SO <sub>x</sub>	100 ton/year	100 ton/year	100 ton/year
PM <sub>10</sub>	70 ton/year	70 ton/year	100 ton/year
CO	50 ton/year	100 ton/year	100 ton/year

well as the previously-administered Community Bank) is important to the NSR program and the local economy while encouraging installation of BACT. Therefore, SCAQMD has assumed the responsibility of providing the necessary offsets for exempt sources, the Priority Reserve, and the Community Bank. This report examines deposits to and withdrawals from SCAQMD's emission offset accounts during calendar year 2013 and demonstrates programmatic equivalence on an aggregate basis with federal emission offset requirements for the sources exempt from providing offsets and the sources that receive offsets from the Priority Reserve or the Community Bank.

### **SCAQMD's Offset Accounts**

For the purposes of this report, federal debit and credit accounting for SCAQMD's offset accounts was conducted pursuant to the same procedures previously agreed to by U.S. EPA and as delineated in Rule 1315 and described in the staff report. Each of the pollutants subject to offset requirements and covered by Rule 1315 has its own federal offset account. 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 SCAQMD's federal offset account for each pollutant remains positive, indicating that there were adequate offsets available.

#### *Debit Accounting*

SCAQMD tracks all emission increases that are offset through the Priority Reserve or the Community Bank, as well as all increases that are exempt from offset requirements pursuant to Rule 1304 – Exemptions. These increases are all debited from SCAQMD's federal offset accounts when they occur at federal major sources. For federal equivalency demonstrations, SCAQMD uses an offset ratio of 1.2-to-1.0 for extreme non-attainment pollutants (ozone and ozone precursors, *i.e.*, VOC and NO<sub>x</sub>) and uses 1.0-to-1.0 for all other non-attainment pollutants (non-ozone precursors, *i.e.*, SO<sub>x</sub>, CO, and PM<sub>10</sub>) to offset any such increases. 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 and 1.0 pound is deducted for each pound of maximum allowable permitted potential to emit SO<sub>x</sub>, CO, or PM<sub>10</sub> at a federal source. A more detailed description of federal debit accounting is provided in the Rule 1315 staff report and Rule 1315(c)(2).

#### *Credit Accounting*

When emissions from a permitted source are permanently reduced (*e.g.*, installation of control equipment, removal of the source) and the emission reduction is not required by rule or law and is not called for by an AQMP control measure that has been assigned a

target implementation date<sup>6</sup>, the permit holder may apply for ERCs for the pollutants reduced. If the permit holder for the source generating the emission reduction had previously received offsets from SCAQMD or has a “positive NSR balance” (*i.e.*, pre-1990 net emission increase), the quantity of SCAQMD offsets used or the amount of the positive NSR balance is subtracted from the reduction and “paid back” to SCAQMD’s accounts prior to issuance of an ERC pursuant to Rule 1306. In certain other cases, permit holders do not always submit applications to claim ERCs or do not qualify to obtain ERCs for their equipment shutdowns or other eligible emission reductions. These unclaimed reductions are referred to as “orphan shutdowns” and are deposited in SCAQMD’s offset accounts. ERCs provided as offsets by major sources in excess of the applicable federally-required offset ratio and all ERCs provided as offsets by minor sources not subject to federal offset requirements are also deposited in SCAQMD’s federal offset accounts. A more detailed description of federal credit accounting is provided in Rule 1315(c)(3)(A) and its staff report.

## **DETERMINATION OF EQUIVALENCY WITH FEDERAL OFFSET REQUIREMENTS**

The federal offset requirements PDE for calendar year 2013 and the projections for calendar years 2014 and 2015 are summarized in Tables 1, and 2, respectively. The detailed listing of actual final withdrawals, deposits, and sum of withdrawals and deposits are shown in Tables A and B of Attachment I to this letter.

These account balances, shown in Tables A and B reflect the tracking sequence described under Rule 1315(c)(5).

## **CONCLUSIONS**

The analysis presented in this report demonstrates the following:

- For calendar year 2013, SCAQMD’s NSR program provides equivalent offsets to those required by federal NSR requirements and is at least preliminarily equivalent to the federal requirements on an aggregate basis. This conclusion is based on the fact that the preliminary ending offset account balances for the calendar year reporting period, as shown in Table 1, remained positive for all pollutants.
- SCAQMD’s projected offset account balances for 2014 and 2015 are projected to remain positive. This means that the sum of the estimated deposits to and withdrawals from SCAQMD’s offset accounts during 2014 and 2015 are projected to remain positive.

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<sup>6</sup> Refer to Rule 1309(b) for a complete explanation of eligibility requirements.

**ATTACHMENTS**

Attachment I – Detailed listing of actual debits, preliminary credits, and sum of debits and credits

## ATTACHMENT I

Detailed listing of actual final debits, preliminary credits, and sum of debits and credits

**Table A**  
**Total Actual Debits from SCAQMD's Federal Offset Accounts**  
**(January 2013 through December 2013)**

<b>DISTRICT OFFSETS USED</b>	<b>VOC</b>	<b>NO<sub>x</sub></b>	<b>SO<sub>x</sub></b>	<b>CO</b>	<b>PM10</b>
Priority Reserve (lb/day)	-18	-10	0	0	0
Community Bank (lb/day)	0	0	0	0	0
Rule 1304 Exemptions (lb/day)	-826	-2	0	-15,957	0
Sum Total of SCAQMD Offsets (lb/day)	-844	-12	0	-15,957	0
1.2-to-1.0 Offset Ratio (lb/day)	-169	-2	N/A	N/A	N/A
<b>Total Actual Debits to SCAQMD Account (lb/day)</b>	<b>-1013</b>	<b>-14</b>	<b>0</b>	<b>-15,957</b>	<b>0</b>
<b>Total Actual Debits to SCAQMD Account (ton/day)</b>	<b>-0.51</b>	<b>-0.01</b>	<b>0</b>	<b>-7.98</b>	<b>0</b>

**Table B**  
**Sum of Preliminary Credits/Debits Activities in SCAQMD's Federal Offset Accounts**  
**(January 2013 through December 2013)**

	<b>VOC</b>	<b>NO<sub>x</sub></b>	<b>SO<sub>x</sub></b>	<b>CO</b>	<b>PM10</b>
Total Actual Debits* (lb/day)	-1,013	-14	0	-15,957	0
Total Actual Credits* (lb/day)	0	0	0	0	0
<b>Sum of Actual Debits(-)/Credits(+)* (lb/day)</b>	<b>-1,013</b>	<b>-14</b>	<b>0</b>	<b>-15,957</b>	<b>0</b>
<b>Sum of Actual Debits(-)/Credits(+)* (ton/day)</b>	<b>-0.51</b>	<b>-0.01</b>	<b>0</b>	<b>-7.98</b>	<b>0</b>

\* Debits are shown as negative and Credits as positive, while their sum is shown as negative or positive, as appropriate. No credits are accounted for in the preliminary determination of equivalency analysis; they will be presented in the Final Determination of Equivalency due in September 2015.