

BOARD MEETING DATE: February 2, 2018

AGENDA NO. 29

REPORT: Status Report on Regulation XIII – New Source Review

SYNOPSIS: This report presents the federal preliminary determination of equivalency for January 2016 through December 2016. 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 2016 through December 2016.

COMMITTEE: Stationary Source Committee, January 19, 2018

RECOMMENDED ACTION:
Receive and file the attached report.

Wayne Natri
Executive Officer

LT:WCT:SKT

SUMMARY

SCAQMD’s New Source Review (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 NOx and SOx sources that are subject to Regulation XX – Regional Clean Air Incentives Market (RECLAIM)¹.

¹ While the RECLAIM program is different than command and control rules for NOx and SOx, 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 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 - Priority Reserves, and/or that are exempt from offsets under SCAQMD Rule 1304 - Exemptions. 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 2016 PDE and FDE are required to be reported to the SCAQMD Board at the February and September 2018 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 1, 2017 presented the FDE for calendar year 2015 and demonstrated that SCAQMD’s NSR program met the federal offset requirements for calendar year 2015.

This report, which presents the PDE covering the calendar year 2016 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 District offset requirements or obtained their offsets from SCAQMD pursuant to Regulation XIII.

The PDE for the calendar year 2016 is summarized in Table 1. Additionally, the projections of SCAQMD’s federal offset account balances for January 2017 through December 2017 and January 2018 through December 2018 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 demonstrates that, for calendar years 2016 through 2018, SCAQMD’s NSR program continues to meet and is projected to meet federal offset requirements and is equivalent to those requirements on an aggregate basis². Although the 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.

² 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 2016 through December 2016

DESCRIPTION	VOC	NO _x	SO _x	CO	PM10
2015 Actual Ending Balance^a (tons/day)	101.47	24.49	4.15	14.80	15.05
2016 Discount of Credits for Surplus Adjustment ^b (tons/day)	0.00	-2.73	0.00	0.00	0.00
2016 Starting Balance (tons/day)	101.47	21.76	4.15	14.80	15.05
2016 Actual Total Credits ^c (lbs/day)	0	0	0	0	0
2016 Actual Total Credits^c (tons/day)	0.00	0.00	0.00	0.00	0.00
2016 Actual Total Debits ^d (lbs/day)	-22	-65	0	-10	0
2016 Actual Total Debits^d (tons/day)	-0.01	-0.03	0.00	-0.01	0.00
2016 Preliminary Ending Balance^e (tons/day)	101.46	21.73	4.15	14.79	15.05

^a “2015 Actual Ending Balance” is from Table 1 of the 2015 FDE report dated September 1, 2017.

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

^c PDE does not account for any credits for calendar year 2016, however, credits will be included in the Final Determination of Equivalency.

^d 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.

^e “2016 Preliminary Ending Balance” equals the “2015 Actual Ending Balance” reduced by any surplus adjustments and the sum of actual debits.

Table 2
Projections of SCAQMD’s Federal Offset Account Balances for
January 2017 through December 2017, and
January 2018 through December 2018

DESCRIPTION	VOC	NO _x	SO _x	CO	PM10
2016 Preliminary Ending Balance^a (tons/day)	101.46	21.73	4.15	14.79	15.05
2017 Projected Discount of Credits for Surplus Adjustment ^b (tons/day)	-0.20	-1.33	0.00	-0.10	0.00
2017 Projected Starting Balance (tons/day)	101.26	20.40	4.15	14.69	15.05
2017 Total Projected Credits ^c (lbs/day)	9,715	2,312	586	3,991	1,238
2017 Total Projected Debits ^c (lbs/day)	-547	-394	0	-4,161	-113
2017 Sum of Projected Credits/Debits^c (lbs/day)	9,169	1,918	586	-170	1,124
2017 Sum of Projected Credits/Debits^c (tons/day)	4.58	0.96	0.29	-0.09	0.56
2017 Projected Ending Balance^d (tons/day)	105.84	21.36	4.44	14.60	15.61
2018 Projected Discount of Credits for Surplus Adjustment ^b (tons/day)	-0.21	-1.30	0.00	-0.09	0.00
2018 Projected Starting Balance (tons/day)	105.63	20.06	4.44	14.51	15.61
2018 Total Projected Credits ^c (lbs/day)	9,715	2,312	586	3,991	1,238
2018 Total Projected Debits ^c (lbs/day)	-547	-394	0	-4,161	-113
2018 Sum of Projected Credits/Debits^c (lbs/day)	9,169	1,918	586	-170	1,124
2018 Sum of Projected Credits/Debits^c (tons/day)	4.58	0.96	0.29	-0.09	0.56
2018 Projected Ending Balance^e (tons/day)	110.21	21.02	4.73	14.42	16.17

^a “2016 Preliminary Ending Balance” is as shown in Table 1.

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

^c 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.

^d “2017 Projected Ending Balance” equals the “2016 Preliminary Ending Balance” plus any projected surplus adjustments and the sum of projected credits and projected debits.

^e “2018 Projected Ending Balance” equals the “2017 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 the 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 law suit 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 approved Rule 1315 in 2012 (77FR31200).

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. 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 in 2007, the South Coast Air Basin (SOCAB) and Salton Sea Air Basin (SSAB) must comply with the requirements for severe 17 and severe non-attainment areas, respectively, for ozone precursors (*i.e.*, VOC and NO_x). However, in May of 2010, the SOCAB was re-designated as an extreme non-attainment area for ozone. During the equivalency period, both the SOCAB and the SSAB complied with their respective requirements for ozone non-attainment and serious non-attainment for PM₁₀ and its precursors (*i.e.*, VOC, NO_x and SO_x)³. SSAB is considered attainment

³ As of July 26, 2013, SOCAB was redesignated as attainment for the federal 24-hour PM₁₀ standard and U.S. EPA approved a PM₁₀ maintenance plan; however, Rule 1303 still requires offsets for PM₁₀ since SOCAB is considered non-attainment for state PM₁₀ Ambient Air Quality Standards, so that pollutant continues to be

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 SO₂ and NO₂, however SO_x and NO_x are precursors to pollutants for which both SOCAB and SSAB are designated as non-attainment⁴. The Mojave Desert Air Basin (MDAB) is currently classified as moderate non-attainment for ozone precursors (*i.e.*, VOC and NO_x) and as attainment for NO₂, SO₂, and CO. Federal law requires the use of Lowest Achievable Emission Rate (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 source⁵ for the nonattainment pollutants (or their precursors). 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 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 withdrawals from

tracked. Although the Clean Air Act no longer requires offsets for PM₁₀ major sources in SOCAB, PM_{2.5} is not covered by Rule 1315 or Rule 1304 and is subject to its own NSR Rule, 1325 - Federal PM_{2.5} New Source Review Program.

⁴ SO_x is a precursor to PM₁₀ and NO_x is a precursor to both PM₁₀ and ozone.

⁵ The major source thresholds for SOCAB, SSAB and MDAB, based on their attainment status during the calendar year 2007 through 2016 reporting periods are summarized below:

Pollutant	SOCAB	SSAB	MDAB
VOC	10 tons/year	25 tons/year	100 tons/year
NO _x	10 tons/year	25 tons/year	100 tons/year
SO _x	100 tons/year	100 tons/year	100 tons/year
PM ₁₀	100 tons/year	100 tons/year	100 tons/year
CO	100 tons/year	100 tons/year	100 tons/year

SCAQMD's emission offset accounts during calendar year 2016 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 dated January 7, 2011. Each of the pollutants subject to offset requirements 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_x) and uses 1.0-to-1.0 for all other non-attainment pollutants (non-ozone precursors, *i.e.*, SO_x, CO, and PM₁₀) 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_x increase at a major source and 1.0 pound is deducted for each pound of maximum allowable permitted potential to emit SO_x, CO, or PM₁₀ at a major source. A more detailed description of federal debit accounting is provided in the Rule 1315 staff report and Rule 1315(c)(2).

Furthermore, to comply with U.S. EPA's NSR Reform requirements applicable to extreme non-attainment areas for ozone, the SCAQMD tracks changes to facility-wide limits under Rule 1304 – Exemptions, and debit any increases from the federal offset accounts accordingly.

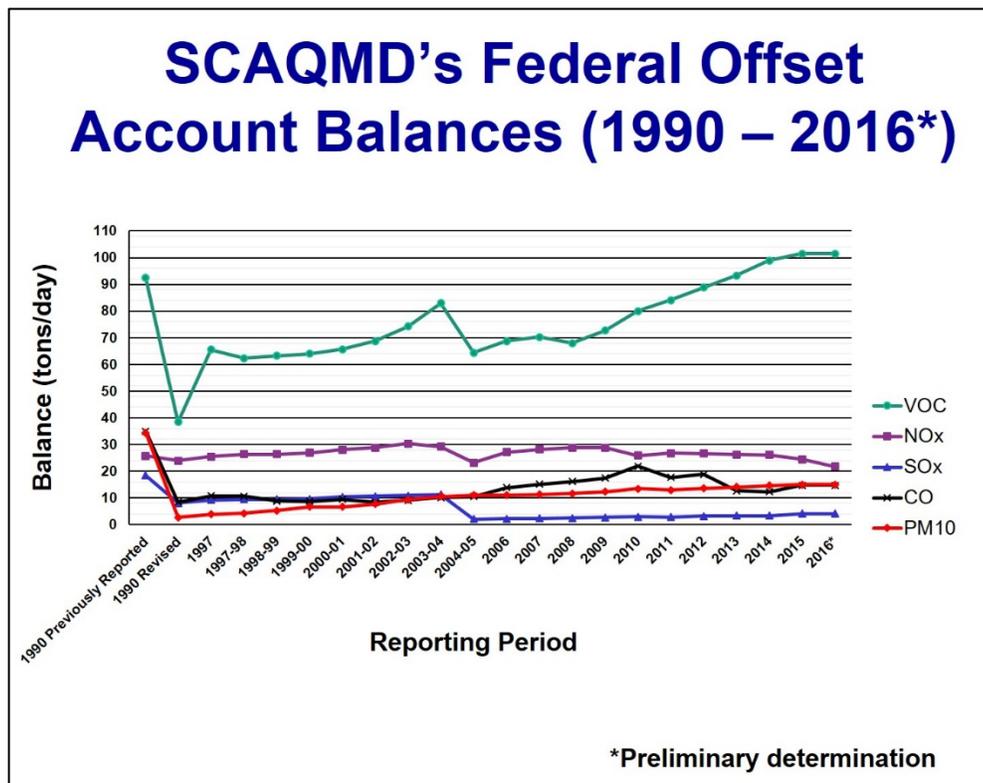
Credit Accounting

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 date⁶, 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

Figure 1 illustrates SCAQMD’s federal offset account balances for calendar years 1990 and after. The calendar year 2016 balances are based on preliminary determinations.



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

The federal offset requirements PDE for calendar year 2016 and the projections for calendar years 2017 and 2018 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 1 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 2016, SCAQMD's NSR program provided 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 2017 and 2018 are projected to remain positive. This means that the sum of the estimated deposits to and withdrawals from SCAQMD's offset accounts during 2017 and 2018 are projected to remain positive.

ATTACHMENTS

1. Detailed listing of actual debits, preliminary credits, and sum of debits and credits.
2. Board Meeting Presentation

ATTACHMENT 1

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

Table A
Total Actual Debits from SCAQMD's Federal Offset Accounts
(January 2016 through December 2016)

DISTRICT OFFSETS USED	VOC	NO_x	SO_x	CO	PM10
Priority Reserve (lbs/day)	-18	-2	0	-166	-27
Community Bank (lbs/day)	0	0	0	0	0
Rule 1304 Exemptions (lbs/day)	0	-52	0	-1	0
Sum Total of SCAQMD Offsets (lbs/day)	-18	-54	0	-10	0
1.2-to-1.0 Offset Ratio (lbs/day)	-4	-11	N/A	N/A	N/A
Total Actual Debits to SCAQMD Account (lbs/day)	-22	-65	0	-10	0
Total Actual Debits to SCAQMD Account (tons/day)	-0.01	-0.03	0.00	-0.01	0.00

Table B
Sum of Preliminary Credits/Debits Activities in SCAQMD's Federal Offset Accounts
(January 2016 through December 2016)

	VOC	NO_x	SO_x	CO	PM10
Total Actual Debits* (lbs/day)	-22	-65	0	-10	0
Total Actual Credits* (lbs/day)	0	0	0	0	0
Sum of Actual Debits(-)/Credits(+)* (lbs/day)	-22	-65	0	-10	0
Sum of Actual Debits(-)/Credits(+)* (tons/day)	-0.01	-0.03	0.00	-0.01	0

* 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.



Status Report on Regulation XIII – New Source Review

Governing Board Meeting
February 2, 2018



NSR Status Report Overview

Purpose:

Demonstrate SCAQMD's NSR program meets federal NSR offset requirements for Major Sources, as required by EPA, for sources that are exempt from offsets under SCAQMD's NSR rule



NSR Status Report History

- SCAQMD has produced Annual NSR Status Reports since 1990
- Around 2002-2004 EPA requested SCAQMD adopt a rule to memorialize equivalency demonstrations
- SCAQMD adopted Rule 1315 - Federal NSR Tracking System, was adopted in 2006/2007 and revised in 2011
- EPA approved Rule 1315 into the SIP and it became effective on June 25, 2012



Rule 1315

Federal NSR Tracking System

- Rule 1315 established procedures to demonstrate equivalency with federal NSR offset requirements
 - Tracks debits from and credits to SCAQMD's federal internal offset account for each pollutant
 - Annual Preliminary Determinations of Equivalency (PDE), Final Determinations of Equivalency (FDE) and Projections
 - Balances in SCAQMD's federal offset accounts must remain positive



SCAQMD's Federal NSR Offset Accounts

Preliminary Determination of Equivalency (PDE)* (CY 2016)

DESCRIPTION	VOC	NOx	SOx	CO	PM10
2015 Final Ending Balance (tons/day)	101.47	24.49	4.15	14.80	15.05
2016 Total Credits (tons/day)*	0.00	0.00	0.00	0.00	0.00
2016 Total Debits (tons/day)	-0.01	-0.03	0.00	-0.01	0.00
2016 Total Discount of Credits for Surplus Adjustment (tons/day)	0.00	-2.73	0.00	0.00	0.00
2016 Preliminary Ending Balance (tons/day)	101.46	21.73	4.15	14.79	15.05

***PDE does not account for any credits for CY 2016, however, credits will be included in the Final Determination of Equivalency.**



SCAQMD's Projected Federal NSR Offset Accounts CY 2017

DESCRIPTION	VOC	NOx	SOx	CO	PM10
2016 Preliminary Ending Balance (tons/day)	101.46	21.73	4.15	14.79	15.05
2017 Total Projected Credits (tons/day)	4.85	1.16	0.29	1.99	0.62
2017 Total Projected Debits (tons/day)	-0.27	-0.20	0.00	-2.08	-0.06
2017 Total Projected Discount of Credits for Surplus Adjustment (tons/day)	-0.20	-1.33	0.00	-0.10	0.00
2017 Projected Ending Balance (tons/day)	105.84	21.36	4.44	14.60	15.61

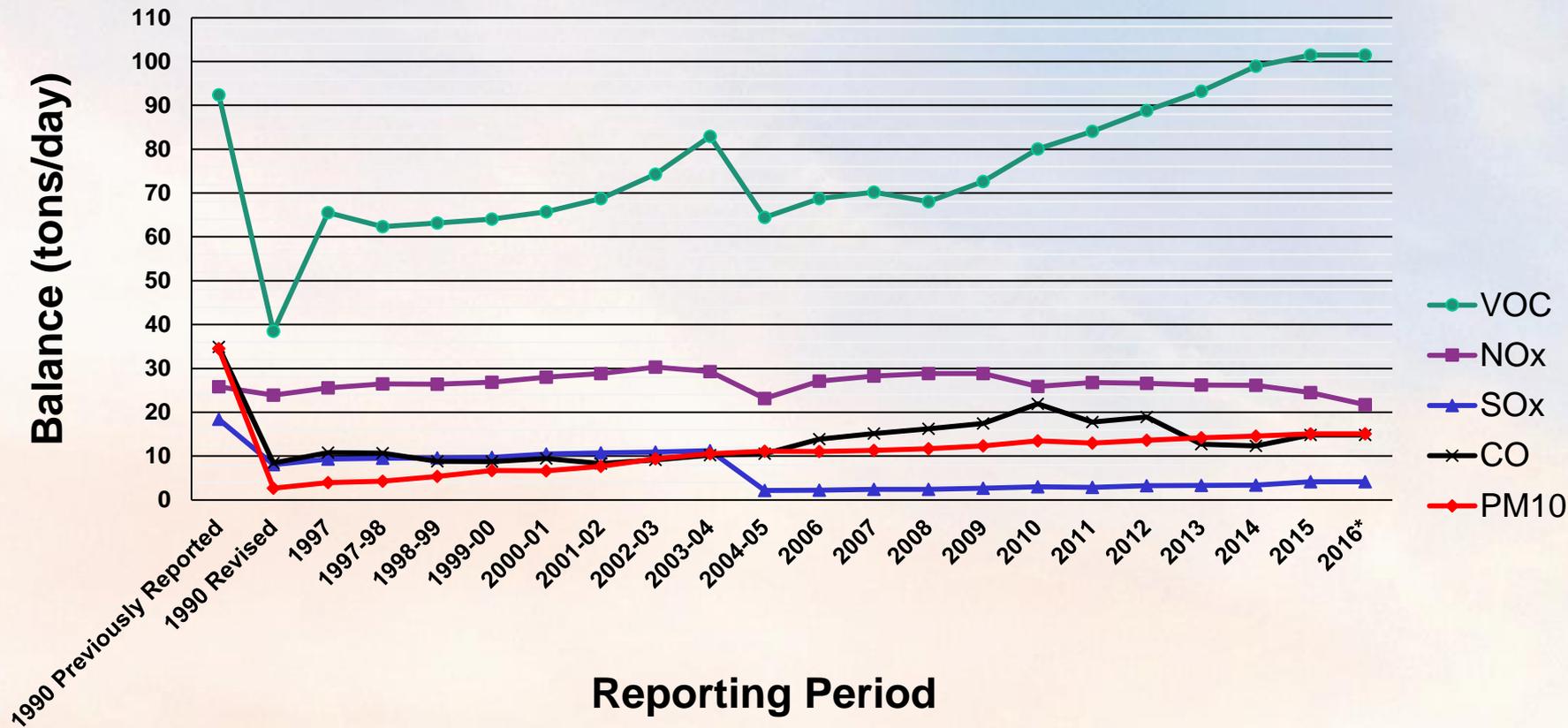


SCAQMD's Projected Federal NSR Offset Accounts CY 2018

DESCRIPTION	VOC	NOx	SOx	CO	PM10
2017 Projected Ending Balance (tons/day)	105.84	21.36	4.44	14.60	15.61
2018 Total Projected Credits (tons/day)	4.85	1.16	0.29	1.99	0.62
2018 Total Projected Debits (tons/day)	-0.27	-0.20	0.00	-2.08	-0.06
2018 Total Projected Discount of Credits for Surplus Adjustment (tons/day)	-0.21	-1.30	0.00	-0.09	0.00
2018 Projected Ending Balance (tons/day)	110.21	21.02	4.73	14.42	16.17



SCAQMD's Federal Offset Account Balances (1990 – 2016*)



*Preliminary determination



Conclusions

- The Preliminary analysis for CY 2016 shows SCAQMD's NSR program continued to be equivalent to the federal NSR offset requirements
- For CYs 2017 and 2018 it is also projected that SCAQMD's NSR program will continue to be equivalent to the federal NSR offset requirements
- Next Final Demonstration of Equivalency for CY 2016 will be presented to the Governing Board on September 7, 2018