Preliminary Draft Staff Report
Proposed Amendments to Regulation XX – Regional Clean Air Incentives Market

NOx RECLAIM

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Deputy Executive Officer
Planning, Rule Development, and Area Sources
Philip M. Fine, Ph.D.

Acting Assistant Deputy Executive Officer
Planning, Rule Development, and Area Sources
Susan Nakamura

Planning and Rules Manager
Planning, Rule Development, and Area Sources
Tracy A. Goss, P.E.

Author: Kevin Orellana – Air Quality Specialist

Reviewed by: Gary Quinn, P.E. – Program Supervisor
Danny Luong, P.E. – Senior Enforcement Manager
William Wong – Principal Deputy District Counsel
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
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ACTING EXECUTIVE OFFICER:

WAYNE NASTRI
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Executive Summary

Background
The South Coast Air Quality Management District (SCAQMD) Governing Board adopted the Regional Clean Air Incentives Market (RECLAIM) program in October 1993. The purpose of RECLAIM is to reduce NOx and SOx emissions through a market-based approach. The program replaced a series of existing and future command-and-control rules and was designed to provide facilities with the flexibility to seek the most cost-effective solution to reduce their emissions. It also was designed to provide equivalent emission reductions, in the aggregate, for the facilities in the program compared to what would occur under a command-and-control approach. Regulation XX includes a series of rules that specify the applicability and procedures for determining NOx and SOx facility emissions allocations, program requirements, as well as monitoring, reporting, and recordkeeping requirements for sources located at RECLAIM facilities.

Regulation XX was amended on December 4, 2015 to achieve programmatic NOx RECLAIM trading credit (RTC) reductions from compliance years 2016 through 2022. Among the proposed amendments considered was a provision to address RTCs from shutdown facilities. The Governing Board motion that was approved did not include the shutdown provisions and directed staff to return to the Board, after further analysis and discussion with the RECLAIM working group, with a proposal that would allow a closer alignment of shutdown credits in the RECLAIM program and command and control programs, short of full forfeiture.

SCAQMD staff is proposing amendments to Regulation XX – RECLAIM to address RTCs from facility shutdowns. The objective is to prevent facility shutdown RTCs from entering the market and delaying the installation of pollution controls at other RECLAIM facilities. Specifically, the proposed amendments establish the criteria for determining a facility shutdown, and the methodology to calculate the amount of RTCs that a facility will be required to surrender. The proposed amendments also include exclusions from these provisions to allow facilities under common ownership that conduct the same function to use shutdown RTCs as well as provisions that allow for planned non-operation for up to five years for facilities that meet specific criteria.

Public Process
The current rulemaking process for PAR XX – NOx RECLAIM (shutdown provisions) began in the 1st quarter of 2016. SCAQMD staff has met with the NOx RECLAIM working group three times, on January 21, February 25, and June 8, 2016. The NOx RECLAIM working group is comprised of representatives from business, environmental, RTC brokers, and other agencies. The SCAQMD staff also provides monthly briefings to environmental and community groups regarding the proposed amendments. The public workshop for this amendment will be held on Thursday, August 11, 2016.
SCAQMD staff has also received comment letters from several stakeholders, and has also met with individual RECLAIM facility operators regarding the shutdown provisions of the proposed amendments. Various comments from the stakeholders have been incorporated into the preliminary draft rule language.
Chapter 1 – Background

December 4, 2015 Governing Board Motion
Regulation XX was amended on December 4, 2015 to achieve programmatic NOx RECLAIM trading credit (RTC) reductions from compliance years 2016 through 2022. Among the proposed amendments considered was a provision to address RTCs from shutdown facilities. The Governing Board motion that was approved did not include the shutdown provisions and directed staff to return to the Board, after further analysis and discussion with the RECLAIM working group, with a proposal that would allow a closer alignment of shutdown credits in the RECLAIM program and command and control programs, short of full forfeiture. Paragraph 3 of the motion, which pertains to the shutdown provisions, reads as follows:

“Subparagraph (i) of Rule 2002 that was originally proposed by staff on November 4, 2015 and released in rewritten form on November 28, 2015 is NOT adopted at this time. Staff shall return it to the NOx RECLAIM Working Group for further discussion and analysis of that proposal’s potential implications on the entire NOx RECLAIM Program and consideration of possible alternatives that would allow a closer alignment of the treatment of shutdown credits in RECLAIM and command-and-control programs short of full forfeiture. Following this process, staff may bring its original proposal or some other alternative back to the Governing Board for consideration for adoption.”

The proposal presented before the Governing Board on December 4, 2015 would have RTCs retired from complete facility closures or equipment shutdowns that represent twenty-five percent or more of a facility’s emissions for any quarter within the previous 2 compliance years. This would have applied to any facility listed in Tables 7 or 8 of Rule 2002 (i.e., the larger NOx emitting facilities). Permits associated with the equipment being shutdown would be surrendered, and the RTCs for future years would be retired from the RECLAIM program.

Shutdown Credits in the RECLAIM Program
Currently, RTCs resulting from facilities that permanently shutdown can be sold and reintroduced back into the RECLAIM program for use by other facilities. Allowing the use of shutdown RTCs in a market where many facilities have not yet installed BARCT controls can further delay or eliminate the need for facilities to install equipment to reduce their NOx emissions.

The emission reductions as a result of the amendments to the NOx RECLAIM program in 2005 illustrate this condition. The NOx RTC shave target for the 2005 amendments was 7.7 tons per day from 2007 to 2011. The actual NOx emission reductions between the timeframe of 2006 and 2012 was 4 tons per day. Of these 4 tons per day, 2.6 tons per day (or 65%) originated from facility shutdowns, while 1.4 tons per day (or 35%) came from...
either emission controls, process changes, or from a decrease in production levels due to the recession (Figure 1).

Figure 1. NOx Emission Reductions Between 2006-2012

Under a command and control regulatory program, facilities are required to meet equipment specific BARCT emission limits and emission reductions from a facility shutdown could not be used to delay installation of BARCT controls. However, under RECLAIM, RTCs belonging to shutdown facilities can be sold to other operating facilities in RECLAIM and can be used to delay or eliminate the need for installation of BARCT controls. Figure 2 illustrates the quantity and magnitude of the emissions from shutdown facilities in the RECLAIM program since its inception. The maximum annual emissions for each of these facilities was used, and although there are many smaller emitters that have shutdown, the larger emitting facilities had maximum annual emissions ranging from around 0.2 to over 2 tons per day per facility (~146,000 lbs per year to over 1,460,000 lbs per year). The cumulative maximum emissions for these shutdown facilities total about 5.9 tons per day.
The emissions from facility shutdowns and the corresponding RTCs can be substantial. To better highlight the magnitude, emissions associated with facility shutdowns are compared to the highest NOx emitting facilities in the current RECLAIM universe. In Figure 3, the blue bars to the right represent a sample of the range of emissions from the top 90% of NOx emitters in the RECLAIM program (i.e. the 56 facilities which are listed in Table 7 and Table 8 of Rule 2002) from which the RTC allocation shave for the December 4, 2015 amendments was based. Facility 5 was the top emitter while Facility 15 was the lowest emitter from this subset of the Table 7 and Table 8 facilities. The red bars to the left in Figure 3 represent the maximum emissions from the top four facilities that have shutdown from Figure 2 and illustrate that the magnitude of these emissions is on the same order as many of the top emitting facilities in operation today. The highest NOx emitter from these shutdown facilities was the California Portland Cement Company. This facility produced cement by operating two long, dry kilns and was at one time the top NOx emitting source in the NOx RECLAIM program. The very large quantity of these RTCs that became available upon shutdown were made available for sale and were subsequently purchased by another facility to meet its compliance goals without the installation of BARCT controls. The RTC sales from these shutdown credits belonging to California Portland Cement Company exceeded $100 million.
On this basis, staff is proposing to have specified amounts of the RTCs retired from NOx emitting facilities that have shutdown. This change is proposed to further assure the installation of BARCT controls.

**Shutdowns in Command and Control**

The most significant difference between RTCs from facility shutdowns in RECLAIM and Emission Reduction Credits (ERCs) from shutdowns under command and control is that there is no discounting or adjustment of RTCs under RECLAIM once a facility shuts down. In command and control, Regulation XIII rules govern how emission reduction credits (ERCs) are generated. Here is brief summary of the ERC generation process:

1. In order to obtain an ERC, an application must be submitted as required by Rule 1309(b).
2. The application is only deemed complete if it satisfies the minimum requirements by the applicant providing supporting data and documents [Rule 1309(b)(1)].
3. Once deemed complete, the emission reductions must meet the eligibility requirements according to Rule 1309(b)(4) of being real, quantifiable, permanent, federally enforceable, and not greater than what would be achieved with current BACT.
4. If the emission reductions meet the eligibility requirements above and no further emission reductions are required per Rule 1309(b)(5), i.e. required by a control...
measure or other District, State, or Federal rule, then the ERCs are calculated pursuant to Rule 1306. The emission decrease from a source that has shutdown shall be the actual emissions reduced to the amount which would be actual if current BACT were applied.

5. The ERCs are determined from the emission credits calculated minus any payback necessary, such as a payback from offsets provided by the District’s internal bank [Rule 1306(e)(3)]. This is based on the actual emissions during the 2-year period preceding the date of application.

6. The final step prior to the issuance on an ERC is the requirement for a public notice [Rule 1309(f)(3)].

The multi-step approach in command and control rules does not apply to RECLAIM facilities. As mentioned above, there is no discounting or adjustment of RTCs upon shutting down. A facility that shuts down can sell the entirety of the RTCs that it holds at the current market price. If the RTC price for infinite year block credits (IYBs) is favorable and there is a substantial quantity available for sale, a shutdown facility can significantly profit from the IYB credit sale. It should be noted that at the beginning of the RECLAIM program, allocations of RTCs were provided to facilities free of charge.

**Industry Comments for the Shutdown Provisions**

Comments were received as a result of the proposed shutdown provisions for the December 4, 2015 amendments. A summary of these comments is listed below:

- The requirements should not apply to shutdown equipment for which the equipment’s operational capacity is replaced by new or existing equipment serving the same functional needs at the same facility or another facility under common control.
- The shutdown requirements should not apply to equipment that is used in a cyclical operation or for equipment that is out of service or repair.
- The shutdown requirements should not apply to equipment that is planned to be returned to service at a future date.
- The RECLAIM program is working because buying and selling of RTCs is a fundamental component of a market-based program.

**Affected Facilities**

There were 275 facilities in RECLAIM during the recent amendments that were adopted by the Governing Board on December 4, 2015. These facilities either elected to enter the program or had NOx emissions greater than or equal to four tons per year in 1990 or any subsequent year. The proposed shutdown provisions would apply to any facility in the NOx RECLAIM program that shuts down entirely, except those that received no initial allocations.
Chapter 2 – Proposed Amendments to Regulation XX, Rule 2002

The proposed amendments regarding facility shutdowns will be addressed in Rule 2002, which establishes the methodology for calculating facility allocations and adjustments to RTC holdings for Oxides of Nitrogen (NOx) and Oxides of Sulfur (SOx). The proposed amendments would apply to NOx RTC holdings for NOx RECLAIM Facility Permit Holders that permanently shutdown. This can be a result of a facility self-reporting that this has occurred or based on a process initiated by the Executive Officer. Proposed amended rule (PAR) 2002(i)(1) states that:

“Any Facility Permit Holder that permanently shuts down or surrenders all operating permits for the entire facility shall have its adjusted initial NOx allocation reduced each compliance year by an amount equivalent to the difference between:

(A) The average of actual NOx emissions from the highest 2 of the past 5 compliance years for the facility; and

(B) The NOx emissions that would have occurred in those same 2 years as if it was operated at the most stringent applicable BARCT emission factors specified in Rule 2002(f)(1)(L).”

In addition, PAR 2002(i)(2) states that:

“Any offsets provided by the SCAQMD pursuant to Rule 1304 that remain as part of the adjusted initial NOx allocation shall also be subtracted for each compliance year.”

Although there are inherent differences between RECLAIM Trading Credits (RTCs) and emission reduction credits (ERCs) in command and control under Regulation XIII, the proposed amendments would require that the adjusted initial allocation of RTCs to a facility that shuts down be adjusted by the difference between the most stringent BARCT level and recent actual emissions. The RTC adjustment would apply to all future compliance year RTCs [PAR 2002(i)(4)], but the reduction of RTCs shall not exceed the adjusted initial allocation [PAR 2002(i)(3)]. The adjusted initial allocation is the remaining amount of RTCs that a facility is allocated after all the reductions associated with subsequent RTC shaves have been calculated. The RTCs to be held by the Facility Permit Holder after the BARCT adjustment would be the lesser amount of its adjusted initial allocation or the calculated BARCT-adjusted amount, per the provisions of proposed paragraph (i)(1).

Under PAR 2002, a Facility Permit Holder that shuts down is responsible for providing the RTCs to the SCAQMD. PAR 2002(i)(5) states that if any RTCs that are adjusted to BARCT from the adjusted initial allocation pursuant to paragraph (i)(1) have been sold prior to the adjustment, the Facility Permit Holder must purchase and then retire the sufficient quantity of RTCs to fulfill the adjustment requirement. In addition, a RECLAIM facility that has knowledge of an imminent shutdown should not attempt to sell off its RTCs. Otherwise, the facility would have to purchase the quantity of RTCs in
the open market at the current market price to fulfill the RTC obligation, if there is a deficit as a result of the RTC adjustment.

PAR 2002(i)(6) provides an exemption for the shutdown RTC adjustment requirements for facilities that shutdown and transfer RTCs to another facility that is under common ownership that conducts the same function based on the same six-digit North American Industry Classification System (NAICS) code.

“The requirements specified in this subdivision shall not apply to facility shutdowns where the RTCs are transferred to another facility under common ownership that conducts the same functions at another facility with the same 6-digit North American Industry Classification System (NAICS) designation.”

This provision allows businesses to consolidate their operations to increase efficiency. The same six digit NAICS code amongst several facilities under common ownership ensures that the operations are virtually identical.

Under PAR 2002, the Executive Officer can deem a RECLAIM facility as shutdown if it meets the criteria in paragraph (i)(7):

“In addition to self-reported facility shutdowns, the Executive Officer will determine a NOx RECLAIM facility to have shut down if the facility has been non-operational for a period of two consecutive years or longer, based on APEP reports. A facility is deemed to be non-operational if NOx emissions in any compliance year are less than 10 percent of the maximum annual NOx emissions in the previous 2 compliance years…”

The Annual Permit Emissions Program (APEP) reports provide evidence of operational emissions from a RECLAIM facility. If a facility’s annual emissions drop more than 90% from the typical levels over the previous two compliance years, the Executive Officer would deem the facility as shutdown. It is not uncommon for a facility to maintain small ancillary equipment during a facility shutdown. This was demonstrated when Cal Portland Cement Company shutdown its cement production operations. The two major source kilns were shut down, but small ancillary equipment remained in operation as the facility underwent a facility shutdown. Since the emissions from the kilns comprised the vast majority of its total annual emissions, the facility had become essentially non-operational.

As a result of discussions with RECLAIM facility operators throughout the rule development, staff has made revisions in the proposed rule to reflect specific situations where a facility would not be deemed a shutdown. The Executive Officer would not deem a facility as shutdown if it meets any of the following criteria listed in proposed subparagraphs (i)(7)(A) through (D):

“(A) Cyclical operations in conjunction with facility equipment;

(B) Delay in the availability of parts used to repair the shutdown equipment;
(C) Equipment that must be placed in a reserve status until remaining operations at the facility are recommissioned requiring the reinstatement of this equipment; or

(D) Emission reductions due to implementation of add-on NOx emission controls.”

PAR 2002 acknowledges there are certain situations where there is a substantial reduction in operational emissions, but the facility is not shutting down. Some facilities have cyclical operations that can take place over the course of several years. Another scenario as allowed under proposed subparagraph (B) is for a situation where operational emissions temporarily stop because there has been a delay in obtaining parts for equipment or pollution controls. Another scenario as allowed under proposed subparagraph (C) is where a facility is modifying existing or installing new equipment or pollution controls and operations must be put on a reserve status until the equipment and/or pollution controls are recommissioned and reinstated. Under proposed subparagraph (D), the proposed amended rule would not penalize a facility that has installed pollution controls that results in substantial emission reductions. Staff will also solicit comments from stakeholders for other criteria to not deem a facility as shutdown.

If the Executive Officer determines that a facility has shutdown, the Facility Permit Holder will be notified by way of a preliminary determination [PAR 2002 (i)(8)]. Within 30 days of the preliminary determination, the facility must submit a plan application, along with the corresponding plan fees listed in Rule 306, and provide information that demonstrates that the preliminary determination did not adequately consider the factors listed in proposed subparagraphs (i)(7)(A) through (D). This would pertain to facilities in which any of the criteria listed in proposed subparagraphs (i)(7)(A) through (D) do apply. Upon submittal of the plan, the Executive Officer will evaluate it and provide a final determination within 60 days of the plan submittal. If the Executive Officer fails to notify the Facility Permit Holder of changes to the preliminary determination within 60 days of the preliminary determination or within 60 days of the plan submittal date, whichever is later, the facility will be deemed as shutdown. If the Facility Permit Holder disagrees with the determination, the Facility Permit Holder may file an appeal to the Hearing Board [PAR 2002(i)(9)].

If a facility meets the criteria listed in proposed subparagraphs (i)(7)(A) through (D), the facility may submit a plan application per the requirements in PAR 2002(i)(10), along with the associated Rule 306 plan fees, to request for planned non-operation status (PNO). The PNO status shall be no longer than 5 years for equipment at the facility from the date that the equipment ceased operation. The Executive Officer will consider the criteria in proposed subparagraphs (i)(7)(A) through (D) for approving the plan and the facility would be required to provide company records to support the claim that a PNO status of no longer than 5 years is necessary and meets the criteria of proposed paragraph (i)(10). Executive Officer approval for PNO status must be obtained within 6 months of receiving the plan application. Otherwise, the facility will be deemed as shutdown and subject to the RTC reduction adjustment in proposed paragraphs (i)(1) through (i)(5). If the facility is granted PNO status, its NOx RTC holdings would become non-tradable for
the entire duration of the PNO status. If the Executive Officer denies the PNO plan application, the facility may appeal to the Hearing Board.

Proposed paragraph (i)(11) states that if a facility is deemed as shutdown, whether by the Executive Officer failing to notify the Facility Permit Holder of changes to the preliminary determination in proposed paragraph (i)(9) or by the Executive Officer denying PNO status to a facility in proposed paragraph (i)(10), the adjusted initial allocation would be reduced pursuant to proposed paragraphs (i)(1) through (i)(5).

The requirements in this proposed subdivision shall not apply to facilities without an initial allocation [PAR 2002(i)(12)].
Chapter 3 – Impact Assessment

Emissions Impacts and Cost-Effectiveness

Staff does not anticipate any adverse impacts on the operation and performance of the RECLAIM program resulting from the implementation of the proposed rule amendments. This is predicated on the following: The shutdown of NOx RECLAIM facilities will simultaneously reduce NOx emissions (and thus, demand for RTCs) and remove RTCs from the program. However, RTCs above the reduction of NOx emissions from facility equipment adjusted to BARCT will be available for use in the RECLAIM program. Thus, even with the handling of facility shutdowns as proposed, NOx RECLAIM should continue to programmatically operate as anticipated and continue its progress in meeting the emission reduction goals set forth in the recent December 4, 2015 amendments or any other reductions that would be the result of future amendments.

California Environmental Quality Act

The currently proposed amendments to Regulation XX are considered to be modifications to the previously approved project (the December 2015 amendments to Regulation XX) and are a "project" as defined by the California Environmental Quality Act (CEQA). For the previously approved project, the SCAQMD, as the CEQA Lead Agency, prepared a Final Program Environmental Assessment (PEA) for Proposed Amended Regulation XX - Regional Clean Air Incentives Market (RECLAIM) that was certified by the SCAQMD Governing Board on December 4, 2015 (State Clearinghouse No. 2014121018 / SCAQMD No. 12052014BAR).

The December 2015 Final PEA analyzed the impacts that would occur with the installation of BARCT at the affected NOx RECLAIM facilities. The Final PEA identified and described those environmental topics where the proposed project could cause significant adverse environmental impacts (e.g., aesthetics; air quality and greenhouse gas emissions; energy; hazards and hazardous materials; hydrology and water quality; solid and hazardous waste; and, transportation and traffic). Subsequent to the release of the Draft PEA, key revisions to the proposed project were the addition of opt-out provisions for electricity generating facilities (EGFs) and the surrendering of RTCs for complete facility closures and equipment shutdowns. The Final PEA determined that the shutdown provisions would not constitute: 1) significant new information; 2) a substantial increase in the severity of an environmental impact; 3) provide new information of substantial importance relative to the draft document; or, 4) create new, avoidable significant effects. The December 2015 Final PEA analyzed the surrendering of RTCs for facility closures and equipment shutdowns, which is broader than this proposed amendment.

CEQA Guidelines §15164 (a) allows a lead agency to prepare an Addendum to a previously certified CEQA document if some changes or additions are necessary but none of the conditions described in CEQA Guidelines §15162 have occurred. The currently
proposed amendments to Regulation XX would not be expected to trigger any conditions identified in CEQA Guidelines §15162 because the proposed project would not:

- result in new or more severe significant effects requiring substantial revisions in the previous CEQA document (e.g., the Final PEA);
- create new significant project-specific or cumulative impacts in any environmental topic areas; or,
- make any project-specific or cumulative impacts in any environmental areas substantially worse as a result of implementing the proposed project.

Thus, SCAQMD will prepare an Addendum to the December 2015 Final PEA for the currently proposed project. While an Addendum need not be circulated for public review [CEQA Guidelines §15164 (c)], the Addendum, as well as the currently proposed amendments to Regulation XX, will be made available to the public 30 days prior to Public Hearing to be held on October 7, 2016 (subject to change). The previously certified Final PEA, supporting documentation, and record of approval of the December 2015 amendments to Regulation XX are available upon request by calling the SCAQMD Public Information Center at (909) 396-2039 or by visiting SCAQMD’s website at www.aqmd.gov. The direct link to the December 2015 Final PEA can be found at http://www.aqmd.gov/home/library/documents-support-material/lead-agency-scaqmd-projects/scaqmd-projects---year-2015.

**Socioeconomic Analysis**

The proposed amendments would not be expected to create new socioeconomic impacts resulting in new or more severe significant effects not covered by the previous Final Socioeconomic Report for the December 4, 2015 amendments to Regulation XX.

**References**

1. Staff Report to Proposed Amendments to Regulation XX. Agenda Item 30 of the SCAQMD Governing Board Meeting, December 4, 2015.

2. Final Program Environmental Assessment to Proposed Amendments to Regulation XX. Agenda Item 30 of the SCAQMD Governing Board Meeting, December 4, 2015.