

BOARD MEETING DATE: June 5, 2026

AGENDA NO. 31

**PROPOSAL:** Determine That Proposed Amended Rule 2011 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SOx) Emissions, Proposed Amended Rule 2012 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NOx) Emissions, and Proposed Amended Rule 2015 – Backstop Provisions, Are Exempt from CEQA; and Amend Rules 2011, 2012, and 2015

**SYNOPSIS:** Proposed Amended Rules 2011 and 2012 will allow an additional pathway for reporting emissions data for SOx and NOx RECLAIM sources, respectively. Proposed Amended Rule 2015 will revise the publication date and streamline the RECLAIM annual audit report. The proposed amendments also include minor editorial corrections and revisions for clarity.

**COMMITTEE:** Stationary Source, April 17, 2026, Reviewed

**RECOMMENDED ACTIONS:**

Adopt the attached Resolution:

1. Determining that Proposed Amended Rule 2011 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SOx) Emissions, Proposed Amended Rule 2012 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NOx) Emissions, and Proposed Amended Rule 2015 – Backstop Provisions, are exempt from the requirements of the California Environmental Quality Act; and
2. Amending Rules 2011, 2012, and 2015.

Wayne Natri  
Executive Officer

SR:MK:MM:IS

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This Board letter serves as the Staff Report for the proposed amendments to Rule 2011 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SOx) Emissions (Rule 2011), Rule 2012 – Requirements for Monitoring, Reporting,

and Recordkeeping for Oxides of Nitrogen (NO<sub>x</sub>) Emissions (Rule 2012), and Rule 2015 – Backstop Provisions (Rule 2015).

### **Background**

Rule 2011 and Rule 2012 were adopted in 1993 to establish monitoring, reporting, and recordkeeping requirements for NO<sub>x</sub> and SO<sub>x</sub> facilities in the RECLAIM program. These rules contain provisions for electronic data submittal via modem for major source devices in Appendix A Chapter 5 of Rule 2011 and Appendix A Chapter 7 of Rule 2012. Use of modems to submit electronic data is challenging for operators as modems are difficult to maintain or replace as many models of modems are obsolete. In addition, RECLAIM facilities have reported an increasing number of copper wire theft incidents, which have disrupted telephone line infrastructure used for modem data transmission and further reduced the reliability of the existing modem-based reporting system.

Rule 2015 was also adopted in 1993 and was last amended more than 20 years ago. Rule 2015 specifies backstop provisions and RECLAIM program auditing requirements, including a requirement to present the annual audit to the Governing Board in a public hearing by March of each year. However, approximately half of the RECLAIM facilities (Cycle 2 RECLAIM facilities)<sup>1</sup>, are not required to submit their annual emissions and supporting documents until the end of August. In addition, recently adopted landing rules for NO<sub>x</sub> RECLAIM have increased compliance verification requirements for command-and-control rules. As a result, it has become increasingly challenging to complete the RECLAIM annual audit report within the current timeframe.

### **Public Process**

Staff held a Public Workshop for PAR 2011, PAR 2012, and PAR 2015 on March 24, 2026.

### **Proposal**

PARs 2011 and 2012 establish an alternative emissions reporting pathway for major source devices in lieu of submitting emission data via modem. The proposed amendments incorporate an alternative electronic reporting system approved by the Executive Officer as a compliance option where appropriate in Appendix A Chapter 5 of PAR 2011 and Appendix A Chapter 7 of PAR 2012. The use of the general term “alternative electronic reporting system” is intended to encompass any future reporting systems approved by the Executive Officer for RECLAIM emission reporting. PARs 2011 and 2012 also include minor editorial corrections and clarifications. The following sections will be updated accordingly in both Appendix A Chapter 5 of Rule 2011 and Appendix A Chapter 7 of Rule 2012: preface and Section A.1.

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<sup>1</sup> The RECLAIM program divides facilities into two groups with distinct reporting schedules. For Cycle 1 facilities, the compliance year runs from January 1 to December 31, while for Cycle 2 facilities, the compliance year runs from July 1 to June 30 of the following year.

PAR 2015 streamlines the annual audit report and establishes a more reasonable annual auditing schedule. PAR 2015 paragraph (b)(1) removes the annual assessment of per capita exposure to air pollution and toxic risk reductions as those items are covered comprehensively in other reports<sup>2</sup> published by South Coast AQMD, clarifies that the compliance assessment is focused on the facilities' emission reconciliation for that compliance year, and removes the requirement to include seasonal fluctuations in the annual audit report. Emission trends will continue to be evaluated annually, as historical data has not shown significant seasonal fluctuations. PAR 2015 also revises the month the RECLAIM annual audit is published in connection with a Governing Board meeting from March to June. Additionally, the annual audit report will no longer be presented in a public hearing but will be a receive and file item for the Board's consideration and approval.

### **Key Issues**

Staff is not aware of any key remaining issues.

### **California Environmental Quality Act (CEQA)**

Pursuant to CEQA Guidelines Sections 15002(k) and 15061, the proposed project (PAR 2011, PAR 2012, and PAR 2015) is exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3). A Notice of Exemption has been prepared pursuant to CEQA Guidelines Section 15062 and is included as Attachment I to this Board Letter. If the proposed project is approved, the Notice of Exemption will be filed with the county clerks of Los Angeles, Orange, Riverside, and San Bernardino counties, and with the State Clearinghouse of the Governor's Office of Land Use and Climate Innovation.

### **Socioeconomic Impact Assessment**

A socioeconomic impact assessment is not required by Health and Safety Code Sections 40440.8 and 40728.5 and has not been prepared because PAR 2011, PAR 2012, and PAR 2015 contain administrative changes that will not significantly affect air quality or emission limitations, and thus, will not result in significant socioeconomic impacts.

### **Comparative Analysis**

PAR 2011, PAR 2012, and PAR 2015 do not impose a new or more stringent emissions limit or standard, or a new or more stringent monitoring, reporting, or recordkeeping requirement. Therefore, consistent with Health and Safety Code Section 40727.2 (g), no comparative analysis is required.

### **AQMP and Legal Mandates**

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<sup>2</sup> Examples of such reports are the Multiple Air Toxics Exposure Study (MATES) and the annual Air Quality Data Tables. MATES VI is currently in the planning stage and will be conducted over the next several years. Until results are available, the MATES V study published in the summer of 2021 provides the most up to date assessment of air toxics risk throughout the region.

The Health and Safety Code requires the South Coast AQMD to adopt an Air Quality Management Plan (AQMP) to meet state and federal ambient air quality standards in the South Coast Air Basin. In addition, the Health and Safety Code requires the South Coast AQMD to adopt rules and regulations that carry out the objectives of the AQMP. PAR 2011, PAR 2012, and PAR 2015 are not part of any control measure in the 2022 AQMP.

**Resource Impacts**

Existing staff resources are adequate to implement the recommended actions.

**Attachments**

- A. Summary of Proposal
- B. Key Issues and Responses
- C. Rule Development Process
- D. Key Contacts List
- E. Resolution
- F. Proposed Amended Rule 2011
- G. Proposed Amended Rule 2012
- H. Proposed Amended Rule 2015
- I. Notice of Exemption from CEQA
- J. Board Presentation

**ATTACHMENT A**  
**SUMMARY OF PROPOSAL**

**Proposed Amended Rule 2011 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SO<sub>x</sub>) Emissions**

**Proposed Amended Rule 2012 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO<sub>x</sub>) Emissions**

**Proposed Amended Rule 2015 – Backstop Provisions**

Proposed Amended Rules 2011 and 2012

- Incorporate an alternative electronic reporting system approved by the Executive Officer as a compliance option to submit emission data for major source devices in lieu of using a modem

Proposed Amended Rule 2015

- Streamlines the annual audit report by:
  - Removing the annual assessment of per capita exposure to air pollution and toxic risk reductions
  - Clarifying that the compliance assessment is focused on the facilities' emission reconciliation for that compliance year
  - Removing the requirement to include seasonal fluctuations in the annual audit report
- Revises the month the annual audit is published from March to June
- Allows the annual audit report to be a receive and file item

**ATTACHMENT B**  
**KEY ISSUES AND RESPONSES**

**Proposed Amended Rule 2011 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SO<sub>x</sub>) Emissions**

**Proposed Amended Rule 2012 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO<sub>x</sub>) Emissions**

**Proposed Amended Rule 2015 – Backstop Provisions**

Throughout the rulemaking process, staff worked with stakeholders to resolve key issues. Stakeholders requested a reduced emission data reporting frequency, extension of the 96-hour grace period to submit emission reports, and the ability to manually enter emission data during events of modem failure as an interim solution while the alternative electronic reporting system is being built. These requests would decrease the stringency and/or reliability of RECLAIM emission reporting and therefore were not included in the proposed amendments. In the event of a power, computer, or other system failure that precludes a facility of a major source device from submitting daily emission data, there is a 96-hour extension to submit the required report, after which emissions must be calculated pursuant to missing data procedures. If there are more than three non-consecutive occurrences per compliance year, there is a 24-hour extension to submit the required report, after which emissions must be calculated pursuant to missing data procedures.

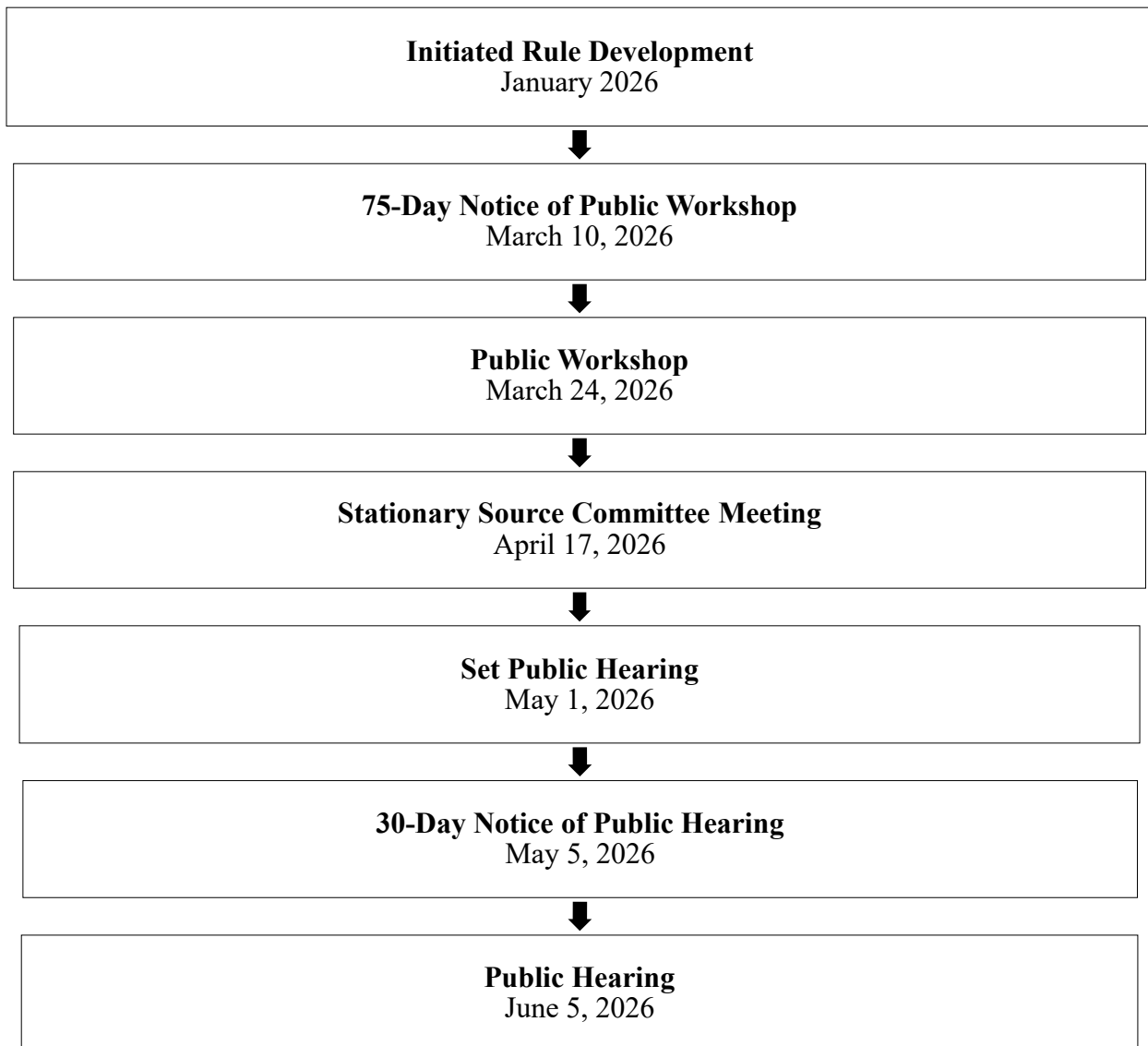
Staff is not aware of any key remaining issues.

**ATTACHMENT C**  
**RULE DEVELOPMENT PROCESS**

**Proposed Amended Rule 2011 – Requirements for Monitoring, Reporting, and  
Recordkeeping for Oxides of Sulfur (SOx) Emissions**

**Proposed Amended Rule 2012 – Requirements for Monitoring, Reporting, and  
Recordkeeping for Oxides of Nitrogen (NOx) Emissions**

**Proposed Amended Rule 2015 – Backstop Provisions**



Five (5) months spent in rule development  
One (1) Public Workshop  
One (1) Stationary Source Committee Meeting

**ATTACHMENT D**  
**KEY CONTACTS LIST**

**Proposed Amended Rule 2011 – Requirements for Monitoring, Reporting, and  
Recordkeeping for Oxides of Sulfur (SO<sub>x</sub>) Emissions**

**Proposed Amended Rule 2012 – Requirements for Monitoring, Reporting, and  
Recordkeeping for Oxides of Nitrogen (NO<sub>x</sub>) Emissions**

**Proposed Amended Rule 2015 – Backstop Provisions**

AES

California Council for Environmental and Economic Balance

California Steel Industries

City of Riverside

Exele Information Systems

Kinder Morgan

Los Angeles Department of Water and Power

Marathon Petroleum

Montrose Environmental Solutions

Northrop Grumman

NRG Energy

PBF Energy

Semtech

Southern California Edison

**ATTACHMENT E**

RESOLUTION NO. 26-\_\_\_\_\_

**A Resolution of the Governing Board of the South Coast Air Quality Management District (South Coast AQMD) determining that Proposed Amended Rule 2011 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SO<sub>x</sub>) Emissions, Proposed Amended Rule 2012 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO<sub>x</sub>) Emissions, and Proposed Amended Rule 2015 – Backstop Provisions, are exempt from the requirements of the California Environmental Quality Act (CEQA).**

**A Resolution of the South Coast AQMD Governing Board amending Rule 2011 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SO<sub>x</sub>) Emissions, Rule 2012 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO<sub>x</sub>) Emissions, and Rule 2015 – Backstop Provisions.**

**WHEREAS**, the South Coast AQMD Governing Board finds and determines that Proposed Amended Rule 2011, Proposed Amended Rule 2012, and Proposed Amended Rule 2015 are considered a “project” as defined by CEQA; and

**WHEREAS**, the South Coast AQMD has had its regulatory program certified pursuant to Public Resources Code Section 21080.5 and CEQA Guidelines Section 15251(l) and has conducted a CEQA review and analysis of the proposed project pursuant to such program (South Coast AQMD Rule 110); and

**WHEREAS**, the South Coast AQMD Governing Board finds and determines that after conducting a review of the proposed project in accordance with CEQA Guidelines Section 15002(k) – General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA, and CEQA Guidelines Section 15061 – Review for Exemption, procedures for determining if a project is exempt from CEQA, that Proposed Amended Rule 2011, Proposed Amended Rule 2012, and Proposed Amended Rule 2015 are exempt from CEQA; and

**WHEREAS**, the South Coast AQMD Governing Board finds and determines that it can be seen with certainty that there is no possibility that Proposed Amended Rule 2011, Proposed Amended Rule 2012, and Proposed Amended Rule 2015 will cause a significant adverse effect on the environment because the proposed changes are administrative in nature and will not require physical modifications. Therefore, the proposed project is exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption; and

**WHEREAS**, the South Coast AQMD staff has prepared a Notice of Exemption for the proposed project that is completed in compliance with CEQA Guidelines Section 15062 – Notice of Exemption; and

**WHEREAS**, Proposed Amended Rule 2011, Proposed Amended Rule 2012, and Proposed Amended Rule 2015, and supporting documentation, including but not limited to, the Notice of Exemption and the Board Letter, were presented to the South Coast AQMD Governing Board and the South Coast AQMD Governing Board has reviewed and considered this information, as well as has taken and considered staff testimony and public comment prior to approving the proposed project; and

**WHEREAS**, the South Coast AQMD Governing Board finds and determines, taking into consideration the factors in Section (d)(4)(D) of the Governing Board Procedures (Section 30.5(4)(D)(i) of the Administrative Code), that the modifications to Proposed Amended Rule 2011, Proposed Amended Rule 2012, and Proposed Amended Rule 2015 since the Notice of Public Hearing was published are not so substantial as to significantly affect the meaning of Proposed Amended Rule 2015 within the meaning of Health and Safety Code Section 40726 because deleting “and by March of each subsequent year” in paragraph (b)(1) clarifies when the annual report will be available and: (a) the changes do not impact emission reductions, (b) the changes do not affect the number or type of sources regulated by the rule, (c) the changes are consistent with the information contained in the Notice of Public Hearing, and (d) the consideration of the range of CEQA alternatives is not applicable because the proposed project is exempt from CEQA; and

**WHEREAS**, Proposed Amended Rule 2011, Proposed Amended Rule 2012, and Proposed Amended Rule 2015 will not be submitted for inclusion into the State Implementation Plan; and

**WHEREAS**, Health and Safety Code Section 40727 requires that prior to adopting, amending or repealing a rule or regulation, the South Coast AQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference based on relevant information presented at the public hearing and in the Board Letter (that serves as the Staff Report); and

**WHEREAS**, the South Coast AQMD Governing Board has determined that a need exists to adopt Proposed Amended Rule 2011, Proposed Amended Rule 2012, and Proposed Amended Rule 2015 to provide an additional emission reporting pathway, streamline the RECLAIM annual audit report, establish a more sustainable annual audit schedule, and provide rule clarifications; and

**WHEREAS**, the South Coast AQMD Governing Board obtains its authority to adopt, amend, or repeal rules and regulations from Health and Safety Code Sections

39002, 40000, 40001, 40440, 40440.1, 40441, 40702, 40725 through 40728, 41508, and 41511; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that Proposed Amended Rule 2011, Proposed Amended Rule 2012, and Proposed Amended Rule 2015 are written and displayed so that their meaning can be easily understood by persons directly affected by them; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that Proposed Amended Rule 2011, Proposed Amended Rule 2012, and Proposed Amended Rule 2015 are in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that Proposed Amended Rule 2011, Proposed Amended Rule 2012, and Proposed Amended Rule 2015 do not impose the same requirements as any existing state or federal regulations, and the proposed amended rules are necessary and proper to execute the powers and duties granted to, and imposed upon, the South Coast AQMD; and

**WHEREAS**, the South Coast AQMD Governing Board, in adopting Proposed Amended Rule 2011, Proposed Amended Rule 2012, and Proposed Amended Rule 2015, references the following statute which the South Coast AQMD hereby implements, interprets or makes specific: Health and Safety Code Sections 39002, 39616, 40001, 40440(a), 40440(b), 40702, 40725 through 40728.5; and

**WHEREAS**, the South Coast AQMD Governing Board finds that no comparative analysis pursuant to Health and Safety Code Section 40727.2 is required because Proposed Amended Rule 2011, Proposed Amended Rule 2012, and Proposed Amended Rule 2015 do not impose a new emission limit or standard, make an existing emission limit or standard more stringent, or impose new or more stringent monitoring, reporting, or recordkeeping requirements; and

**WHEREAS**, the South Coast AQMD Governing Board finds that no socioeconomic impact assessment for Proposed Amended Rule 2011, Proposed Amended Rule 2012, and Proposed Amended Rule 2015 is required per Health and Safety Code Sections 40440.8 and 40728.5 because the proposed amendments are administrative in nature and will not significantly affect air quality or emissions limitations and thus, would not result in significant socioeconomic impacts; and

**WHEREAS**, the South Coast AQMD Governing Board finds that analyses for cost-effectiveness and incremental cost-effectiveness consistent with the Health and Safety Code Section 40920.6 are not required because Proposed Amended Rule 2011, Proposed Amended Rule 2012, and Proposed Amended Rule 2015 do not include new Best

Available Retrofit Control Technology requirements nor a feasible measure pursuant to Health and Safety Code Section 40914; and

**WHEREAS**, the South Coast AQMD staff conducted a public workshop on March 24, 2026, regarding Proposed Amended Rule 2011, Proposed Amended Rule 2012, and Proposed Amended Rule 2015; and

**WHEREAS**, the public hearing has been properly noticed in accordance with all provisions of Health and Safety Code Sections 40725 and 40440.5; and

**WHEREAS**, the South Coast AQMD Governing Board has held a public hearing in accordance with all provisions of law; and

**WHEREAS**, the South Coast AQMD specifies the Planning and Rules Manager of Proposed Amended Rule 2011, Proposed Amended Rule 2012, and Proposed Amended Rule 2015 as the custodian of the documents or other materials which constitute the record of proceedings upon which the adoption of the proposed amended rules are based, which are located at the South Coast Air Quality Management District, 21865 Copley Drive, Diamond Bar, California; and

**NOW, THEREFORE BE IT RESOLVED**, that the South Coast AQMD Governing Board does hereby determine, pursuant to the authority granted by law, that Proposed Amended Rule 2011, Proposed Amended Rule 2012, and Proposed Amended Rule 2015 are exempt from CEQA pursuant to CEQA Guidelines Sections 15061(b)(3) – Common Sense Exemption. This information was presented to the South Coast AQMD Governing Board, whose members exercised their independent judgment and reviewed, considered, and approved the information therein prior to acting on Proposed Amended Rule 2011, Proposed Amended Rule 2012, and Proposed Amended Rule 2015; and

**BE IT FURTHER RESOLVED**, that the South Coast AQMD Governing Board does hereby adopt, pursuant to the authority granted by law, Proposed Amended Rule 2011, Proposed Amended Rule 2012, and Proposed Amended Rule 2015 as set forth in the attached, and incorporated herein by reference.

\_\_\_\_\_  
Date:

\_\_\_\_\_  
Faye Thomas, Clerk of the Board

**ATTACHMENT F**

**RULE 2011 PROTOCOL -  
CHAPTER 5**

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**REMOTE TERMINAL UNIT (RTU)  
- ELECTRONIC REPORTING**



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CHAPTER 5 - REMOTE TERMINAL UNIT (RTU)

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This chapter defines the tasks and characteristics for electronic reporting of emissions from all sources. The Facility Permit holder of a major source shall use an RTU to telecommunicate rule compliance data to the District Central Station Emissions Monitoring Computer. The RTU shall collect data, perform calculations, generate the appropriate data files, and transmit the data to the Central Station. The Facility Permit holder of a large source or process unit may elect to use an RTU. Alternatively, the Facility Permit holder of a large source or process unit shall compile the required rule compliance data manually, and transmit that data ~~via modem~~ in accordance with the data requirements of Section D in this chapter. The Facility Permit holder shall use, when required, the appropriate record type specified in this chapter to report to the District Central Station emissions from all RECLAIM ~~NO<sub>x</sub>~~ SO<sub>x</sub> sources. Alternative to transmitting data to the District Central Station, the Facility Permit holder may use the District Internet Web Site to report emissions electronically from RECLAIM ~~NO<sub>x</sub>~~ SO<sub>x</sub> sources except for major sources.

## A. GENERAL

### 1. General

The Facility Permit holder of a major source shall telecommunicate rule compliance data to the District via Remote Terminal Units (RTU). This form of reporting may also be used for large sources or process units. The RTU shall collect data from a CEMS, a CPMS, or other equipment specified in the Facility Permit and send data periodically to the Central Station Emissions Monitoring Computer (Central Station-).

This chapter specifies the tasks and characteristics required of the RTU and shall be used as a guide for providing the required software/hardware for the RTU. Emissions Data Collection System conformity as well as establishing and maintaining communications with the emission monitoring system and the Central Station shall be the responsibility of the Facility Permit holder. This chapter also serves as a functional guideline for operating requirements of the RTU, and provides information concerning RTU hardware/software procurement, configuration, installation, maintenance, and compatibility with the emission monitoring system and the Central Station.

In lieu of using a modem, the Facility Permit holder of a major source may elect to use an alternative electronic reporting system approved by the Executive Officer to telecommunicate rule compliance data to the South Coast AQMD Central Station Emissions Monitoring Computer. Any use of an approved alternative electronic reporting system shall be in accordance with specifications approved by the Executive Officer.

### 2. RTU and Supporting Equipment Description

#### a. Purpose:

The RTU shall interface to existing data acquisition systems or other field instrumentation, and shall gather and store data, and facilitate telecommunication with the Central Station Computer.

- b. Environment:
- i. Logical Environment:  
The signal chain includes the process equipment, sensing devices, data acquisition system, RTU, modem, communications link and District Central Station.
  - ii. Physical Environment:  
Typical environments shall include "friendly" and "Central Station" environments. Friendly environments include clean, air conditioned areas such as computer rooms and offices. Hostile environments may include exterior spaces or interior spaces without benefit of air conditioning, and areas where free floating air particulates may impede the normal operation of exposed electronics. Each RTU shall be mounted in such a manner as to be environmentally qualified.
  - iii. Electrical Environment:
    - 1) Connected Devices:  
Each RTU may receive information from a local computer (DAS) or various field sensing devices, calculate and/or store the specified parameters and shall make its data available to local and Central Stations.
    - 2) Sensor-based Data to be acquired:  
Where applicable, the RTU shall be able to directly monitor transducers which sense variables required for compliance determinations. At a minimum, input analog conversion hardware should operate with a medium level of resolution (i.e. 12 bit resolution) and a sampling rate sufficient to accurately characterize the sensor based data.
  - iv. Description of Data to be transmitted:  
All data shall be made available at data output ports in ASCII format as described below:
    - 1) Data Sampling:  
Shall retain selectable status levels about its sensors.
    - 2) Rule-specific Data Sets:  
(as specified elsewhere)

c. Functions:

The RTU shall provide the following functions:

- i. Power-Up/Restart Mode:  
Upon resumption of power after a loss, the RTU shall automatically restart and reset itself to predetermined system settings.

- ii. **Non-Communicating Mode:**  
When in the non-communicating mode the RTU shall operate independently of the communications ports as well as store its transactions for later communications with the Central Station.
  
- iii. **Failure Mode:**  
In the event the RTU is unable to initiate communications with the Central Station, the RTU shall perform the following actions:
  - 1) The RTU shall first make four subsequent attempts to establish communications with the Central Station.
  
  - 2) Upon failure of the fourth attempt, the RTU shall:
    - a Revert to the non-communicating mode for a period of fifteen (15) minutes and then again attempt to establish communications with the Central Station.
    - b Each failure shall result in the execution of the failure mode sequence.
  
  - 3) **Error Tolerance:**  
The RTU shall perform its specified functions without misinterpretation of input information, errors in output signals, damage to internal components, and loss or change of stored information with either common mode to ground or differential mode transients present on the communication ports, circuits or power sources which shall be connected to the inputs and power supply terminals to the equipment.

**B. PRODUCTS**

**1. RTU Attributes**

- a. **Environmental Tolerances:** Each RTU shall be installed in such a manner as to be environmentally qualified for the particular physical environment.
  
- b. **Communications Provisions:** The RTU shall provide a minimum of one (1) communications connection. The connection shall be labeled "Remote".
  
- c. **Real Time Clock:** The RTU shall be equipped with a battery-backed Real Time Calendar/Clock (RTC) to provide time signals for implementing time dependent programs. The battery back-up shall be field replaceable and shall not require replacement more often than once every two (2) years. An alarm message shall be generated when the battery reaches a low voltage point with at

least one (1) month life under load left prior to the necessity for battery replacement.

- d. Internal Software:
  - i. Data Collection and Storage: The RTU shall collect data from sensors, generate and store values, and perform calculations upon those values. Data shall be collected and stored in the Data Sampling memory.
  - ii. Calculations and Message Storage: Calculated values and messages resulting from calculations performed upon sampled data shall be stored as ASCII data strings in memory.
- e. Security Provisions:
  - i. Message Security: The RTU shall utilize a standard protocol encryption method for communications with the remote Central Station incorporating error detection. The system shall not incorporate error correction. The code shall detect one hundred (100) percent of single, double and triple errors; one hundred (100) percent of burst errors of six bits or fewer; ninety- seven (97) percent of all seven-bit bursts; and ninety-eight point four (98.4) percent of all other burst as well as a substantial fraction of all random error patterns involving more than three (3) bits.
  - ii. Message Checking: The RTU shall utilize bitsum checking for all messages.
- f. Modem: Provide a modem connected to the Remote Central Station communication port.i.Modem Self-Test: The modem shall be capable of being operated in self testing mode automatically on a periodic basis.
- g. Transient Suppression: Provide hardware, circuitry, components or extended component ratings or characteristics necessary to prevent interference to correct operation or equipment damage from induced transients which may be presented on communication circuits and power sources. Transient suppression shall utilize the latest revision of the ANSI C37.90a standard.

## **C. EXECUTION**

### **1. General**

- a. Section (C) describes acceptable methods and practices for use in completion of this work.
- b. Standards: Perform the work in accordance with the latest revisions of the following standards:
  - i. ANSI American National Standards Institute.

- ii. UL Underwriters Laboratories.
- iii. EIA Electrical Industries Association.
- iv. NEMA National Electrical Manufacturers Association.

**2. Project Plan**

Develop a project plan for accomplishing the requirements of this installation . The plan shall include a checklist for the Submittal date .

**3. Software Requirements Guideline**

The Software Requirement Guideline (SRG) shall specify tasks and characteristics required of the RTU and is to be used as a guide for providing the required software for the RTU. Emissions Data Collection System conformity as well as establishing and maintaining communications with the emission monitoring system and the Central Station shall be the responsibility of the Facility Permit holder.

a. References

This guideline shall be used in conjunction with the following Rules:

**RULE 2011** - Requirements for Monitoring, Reporting and Recordkeeping for Oxides of Sulfur (SO<sub>x</sub>) Emissions

**RULE 2012** - Requirements for Monitoring, Reporting and Recordkeeping for Oxides of Nitrogen (NO<sub>x</sub>) Emissions

b. System Relation

The RTU shall be the local plant data storage and processing point in a system which is reporting data to a Central Station for evaluation to determine regulatory compliance. Data formats shall be standardized between the Central Station and all monitored emissions sources. It is the function of the RTU to convert as necessary the data stream from the local monitoring system. The fundamental operation of the RTU is to:

- i. compile information from the emission monitoring system as specified in this guideline.
- ii. transmit the compiled data to the Central Station on a scheduled basis.

c. Central Station Interface

On scheduled updates the RTU shall download current data to the Central Station. The RTU data buffer shall be reset after each successful download to the Central Station.

d. Software Responsibility

The Facility Permit holder shall be responsible for providing all RTU software required to perform all specified tasks. This may include purchased commercial software packages or custom written programs.

e. Product Function

i. Software Context and Data Flow Diagrams

The flow diagram at the end of this Chapter is a Context Diagram description and Data Flow Diagram which show how the different external functions tie to the RTU package. Plant data or operating information is collected by the emission monitoring system for evaluation of emissions. The RTU Unit is the process shown on this diagram and is the focus of this guideline.

Data Values relating to emissions received from the emission monitoring system are processed by the RTU into data files for transmission to the SCAQMD Central Station. The type of message is shown on the RTU Context Diagram between the RTU and the Central Station. The message is data sets which are sent periodically.

The RTU Data Flow Diagram is a graphical expansion of the RTU Unit process block. Emission monitoring system data is shown coming into the Network Driver and splitting to the other process blocks which represent RTU functions.

ii. Communication End Points

The RTU will communicate with both the emission monitoring system and the Central Station. Each end point has a different protocol and purpose. Data sent from the RTU to the Central Station shall be converted from floating point numbers used to perform calculations into ASCII standard to allow for different internal formats.

f. Specific Requirements

i. RTU Software

The main RTU program shall receive input data, do calculations (if necessary) and store all data in non-volatile memory, as it is received.

ii. Direct Field Input Data

Many RTUs may be capable of reading direct field inputs which shall consist of analog and/or digital real values. Direct field input requirements shall be specified as required for each RTU. Communications software shall be capable of supporting the hardware required to receive these inputs. If analog data cards must be installed in the RTU any resulting values provided to the RTU data bus shall range from -32768 to +32767 for unscaled values. The same accuracy as emission monitoring system network data shall be provided for analog data values scaled on the I/O device before going onto the RTU data bus.

iii. Input Data Conversion/Storage

All input values shall be stored in as received ASCII format. These values shall then be parsed and converted to real numbers for calculations and averaging.iv. Output Data To Central Station

The context diagram displays how the RTU software shall be configured to allow messages to be sent to the Central Station. File transfer for all messages shall be in ASCII format including a bitsum check value with a return acknowledgment expected by the RTU when the Central Station has verified the bitsum check.

v. RTU To Central Station Communications Failure

If the RTU cannot communicate with the Central Station the main program shall store all calculated values and reports in a special file in non-volatile memory. These special files shall be labeled to show that they have not been acknowledged as received by the Central Station.

g. Performance Requirements

i. Speed of Receiving DATA

Incoming data from the plant or emission monitoring system shall be received at intervals specified in the appropriate emission monitoring guideline. Communication

with the Central Station, Parsing, verification, storage and checking shall not block the receipt of new data.

ii. RTU Non-Volatile Memory

The RTU non-volatile memory shall have enough capacity to store all programs, data parameters, emission monitoring system input data and calculated data averages. Input data and calculated averages shall be allocated space using the first in first out (FIFO) method to store the quantity of data as required.

h. Design Restraints

i. Data Set Formats

Section (D) indicates the data format that is to be sent to the Central Station at scheduled intervals. The Central Station will send a confirmation message back for each transmission received which will consist of an identification number unique to the Central Station and a transaction number which is sequentially issued.

i. RTU External Interface Requirements

i. Central Station Interface

External interface to the RTU is shown on the Context Diagram at the end of this chapter. Central Station interface is described above as fixed format ASCII messages using a commercially available communication software package. In return the Central Station will send confirmation messages in ASCII form when a satisfactory message transfer has been completed.

**4. Required Installation Practices**

a. Standards: Install all devices in accordance with the standards set forth herein and in accordance with manufacturers recommendations and first class standard industry practice.

b. Telephone Interface:

RTU shall operate on a standard analog telephone line. Label the remote Central Station communications connector with the telephone number to which it is connected.

**5. Submittals**

a. Shop Drawing:

- i. Submit two (2) copies of the following in accordance with the applicable rule compliance dates.
  - A Title Sheet
  - Single Line Diagrams
  - Wiring Diagrams or Run Sheets
  - Physical Details of Custom Assemblies
- ii. Descriptions of the above shop drawings are as follows:
  - a) Title Sheet containing a drawing list, abbreviations list, symbols list and schedules.
  - b) Single-Line Diagram for each system showing signal relationships of devices within the system and device nomenclatures.
  - c) Wiring Diagram for each assembly or enclosure or free standing device, showing the following:
    - 1) the layout of the devices within;
    - 2) wiring connections;
    - 3) wire numbers;
    - 4) voltage levels, and
    - 5) fuse values and types.
  - d) Physical Details of contractor fabricated assemblies:
    - 1) Provide an assembly drawing showing the finished product. Show components comprising the assembly by manufacturer and model number.
    - 2) Provide a schematic diagram of the assembly, as described above.
- b. RTU Components List:
  - i. The RTU Component List shall contain the following information for all materials, components, devices, wire and equipment used:
    - Quantity for that system.
    - Description (generic).

- Manufacturers Name and Model number.
- c. Software Design Description (SDD). Indicate how the developed software will meet the defined software requirements. The SDD shall be based on ANSI/IEEE standards, specifically 1016 (SDD) and 730 (Quality Assurance).
  - d. Software Listing. Provide a source code listing of all developed software required by the applicable emission monitoring requirements.

**D. DATA REQUIREMENTS**

**1. General Requirements**

The District will accept data in the American Standard Code for Information Interchange (ASCII) format.

The data file structure must be sequential. The record delimiter - a ~ (tilde) occurs only once following the end of each data record. There must be no delimiter before the first data record. The ASCII value for the delimiter is:

~ (decimal 126)

Blank data records must not be reported

In text fields, only upper case characters are to be used and must be left justified. Text fields that are not applicable must be filled with blanks. The ~ character (decimal 126) must never appear inside text fields.

Numeric fields must be right justified and zero filled. Where decimal places are to be reported, they are to be implied - do not include the decimal point character. Numeric fields that are zeros or not applicable, must be zero filled.

Date fields must be entered in the format "YYYYMMDD" and must always specify a valid date.

**2. Data File Description**

A properly composed data file is comprised of the following data records (shown indented to illustrate the logical grouping):

- Code 1A - Transmitter Record
- Code 1F - Facility Record
- Emission data record(s) from any of the following data records
- Code 1NP - NO<sub>x</sub> Process Unit and Large Source Record
- Code 1NM - NO<sub>x</sub> Major Source Record

- Code 1SP - SO<sub>x</sub> Process Unit Record
- Code 1SM - SO<sub>x</sub> Major Source Record
- Code 1FT - Facility Total Record
- Code 1F - Facility Record  
Emission data record(s)
- Code 1FT - Facility Total Record
- Code 1T - Final Total Record

The Code 1A data record identifies the facility submitting the data file and must be the first data record in the data file.

The Code 1T data record identifies the end of a data file and must be the last data record in the data file

The Code 1F data record identifies the facility whose emission data records are being reported.

The Code 1FT data record identifies the end of emission data records for a particular facility.

Code 1F/1FT data records must not be nested inside of another 1F/1FT group and are repeated for each facility to be reported.

Emission data records for a facility are reported following the Code 1F but before the 1FT data record for that facility and can comprise any of the following data record types:

- Code 1NP - NO<sub>x</sub> Process Unit and Large Source Record
- Code 1NM - NO<sub>x</sub> Major Source Record
- Code 1SP - SO<sub>x</sub> Process Unit Record
- Code 1SM - SO<sub>x</sub> Major Source Record

The following table summarizes valid Record Identifiers to be used starting January 1, 1998 to perform electronic reporting via a RTU or modem. The 1A through 1T records are used for identification and grouping purposes. The 1NP through 1SM records are the pre-existing emissions reporting records. Starting January 1, 1998, these records may only be used for devices which do not use multiple fuels and are not involved in multiple processes. Otherwise, sources shall report emissions by each fuel type or process conducted within the reporting period. If more than 50% of the emissions from a source is from the combustion of fuels, the emission report for such a source or process unit shall be reported based on the fuel combusted. Otherwise, emissions shall be reported based on the Source Classification Code (SCC) for the process conducted. The 1NPF through 1SUQ records are utilized for reporting emissions from devices with multiples fuels or processes. Record Identifiers starting with “2” are used to make corrections to submitted electronic emissions reports. Record Identifiers starting with “3” are used to delete previously submitted electronic emissions reports which were filed erroneously. Erroneous records to be corrected need not be deleted first.

**Record Identifiers Summary Table**

Record Identifier for			Description
Adding a record	Updating a record	Deleting a record	
1A*	--	--	Transmitter Record
1F*	--	--	Facility Record
1FT*	--	--	Facility Total Record
1T*	--	--	Final Total Record
1NP*	2NP	3NP	NOx Emissions Report for Process Units
1NL*	2NL	3NL	NOx Emissions Report for Large Sources
1NM*	2NM	3NM	NOx Emissions Report for Major Sources
1SP*	2SP	3SP	SOx Emissions Report for Process Units
1SM*	2SM	3SM	SOx Emissions Report for Major Sources
1NPF	2NPF	3NPF	NOx Emissions Report for Process Units by Fuel Type
1SPF	2SPF	3SPF	SOx Emissions Report for Process Units by Fuel Type
1NLF	2NLF	3NLF	NOx Emissions Report for Large Sources by Fuel Type
1NMF	2NMF	3NMF	NOx Emissions Report for Major Sources by Fuel Type
1SMF	2SMF	3SMF	SOx Emissions Report for Major Sources by Fuel Type
1NPS	2NPS	3NPS	NOx Emissions Report for Process Units by SCC
1SPS	2SPS	3SPS	SOx Emissions Report for Process Units by SCC
1NLS	2NLS	3NLS	NOx Emissions Report for Large Sources by SCC
1NMS	2NMS	3NMS	NOx Emissions Report for Major Sources by SCC
1SMS	2SMS	3SMS	SOx Emissions Report for Major Sources by SCC
1NMM	2NMM	3NMM	Monthly NOx Emissions Report for Major Sources
1SMM	2SMM	3SMM	Monthly SOx Emissions Report for Major Sources
1NMQ	2NMQ	3NMQ	Quarterly NOx Emissions Report for Major Sources
1SMQ	2SMQ	3SMQ	Quarterly SOx Emissions Report for Major Sources
1NLQ	2NLQ	3NLQ	Quarterly NOx Emissions Report for Large Sources
1NRF	2NRF	3NRF	Quarterly NOx Emissions Report by fuel type for Rule 219 Exempt Equipment
1SRF	2SRF	3SRF	Quarterly SOx Emissions Report by fuel type for Rule 219 Exempt Equipment
1NRS	2NRS	3NRS	Quarterly NOx Emissions Report by SCC for Rule 219 Exempt Equipment
1SRS	2SRS	3SRS	Quarterly SOx Emissions Report by SCC for Rule 219 Exempt Equipment
1NVF	2NVF	3NVF	Quarterly NOx Emissions Report by fuel type for Equipment Operating under a Various Locations Permit
1SVF	2SVF	3SVF	Quarterly SOx Emissions Report by fuel type for Equipment Operating under a Various Locations Permit
1NVS	2NVS	3NVS	Quarterly NOx Emissions Report by SCC for Equipment Operating under a Various Locations Permit
1SVS	2SVS	3SVS	Quarterly SOx Emissions Report by SCC for Equipment Operating under a Various Locations Permit
1NWF	2NWF	3NWF	Quarterly NOx Emissions Report by fuel type for Equipment Operating Without Permit or District assigned Device IDs
1SWF	2SWF	3SWF	Quarterly SOx Emissions Report by fuel type for Equipment Operating Without Permit or District assigned Device IDs
1NWS	2NWS	3NWS	Quarterly NOx Emissions Report by SCC for Equipment Operating Without Permit or District assigned Device IDs
1SWS	2SWS	3SWS	Quarterly SOx Emissions Report by SCC for Equipment Operating Without Permit or District assigned Device IDs
1NPQ	2NPQ	3NPQ	Quarterly NOx Aggregate Emissions Report for Process Units

**Record Identifiers Summary Table (cont.)**

Record Identifier for			Description
Adding a record	Updating a record	Deleting a record	
1SPQ	2SPQ	3SPQ	Quarterly SOx Aggregate Emissions Report for Process Units
1NXQ	2NXQ	3NXQ	Quarterly NOx Aggregate Emissions Report for Rule 219 Exempt Equipment
1SXQ	2SXQ	3SXQ	Quarterly SOx Aggregate Emissions Report for Rule 219 Exempt Equipment
1NTQ	2NTQ	3NTQ	Quarterly NOx Aggregate Emissions Report for Equipment Operating under a Various Locations Permit
1STQ	2STQ	3STQ	Quarterly SOx Aggregate Emissions Report for Equipment Operating under a Various Locations Permit
1NUQ	2NUQ	3NUQ	Quarterly NOx Aggregate Emissions Report for Equipment Operating without a Permit
1SUQ	2SUQ	3SUQ	Quarterly SOx Aggregate Emissions Report for Equipment Operating without a Permit

\* Previously defined codes

**Code 1A - Transmitter Record**

The Code 1A data record is used to identify the facility submitting the data file and must be the first data record reported.

Location	Field	Length	Description
1-4	Record Identifier	4	Constant "1A" followed by 2 blanks.
5-10	SCAQMD Facility ID	6	The 6-digit SCAQMD facility ID of the facility submitting the data file.
11-128	Filler	118	Blanks , used to fill unused remaining record positions.

**Code 1F - Facility Record**

The Code 1F data record is used to identify the facility whose emissions are being reported.

Location	Field	Length	Description
1-4	Record Identifier	4	Constant "1F" followed by 2 blanks.
5-10	SCAQMD Facility ID	6	The 6-digit SCAQMD facility ID for the facility whose emissions are being reported.
11-128	Filler	118	Blanks , used to fill unused remaining record positions.

**Code 1FT - Facility Total Record**

The Code 1FT data record is used to identify the end of data emission records for a facility.

Location	Field	Length	Description
1-4	Record Identifier	4	Constant "1FT" followed by 1 blank.
5-11	Number of Emission	7	The total number of emission data records reported for the facility Data Records (excluding the 1F and the 1FT data records). Right justify and zero fill.
12-128	Filler	117	Blanks , used to fill unused remaining record positions.

**Code 1T - Final Total Record**

The Code 1T data record is used to identify the end of the data file and must be the last data record reported.

Location	Field	Length	Description
1-4	Record Identifier	4	Constant "1T" followed by 2 blanks
5-11	Number of Data	7	The total number of data records reported (including the Code 1T) in the data file. Right justify and zero fill.
12-128	Filler	117	Blanks , used to fill unused remaining record positions.

**Code 1NP and 1NL- NO<sub>x</sub> Process Unit and Large Source Record**

The Code 1NP data record is used to report NO<sub>x</sub> emissions from NO<sub>x</sub> Process Units with SCAQMD assigned Device Ids. The Code 1NL data record is used to report NO<sub>x</sub> emissions from NO<sub>x</sub> Large Sources with SCAQMD assigned Device IDs. Starting January 1, 1998, these records shall only be used for devices which do not use multiple fuels and are not involved in multiple processes.

Location	Field	Length	Description
1-4	Record Identifier	4	"1NP" or "1NL" followed by 1 blank
5-10	SCAQMD Device ID	6	The SCAQMD assigned Device IDs for the equipment source. Left justify and fill with blanks
11-18	Date Emitted	8	The date emitted in the format "YYYYMMDD"
19-27	Total Emission	9(#####.##)	The total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
28 - 128	Filler	101	Blanks , used to fill unused remaining record positions

**Code 1NM - NO<sub>x</sub> Major Source Record**

The Code 1NM data record is used to report NO<sub>x</sub> emissions from Major NO<sub>x</sub> sources with SCAQMD assigned Device IDs. Starting January 1, 1998, this record shall only be used for devices which do not use multiple fuels and are not involved in multiple processes.

Location	Field	Length	Description
1-4	Record Identifier	4	Constant "1NM" followed by 1 blank
5-10	SCAQMD Device ID	6	The SCAQMD assigned Device IDs for the equipment source. Left justify and fill with blanks
11-18	Date Emitted	8	The date emitted in the format "YYYYMMDD"
19-27	Total Emission	9(#####.##)	The total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
28-36	Status Word	9	The nine character status word for the reporting day from the Status Word Table.
37 - 128	Filler	92	Blanks , used to fill unused remaining record positions

**Code 1SP - SO<sub>x</sub> Process Unit Record**

The Code 1SP data record is used to report SO<sub>x</sub> emissions from SO<sub>x</sub> Process Units with SCAQMD assigned Device IDs. Starting January 1, 1998, this record shall only be used for devices which do not use multiple fuels and are not involved in multiple processes.

Location	Field	Length	Description
1-4	Record Identifier	4	Constant "1SP" followed by 1 blank
5-10	SCAQMD Device ID	6	The SCAQMD assigned Device IDs for the equipment source. Left justify and fill with blanks
11-18	Date Emitted	8	The date emitted in the format "YYYYMMDD"
19-27	Total Emission	9(#####.##)	The total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
28 - 128	Filler	101	Blanks , used to fill unused remaining record positions

**Code 1SM - SO<sub>x</sub> Major Source Record**

The Code 1SM data record is used to report SO<sub>x</sub> emissions from Major SO<sub>x</sub> sources with SCAQMD assigned Device IDs. Starting January 1, 1998, this record shall only be used for devices which do not use multiple fuels and are not involved in multiple processes.

Location	Field	Length	Description
1-4	Record Identifier	4	Constant "1SM" followed by 1 blank
5-10	SCAQMD Device ID	6	The SCAQMD assigned Device IDs for the equipment source. Left justify and fill with blanks
11-18	Date Emitted	8	The date emitted in the format "YYYYMMDD"
19-27	Total Emission	9(#####.##)	The total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
28-36	Status Word	9	The nine character status word for the reporting day from the Status Word Table.
37 - 128	Filler	92	Blanks , used to fill unused remaining record positions

**Code 1NMF and 1SMF - NO<sub>x</sub> and SO<sub>x</sub> Major Source Emissions Report by Fuel Type**

The Codes 1NMF and 1SMF data records are used to report NO<sub>x</sub> and SO<sub>x</sub> emissions by fuel type from Major SO<sub>x</sub> sources with SCAQMD assigned Device IDs. Starting January 1, 1998, these records shall be used to report emissions from each Major SO<sub>x</sub> sources and each fuel used during a reporting day.

Location	Field	Length	Description
1-4	Record Identifier	4	1NMF or 1SMF
5-10	SCAQMD Device ID	6	The SCAQMD assigned Device IDs for the equipment source. Left justify and fill with blanks
11-18	Date Emitted	8	The date emitted in the format "YYYYMMDD"
19-38	Fuel Type	20	Code for Fuel Type utilized. Left justified, blank filled
39-47	Total Emission	9(#####.##)	The total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
48-56	Status Word	9	The nine character status word for the reporting day from the Status Word Table.
57 - 128	Filler	72	Blanks , used to fill unused remaining record positions

**Code 1NMS and 1SMS - NOx and SOx Major Source Emissions Report by SCC**

The Codes 1NMS and 1SMS data records are used to report NOx and SOx emissions by Source Classification Codes (SCC) from Major SOx sources with SCAQMD assigned Device IDs. Starting January 1, 1998, these records shall be used to report emissions from each Major SOx sources and each process conducted during a reporting day.

Location	Field	Length	Description
1-4	Record Identifier	4	1NMS or 1SMS
5-10	SCAQMD Device ID	6	The SCAQMD assigned Device IDs for the equipment source. Left justify and fill with blanks
11-18	Date Emitted	8	The date emitted in the format "YYYYMMDD"
19-26	SCC	8	Source Classification Code
27-35	Total Emission	9(#####.##)	The total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
36-44	Status Word	9	The nine character status word for the reporting day from the Status Word Table.
45 - 128	Filler	84	Blanks , used to fill unused remaining record positions

**Code 1NLF, 1NPF and 1SPF - NOx Large Source and NOx and SOx Process Unit Emissions Report by Fuel Type**

The Codes 1NLF, 1NPF and 1SPF data records are used to report NOx and SOx emissions by fuel type from NOx Large source, NOx and SOx Process Units, respectively, with SCAQMD assigned Device IDs. Starting January 1, 1998, these records shall be used to report emissions from each device and each fuel used during a reporting period.

Location	Field	Length	Description
1-4	Record Identifier	4	1NLF, 1NPF, or 1SPF
5-10	SCAQMD Device ID	6	The SCAQMD assigned Device IDs for the equipment source. Left justify and fill with blanks
11-18	Date Emitted	8	End date of reporting period in the format "YYYYMMDD"
19-38	Fuel Type	20	Code for Fuel Type utilized. Left justified, blank filled
39-47	Total Emission	9(#####.##)	The total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
48-56	Status Word	9	The nine character status word for the reporting day from the Status Word Table.
57 - 128	Filler	72	Blanks , used to fill unused remaining record positions

**Code 1NLS, 1NPS and 1SPS - NOx Large Source and NOx and SOx Process Units Emissions Report by SCC**

The Codes 1NLS, 1NPS and 1SPS data records are used to report NOx and SOx emissions by SCC from NOx Large source, NOx and SOx Process Units, respectively, with SCAQMD assigned Device IDs. Starting January 1, 1998, these records shall be used to report emissions from each device and each process conducted during a reporting period.

Location	Field	Length	Description
1-4	Record Identifier	4	1NLS, 1NPS, or 1SMS
5-10	SCAQMD Device ID	6	The SCAQMD assigned Device IDs for the equipment source. Left justify and fill with blanks
11-18	Date Emitted	8	End date of reporting period in the format "YYYYMMDD"
19-26	SCC	8	Source Classification Code
27-35	Total Emission	9(#####.##)	The total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
36-44	Status Word	9	The nine character status word for the reporting day from the Status Word Table.
45 - 128	Filler	84	Blanks , used to fill unused remaining record positions

**Code 1NMM, 1SMM, 1NMQ, 1NLQ, 1NPQ, 1SMQ, and 1SPQ - Aggregate Emissions Reports for Devices with District Assigned Device IDs**

The Codes 1NMM and 1SMM data records are used to report monthly total NOx and SOx emissions, respectively, from all NOx and SOx Major Sources within a facility. The Codes 1NMQ, 1SMQ, 1NLQ, 1NPQ, and 1SPQ data records are used to report quarterly total NOx and SOx emissions, respectively, from all NOx and SOx Major, NOx Large Sources, and NOx and SOx Process Units within a facility. Starting January 1, 1998, these records shall be used to report aggregate emissions from applicable classification of devices within each facility.

Location	Field	Length	Description
1-4	Record Identifier	4	1NMM, 1SMM, 1NMQ, 1SMQ, 1NLQ, 1NPQ, or 1SPQ
5-12	Date Emitted	8	End date of the reporting period in the format "YYYYMMDD"
13-21	Total Emission	9(#####.##)	Enter the total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
22 - 128	Filler	107	Blanks , used to fill unused remaining record positions

**Code 1NXQ, 1SXQ, 1NTQ, 1STQ, 1NUQ, and 1SUQ - Aggregate Quarterly Emissions Reports for Devices without District Assigned Device IDs**

The Code 1NXQ, 1SXQ, 1NTQ, 1STQ, 1NUQ, and 1SUQ data records are used to report quarterly total NOx and SOx emissions, respectively, from all Rule 219 exempt equipment, equipment operating under a various locations permit (e.g. rental equipment) and equipment without permit. Starting January 1, 1998, these records shall be used to report aggregate emissions from all applicable devices within each facility.

Location	Field	Length	Description
1-4	Record Identifier	4	1NXQ, 1SXQ, 1NTQ, 1STQ, 1NUQ, and 1SUQ
5-12	Date Emitted	8	End date of the reporting period in the format "YYYYMMDD"
13-21	Total Emission	9(#####.##)	Enter the total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
22 - 128	Filler	107	Blanks , used to fill unused remaining record positions

**Code 1NVF and 1SVF - NOx and SOx Emissions Reports by Fuel Type for Equipment Operated under a Various Locations Permit**

The Code 1NVF and 1SVF data records are used to report NOx and SOx emissions, respectively, by fuel type from each device operating under a various location permit (e.g. rental equipment). Starting January 1, 1998, these records shall be used to report emissions from each device in this category.

Location	Field	Length	Description
1-4	Record Identifier	4	1NVF or 1SVF
5-10	Permit Number	6	SCAQMD Permit Number. Left justified, blank filled
11-18	Date Emitted	8	End date of the reporting period in the format "YYYYMMDD"
19-38	Fuel Type	20	Code for Fuel Type utilized. Left justified, blank filled
39-47	Total Emission	9(#####.##)	Enter the total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
47 - 128	Filler	82	Blanks , used to fill unused remaining record positions

**Code 1NVS and 1SVS - NOx and SOx Emissions Reports by SCC for Equipment Operated under a Various Locations Permit**

The Code 1NVF and 1SVF data records are used to report NOx and SOx emissions, respectively, by SCC from each device operating under a various location permit (e.g. rental equipment). Starting January 1, 1998, these records shall be used to report emissions from each device in this category.

Location	Field	Length	Description
1-4	Record Identifier	4	1NVS or SVS
5-10	Permit Number	6	SCAQMD Permit Number. Left justified, blank filled
11-18	Date Emitted	8	End date of the reporting period in the format "YYYYMMDD"
19-26	SCC	8	Source Classification Code.
27-35	Total Emission	9(#####.##)	Enter the total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
36 - 128	Filler	93	Blanks , used to fill unused remaining record positions

**Code 1NRF, 1SRF, 1NWF, and 1SWF - NOx and SOx Emissions Reports by Fuel Type for Rule 219 Exempt Equipment, and Equipment Operated without a Permit**

Code 1NRF, 1SRF, 1NWF, and 1SWF are used to report NOx and SOx emissions by fuel type from all devices which are exempt from permit under Rule 219 or from all devices operating without a permit. Starting January 1, 1998, these records shall be used to report emissions from all devices in each of these category.

Location	Field	Length	Description
1-4	Record Identifier	4	1NRF, 1SRF, 1NWF, or 1SWF
5-12	Date Emitted	8	End date of the reporting period in the format "YYYYMMDD"
13-32	Fuel Type	20	Code for Fuel Type utilized. Left justified, blank filled
33-41	Total Emission	9(#####.##)	Enter the total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
42 - 128	Filler	82	Blanks , used to fill unused remaining record positions

**Code 1NRS, 1SRS, 1NWS, and 1SWS - NOx and SOx Emissions Reports by SCC for Rule 219 Exempt Equipment, and Equipment Operated without a Permit**

Code 1NRS, 1SRS, 1NWS, and 1SWS are used to report NOx and SOx emissions by SCC from all devices which are exempt from permit under Rule 219 or from all devices operating without a permit. Starting January 1, 1998, these records shall be used to report emissions from all devices in each of these category.

Location	Field	Length	Description
1-4	Record Identifier	4	1NRS, 1SRS, 1NWS, or 1SWS
5-12	Date Emitted	8	End date of the reporting period in the format "YYYYMMDD"
13-20	SCC	8	Source Classification Code.
21-29	Total Emission	9(#####.##)	Enter the total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
30-128	Filler	99	Blanks , used to fill unused remaining record positions

Status Word Table

The Status Word Table is used to compile the status word for the required reporting period. True is 1 and False is 0.

Location	Field	Length	Description
1-1	Valid Data	1	Enter true if valid data was obtained for the entire reporting period, else enter false
2-2	Calibration	1	Enter true if the monitoring system was calibrated during the reporting period, else enter false
3-3	Off-line	1	Enter true if the monitoring system was off-line at any time during the reporting period, else enter false.
4-4	Alternate Data Acquisition	1	Enter true if alternate data acquisition was used during the reporting period, else enter false.
5-5	Out of Control	1	Enter true if the CEMS was out of control during the reporting period, else enter false.
6-6	Fuel Switch	1	Enter true if more than one fuel type was used during the reporting period, else enter false.
7-7	10% range	1	Enter true if concentration was reported at 10% valid range when concentration value was below 10%, else enter false.
8-8	lower than 10% range	1	Enter true if concentration was reported at an actual value less than 10% valid range, else enter false.
9-9	non-operational	1	Enter true if the RECLAIM SOx source being monitored is non-operational for the entire day, else enter false.

Format for Correcting Emissions Reports

Name	Description
Record Identifier	Record Identifier starting with "2"
Record to be corrected	All information contained in previously submitted record which is to be corrected, except the original Record Identifier field and the filler field.
Correct Record	The correct record containing all information for the record type, except the original Record Identifier field and the filler field.
Filler	This field is blank filled to complete the 128 character fixed length reporting record.

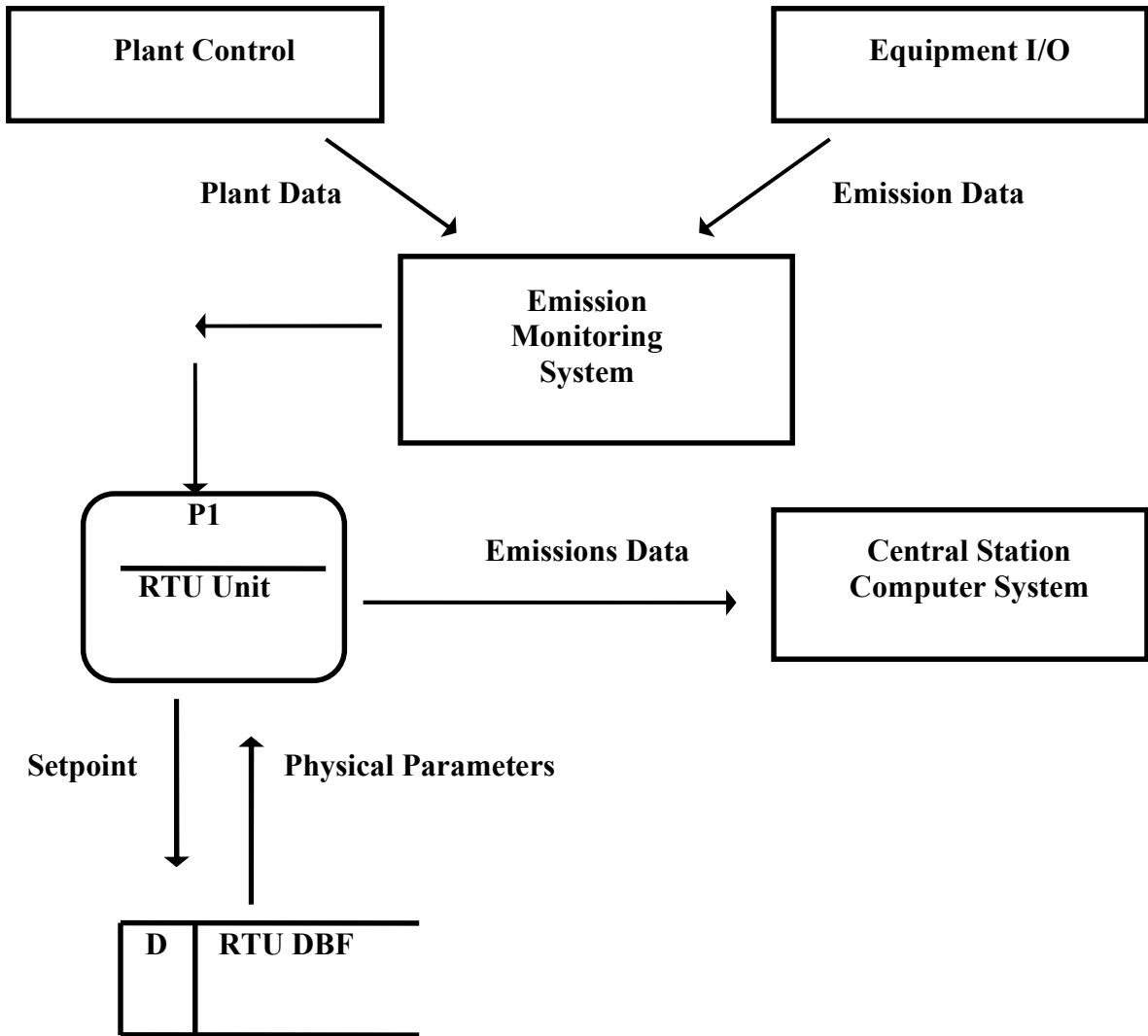
Format for deleting Emissions Reports

Name	Description
Record Identifier	Record Identifier starting with "3"
Record to be deleted	All information contained in previously submitted record which is to be deleted, except the original Record Identifier field and the filler field.

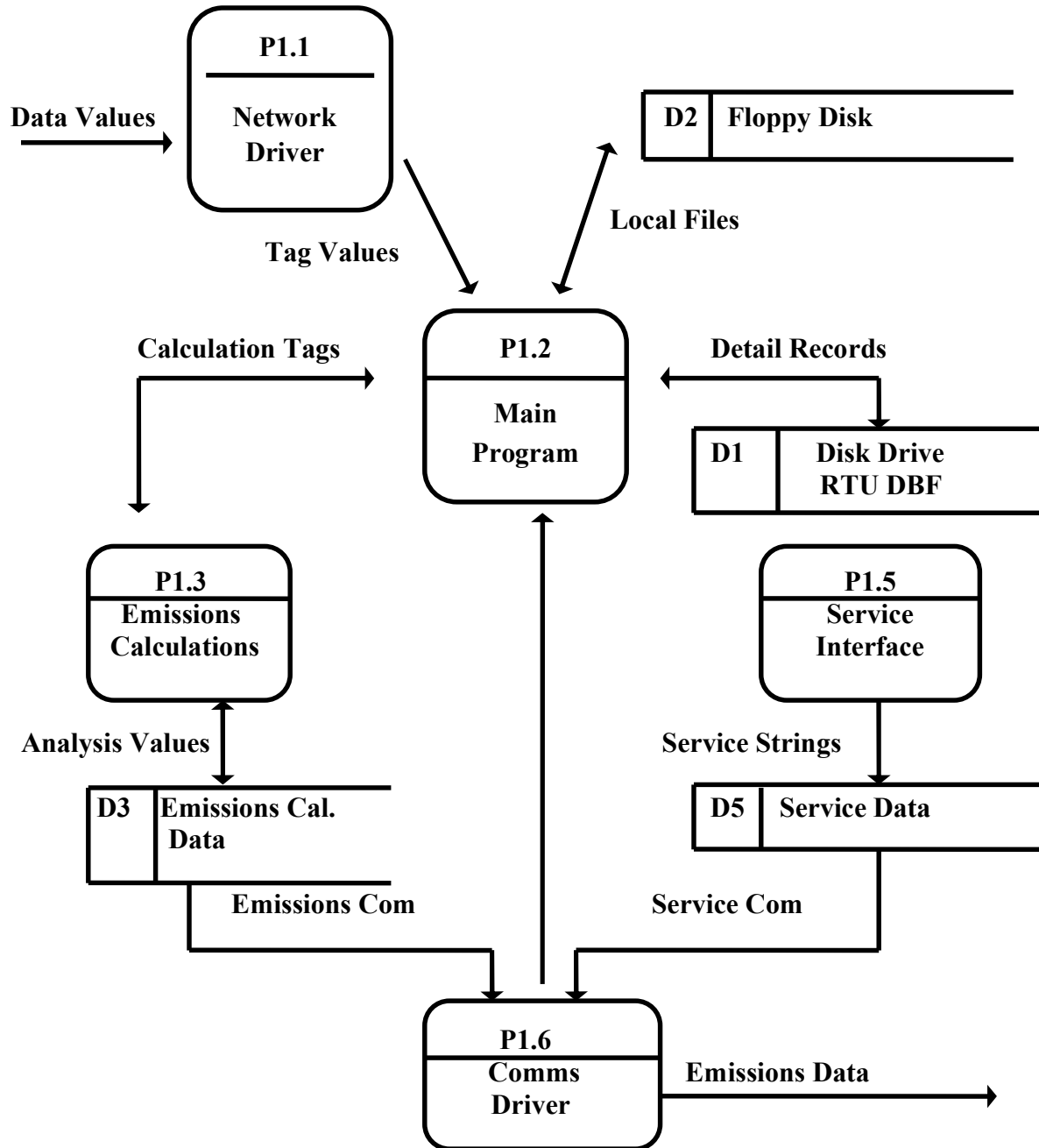
APPENDIX G

DIAGRAMS

### RTU Context Diagram



### RTU Data Flow Diagram



**ATTACHMENT G**

**RULE 2012 PROTOCOL -  
CHAPTER 7**

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**REMOTE TERMINAL UNIT (RTU)  
- ELECTRONIC REPORTING**



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CHAPTER 7 - REMOTE TERMINAL UNIT (RTU)

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This chapter defines the tasks and characteristics for electronic reporting of emissions from all sources. The Facility Permit holder of a major source shall use an RTU to telecommunicate rule compliance data to the District Central Station Emissions Monitoring Computer. The RTU shall collect data, perform calculations, generate the appropriate data files, and transmit the data to the Central Station. The Facility Permit holder of a large source or process unit may elect to use an RTU. Alternatively, the Facility Permit holder of a large source or process unit shall compile the required rule compliance data manually, and transmit that data ~~via modem~~ in accordance with the data requirements of Section D in this chapter. The Facility Permit holder shall use, when required, the appropriate record type specified in this chapter to report to the District Central Station emissions from all RECLAIM NO<sub>x</sub> sources. Alternative to transmitting data to the District Central Station, the Facility Permit holder may use the District Internet Web Site to report emissions electronically from RECLAIM NO<sub>x</sub> sources except for major sources.

## A. GENERAL

### 1. General

The Facility Permit holder of a major source shall telecommunicate rule compliance data to the District via Remote Terminal Units (RTU). This form of reporting may also be used for large sources or process units. The RTU shall collect data from a CEMS, a CPMS, or other equipment specified in the Facility Permit and send data periodically to the Central Station Emissions Monitoring Computer (Central Station-).

This chapter specifies the tasks and characteristics required of the RTU and shall be used as a guide for providing the required software/hardware for the RTU. Emissions Data Collection System conformity as well as establishing and maintaining communications with the emission monitoring system and the Central Station shall be the responsibility of the Facility Permit holder. This chapter also serves as a functional guideline for operating requirements of the RTU, and provides information concerning RTU hardware/software procurement, configuration, installation, maintenance, and compatibility with the emission monitoring system and the Central Station.

In lieu of using a modem, the Facility Permit holder of a major source may elect to use an alternative electronic reporting system approved by the Executive Officer to telecommunicate rule compliance data to the South Coast AQMD Central Station Emissions Monitoring Computer. Any use of an approved alternative electronic reporting system shall be in accordance with specifications approved by the Executive Officer.

### 2. RTU and Supporting Equipment Description

a. Purpose:

The RTU shall interface to existing data acquisition systems or other field instrumentation, and shall gather and store data, and facilitate telecommunication with the Central Station Computer.

b. Environment:

i. Logical Environment:

The signal chain includes the process equipment, sensing devices, data acquisition system, RTU, modem, communications link and District Central Station.

ii. Physical Environment:

Typical environments shall include "friendly" and "Central Station" environments. Friendly environments include clean, air conditioned areas such as computer rooms and offices. Hostile environments may include exterior spaces or interior spaces without benefit of air conditioning, and areas where free floating air particulates may impede the normal operation of exposed electronics. Each RTU shall be mounted in such a manner as to be environmentally qualified.

iii. Electrical Environment:

1) Connected Devices:

Each RTU may receive information from a local computer (DAS) or various field sensing devices, calculate and/or store the specified parameters and shall make its data available to local and Central Stations.

2) Sensor-based Data to be acquired:

Where applicable, the RTU shall be able to directly monitor transducers which sense variables required for compliance determinations. At a minimum, input analog conversion hardware should operate with a medium level of resolution (i.e. 12 bit resolution) and a sampling rate sufficient to accurately characterize the sensor based data.

iv. Description of Data to be transmitted:

All data shall be made available at data output ports in ASCII format as described below:

1) Data Sampling:

Shall retain selectable status levels about its sensors.

2) Rule-specific Data Sets:

(as specified elsewhere)

c. Functions:

The RTU shall provide the following functions:

i. Power-Up/Restart Mode:

Upon resumption of power after a loss, the RTU shall automatically restart and reset itself to predetermined system settings.

ii. Non-Communicating Mode:

When in the non-communicating mode the RTU shall operate independently of the communications ports as well as store its transactions for later communications with the Central Station.

iii. Failure Mode:

In the event the RTU is unable to initiate communications with the Central Station, the RTU shall perform the following actions:

1) The RTU shall first make four subsequent attempts to establish communications with the Central Station.

2) Upon failure of the fourth attempt, the RTU shall:

a Revert to the non-communicating mode for a period of fifteen (15) minutes and then again attempt to establish communications with the Central Station.

b Each failure shall result in the execution of the failure mode sequence.

3) Error Tolerance:

The RTU shall perform its specified functions without misinterpretation of input information, errors in output signals, damage to internal components, and loss or change of stored information with either common mode to ground or differential mode transients present on the communication ports, circuits or power sources which shall be connected to the inputs and power supply terminals to the equipment.

**B. PRODUCTS****1. RTU Attributes**

- a. Environmental Tolerances: Each RTU shall be installed in such a manner as to be environmentally qualified for the particular physical environment.
- b. Communications Provisions: The RTU shall provide a minimum of one (1) communications connection. The connection shall be labeled "Remote".
- c. Real Time Clock: The RTU shall be equipped with a battery-backed Real Time Calendar/Clock (RTC) to provide time signals for implementing time dependent programs. The battery back-up shall be field replaceable and shall not require replacement more often than once every two (2) years. An alarm message shall be generated when the battery reaches a low voltage point with at least one (1) month life under load left prior to the necessity for battery replacement.
- d. Internal Software:
  - i. Data Collection and Storage: The RTU shall collect data from sensors, generate and store values, and perform calculations upon those values. Data shall be collected and stored in the Data Sampling memory.
  - ii. Calculations and Message Storage: Calculated values and messages resulting from calculations performed upon sampled data shall be stored as ASCII data strings in memory.
- e. Security Provisions:
  - i. Message Security: The RTU shall utilize a standard protocol encryption method for communications with the remote Central Station incorporating error detection. The system shall not incorporate error correction. The code shall detect one hundred (100) percent of single, double and triple errors; one hundred (100) percent of burst errors of six bits or fewer; ninety-seven (97) percent of all seven-bit bursts; and ninety-eight point four (98.4) percent of all other burst as well as a substantial fraction of all random error patterns involving more than three (3) bits.
  - ii. Message Checking: The RTU shall utilize bitsum checking for all messages.
- f. Modem: Provide a modem connected to the Remote Central Station communication port.
  - i. Modem Self-Test: The modem shall

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be capable of being operated in self testing mode automatically on a periodic basis.

- g. Transient Suppression: Provide hardware, circuitry, components or extended component ratings or characteristics necessary to prevent interference to correct operation or equipment damage from induced transients which may be presented on communication circuits and power sources. Transient suppression shall utilize the latest revision of the ANSI C37.90a standard.

**C. EXECUTION****1. General**

- a. Section (C) describes acceptable methods and practices for use in completion of this work.
- b. Standards: Perform the work in accordance with the latest revisions of the following standards:
  - i. ANSI American National Standards Institute.
  - ii. UL Underwriters Laboratories.
  - iii. EIA Electrical Industries Association.
  - iv. NEMA National Electrical Manufacturers Association.

**2. Project Plan**

Develop a project plan for accomplishing the requirements of this installation . The plan shall include a checklist for the Submittal date .

**3. Software Requirements Guideline**

The Software Requirement Guideline (SRG) shall specify tasks and characteristics required of the RTU and is to be used as a guide for providing the required software for the RTU. Emissions Data Collection System conformity as well as establishing and maintaining communications with the emission monitoring system and the Central Station shall be the responsibility of the Facility Permit holder.

**a. References**

This guideline shall be used in conjunction with the following Rules:

Recordkeeping for Oxides of Sulfur (SO<sub>x</sub>) Emissions

Recordkeeping for Oxides of Nitrogen (NO<sub>x</sub>) Emissions

**b. System Relation**

The RTU shall be the local plant data storage and processing point in a system which is reporting data to a Central Station for evaluation to determine regulatory compliance. Data formats shall be standardized between the Central Station and all monitored emissions sources. It is the function of the RTU to convert as necessary the data stream from the local monitoring system. The fundamental operation of the RTU is to:

- i. compile information from the emission monitoring system as specified in this guideline.
- ii. transmit the compiled data to the Central Station on a scheduled basis.

c. Central Station Interface

On scheduled updates the RTU shall download current data to the Central Station. The RTU data buffer shall be reset after each successful download to the Central Station.

d. Software Responsibility

The Facility Permit holder shall be responsible for providing all RTU software required to perform all specified tasks. This may include purchased commercial software packages or custom written programs.

e. Product Function

i. Software Context and Data Flow Diagrams

The flow diagram at the end of this Chapter is a Context Diagram description and Data Flow Diagram which show how the different external functions tie to the RTU package. Plant data or operating information is collected by the emission monitoring system for evaluation of emissions. The RTU Unit is the process shown on this diagram and is the focus of this guideline.

Data Values relating to emissions received from the emission monitoring system are processed by the RTU into data files for transmission to the SCAQMD Central Station. The type of message is shown on the RTU Context Diagram between the RTU and the Central Station. The message is data sets which are sent periodically.

The RTU Data Flow Diagram is a graphical expansion of the RTU Unit process block. Emission monitoring system data is shown coming into the Network Driver and splitting to the other process blocks which represent RTU functions.

ii. Communication End Points

The RTU will communicate with both the emission monitoring system and the Central Station. Each end point has a different protocol and purpose. Data sent from the RTU to the Central Station shall be converted from floating point numbers used to perform calculations into ASCII standard to allow for different internal formats.

## f. Specific Requirements

## i. RTU Software

The main RTU program shall receive input data, do calculations (if necessary) and store all data in non-volatile memory, as it is received.

## ii. Direct Field Input Data

Many RTUs may be capable of reading direct field inputs which shall consist of analog and/or digital real values. Direct field input requirements shall be specified as required for each RTU. Communications software shall be capable of supporting the hardware required to receive these inputs. If analog data cards must be installed in the RTU any resulting values provided to the RTU data bus shall range from -32768 to +32767 for unscaled values. The same accuracy as emission monitoring system network data shall be provided for analog data values scaled on the I/O device before going onto the RTU data bus.

## iii. Input Data Conversion/Storage

All input values shall be stored in as received ASCII format. These values shall then be parsed and converted to real numbers for calculations and averaging.

## iv. Output Data To Central Station

The context diagram displays how the RTU software shall be configured to allow messages to be sent to the Central Station. File transfer for all messages shall be in ASCII format including a bitsum check value with a return acknowledgment expected by the RTU when the Central Station has verified the bitsum check.

## v. RTU To Central Station Communications Failure

If the RTU cannot communicate with the Central Station the main program shall store all calculated values and reports in a special file in non-volatile memory. These special files shall be labeled to show that they have not been acknowledged as received by the Central Station.

## g. Performance Requirements

## i. Speed of Receiving DATA

Incoming data from the plant or emission monitoring system shall be received at intervals specified in the appropriate emission monitoring guideline. Communication

with the Central Station, Parsing, verification, storage and checking shall not block the receipt of new data.

ii. RTU Non-Volatile Memory

The RTU non-volatile memory shall have enough capacity to store all programs, data parameters, emission monitoring system input data and calculated data averages. Input data and calculated averages shall be allocated space using the first in first out (FIFO) method to store the quantity of data as required.

h. Design Restraints

i. Data Set Formats

Section (D) indicates the data format that is to be sent to the Central Station at scheduled intervals. The Central Station will send a confirmation message back for each transmission received which will consist of an identification number unique to the Central Station and a transaction number which is sequentially issued.

i. RTU External Interface Requirements

i. Central Station Interface

External interface to the RTU is shown on the Context Diagram at the end of this chapter. Central Station interface is described above as fixed format ASCII messages using a commercially available communication software package. In return the Central Station will send confirmation messages in ASCII form when a satisfactory message transfer has been completed.

**4. Required Installation Practices**

a. Standards: Install all devices in accordance with the standards set forth herein and in accordance with manufacturers recommendations and first class standard industry practice.

b. Telephone Interface:

RTU shall operate on a standard analog telephone line. Label the remote Central Station communications connector with the telephone number to which it is connected.

**5. Submittals**

- a. Shop Drawing:
- i. Submit two (2) copies of the following in accordance with the applicable rule compliance dates.
    - A Title Sheet
    - Single Line Diagrams
    - Wiring Diagrams or Run Sheets
    - Physical Details of Custom Assemblies
  - ii. Descriptions of the above shop drawings are as follows:
    - a) Title Sheet containing a drawing list, abbreviations list, symbols list and schedules.
    - b) Single-Line Diagram for each system showing signal relationships of devices within the system and device nomenclatures.
    - c) Wiring Diagram for each assembly or enclosure or free standing device, showing the following:
      - 1) the layout of the devices within;
      - 2) wiring connections;
      - 3) wire numbers;
      - 4) voltage levels, and
      - 5) fuse values and types.
    - d) Physical Details of contractor fabricated assemblies:
      - 1) Provide an assembly drawing showing the finished product. Show components comprising the assembly by manufacturer and model number.
      - 2) Provide a schematic diagram of the assembly, as described above.
- b. RTU Components List:
- i. The RTU Component List shall contain the following information for all materials, components, devices, wire and equipment used:

- Quantity for that system.
  - Description (generic).
  - Manufacturers Name and Model number.
- c. Software Design Description (SDD). Indicate how the developed software will meet the defined software requirements. The SDD shall be based on ANSI/IEEE standards, specifically 1016 (SDD) and 730 (Quality Assurance).
- d. Software Listing. Provide a source code listing of all developed software required by the applicable emission monitoring requirements.

## **D. DATA REQUIREMENTS**

### **1. General Requirements**

- The District will accept data in the American Standard Code for Information Interchange (ASCII) format.
- The data file structure must be sequential. The record delimiter - a ~ (tilde) occurs only once following the end of each data record. There must be no delimiter before the first data record. The ASCII value for the delimiter is:  
~ (decimal 126)
- Blank data records must not be reported
- In text fields, only upper case characters are to be used and must be left justified. Text fields that are not applicable must be filled with blanks. The ~ character (decimal 126) must never appear inside text fields.
- Numeric fields must be right justified and zero filled. Where decimal places are to be reported, they are to be implied - do not include the decimal point character. Numeric fields that are zeros or not applicable, must be zero filled.
- Date fields must be entered in the format "YYYYMMDD" and must always specify a valid date.

**2. Data File Description**

A properly composed data file is comprised of the following data records (shown indented to illustrate the logical grouping):

- Code 1A - Transmitter Record
- Code 1F - Facility Record
  - Emission data record(s) from any of the following data records
- Code 1NP - NO<sub>x</sub> Process Unit and Large Source Record
- Code 1NM - NO<sub>x</sub> Major Source Record
- Code 1SP - SO<sub>x</sub> Process Unit Record
- Code 1SM - SO<sub>x</sub> Major Source Record
- Code 1FT - Facility Total Record
- Code 1F - Facility Record
  - Emission data record(s)
- Code 1FT - Facility Total Record
- Code 1T - Final Total Record

The Code 1A data record identifies the facility submitting the data file and must be the first data record in the data file.

The Code 1T data record identifies the end of a data file and must be the last data record in the data file

The Code 1F data record identifies the facility whose emission data records are being reported.

The Code 1FT data record identifies the end of emission data records for a particular facility.

Code 1F/1FT data records must not be nested inside of another 1F/1FT group and are repeated for each facility to be reported.

Emission data records for a facility are reported following the Code 1F but before the 1FT data record for that facility and can comprise any of the following data record types:

- Code 1NP - NO<sub>x</sub> Process Unit and Large Source Record
- Code 1NM - NO<sub>x</sub> Major Source Record
- Code 1SP - SO<sub>x</sub> Process Unit Record
- Code 1SM - SO<sub>x</sub> Major Source Record

The following table summarizes valid Record Identifiers to be used starting January 1, 1998 to perform electronic reporting via a RTU or modem. The 1A through 1T records are used for identification and grouping purposes. The 1NP through 1SM records are the

pre-existing emissions reporting records. Starting January 1, 1998, these records may only be used for devices which do not use multiple fuels and are not involved in multiple processes. Otherwise, sources shall report emissions by each fuel type or process conducted within the reporting period. If more than 50% of the emissions from a source is from the combustion of fuels, the emission report for such a source or process unit shall be reported based on the fuel combusted. Otherwise, emissions shall be reported based on the Source Classification Code (SCC) for the process conducted. The INPF through 1SUQ records are utilized for reporting emissions from devices with multiples fuels or processes. Record Identifiers starting with “2” are used to make corrections to submitted electronic emissions reports. Record Identifiers starting with “3” are used to delete previously submitted electronic emissions reports which were filed erroneously. Erroneous records to be corrected need not be deleted first.

**Record Identifiers Summary Table**

Record Identifier for			Description
Adding a record	Updating a record	Deleting a record	
1A*	--	--	Transmitter Record
1F*	--	--	Facility Record
1FT*	--	--	Facility Total Record
1T*	--	--	Final Total Record
1NP*	2NP	3NP	NOx Emissions Report for Process Units
1NL*	2NL	3NL	NOx Emissions Report for Large Sources
1NM*	2NM	3NM	NOx Emissions Report for Major Sources
1SP*	2SP	3SP	SOx Emissions Report for Process Units
1SM*	2SM	3SM	SOx Emissions Report for Major Sources
1NPF	2NPF	3NPF	NOx Emissions Report for Process Units by Fuel Type
1SPF	2SPF	3SPF	SOx Emissions Report for Process Units by Fuel Type
1NLF	2NLF	3NLF	NOx Emissions Report for Large Sources by Fuel Type
1NMF	2NMF	3NMF	NOx Emissions Report for Major Sources by Fuel Type
1SMF	2SMF	3SMF	SOx Emissions Report for Major Sources by Fuel Type
1NPS	2NPS	3NPS	NOx Emissions Report for Process Units by SCC
1SPS	2SPS	3SPS	SOx Emissions Report for Process Units by SCC
1NLS	2NLS	3NLS	NOx Emissions Report for Large Sources by SCC
1NMS	2NMS	3NMS	NOx Emissions Report for Major Sources by SCC
1SMS	2SMS	3SMS	SOx Emissions Report for Major Sources by SCC
1NMM	2NMM	3NMM	Monthly NOx Emissions Report for Major Sources

**Record Identifiers Summary Table (Continued)**

Record Identifier for			Description
Adding a record	Updating a record	Deleting a record	
1SMM	2SMM	3SMM	Monthly SOx Emissions Report for Major Sources
1NMQ	2NMQ	3NMQ	Quarterly NOx Emissions Report for Major Sources
1SMQ	2SMQ	3SMQ	Quarterly SOx Emissions Report for Major Sources
1NLQ	2NLQ	3NLQ	Quarterly NOx Emissions Report for Large Sources
1NRF	2NRF	3NRF	Quarterly NOx Emissions Report by fuel type for Rule 219 Exempt Equipment
1SRF	2SRF	3SRF	Quarterly SOx Emissions Report by fuel type for Rule 219 Exempt Equipment
1NRS	2NRS	3NRS	Quarterly NOx Emissions Report by SCC for Rule 219 Exempt Equipment
1SRS	2SRS	3SRS	Quarterly SOx Emissions Report by SCC for Rule 219 Exempt Equipment
1NVF	2NVF	3NVF	Quarterly NOx Emissions Report by fuel type for Equipment Operating under a Various Locations Permit
1SVF	2SVF	3SVF	Quarterly SOx Emissions Report by fuel type for Equipment Operating under a Various Locations Permit
1NVS	2NVS	3NVS	Quarterly NOx Emissions Report by SCC for Equipment Operating under a Various Locations Permit
1SVS	2SVS	3SVS	Quarterly SOx Emissions Report by SCC for Equipment Operating under a Various Locations Permit
1NWF	2NWF	3NWF	Quarterly NOx Emissions Report by fuel type for Equipment Operating Without Permit or District assigned Device IDs
1SWF	2SWF	3SWF	Quarterly SOx Emissions Report by fuel type for Equipment Operating Without Permit or District assigned Device IDs
1NWS	2NWS	3NWS	Quarterly NOx Emissions Report by SCC for Equipment Operating Without Permit or District assigned Device IDs
1SWS	2SWS	3SWS	Quarterly SOx Emissions Report by SCC for Equipment Operating Without Permit or District assigned Device IDs
1NPQ	2NPQ	3NPQ	Quarterly NOx Aggregate Emissions Report for Process Units
1SPQ	2SPQ	3SPQ	Quarterly SOx Aggregate Emissions Report for Process Units
1NXQ	2NXQ	3NXQ	Quarterly NOx Aggregate Emissions Report for Rule 219 Exempt Equipment
1SXQ	2SXQ	3SXQ	Quarterly SOx Aggregate Emissions Report for Rule 219 Exempt Equipment

\* Previously defined codes

**Record Identifiers Summary Table (Continued)**

Record Identifier for			Description
Adding a record	Updating a record	Deleting a record	
1NTQ	2NTQ	3NTQ	Quarterly NOx Aggregate Emissions Report for Equipment Operating under a Various Locations Permit
1STQ	2STQ	3STQ	Quarterly SOx Aggregate Emissions Report for Equipment Operating under a Various Locations Permit
1NUQ	2NUQ	3NUQ	Quarterly NOx Aggregate Emissions Report for Equipment Operating without a Permit
1SUQ	2SUQ	3SUQ	Quarterly SOx Aggregate Emissions Report for Equipment Operating without a Permit

\* Previously defined codes

**Code 1A - Transmitter Record**

The Code 1A data record is used to identify the facility submitting the data file and must be the first data record reported.

Location	Field	Length	Description
1-4	Record Identifier	4	Constant "1A" followed by 2 blanks.
5-10	SCAQMD Facility ID	6	The 6-digit SCAQMD facility ID of the facility submitting the data file.
11-128	Filler	118	Blanks , used to fill unused remaining record positions.

**Code 1F - Facility Record**

The Code 1F data record is used to identify the facility whose emissions are being reported.

Location	Field	Length	Description
1-4	Record Identifier	4	Constant "1F" followed by 2 blanks.
5-10	SCAQMD Facility ID	6	The 6-digit SCAQMD facility ID for the facility whose emissions are being reported.
11-128	Filler	118	Blanks , used to fill unused remaining record positions.

**Code 1FT - Facility Total Record**

The Code 1FT data record is used to identify the end of data emission records for a facility.

Location	Field	Length	Description
1-4	Record Identifier	4	Constant "1FT" followed by 1 blank.
5-11	Number of Emission Data Records	7	The total number of emission data records reported for the facility (excluding the 1F and the 1FT data records). Right justify and zero fill.
12-128	Filler	117	Blanks , used to fill unused remaining record positions.

**Code 1T - Final Total Record**

The Code 1T data record is used to identify the end of the data file and must be the last data record reported.

Location	Field	Length	Description
1-4	Record Identifier	4	Constant "1T" followed by 2 blanks
5-11	Number of Data	7	The total number of data records reported (including the Code 1T) in the data file. Right justify and zero fill.
12-128	Filler	117	Blanks , used to fill unused remaining record positions.

**Code 1NP and 1NL- NO<sub>x</sub> Process Unit and Large Source Record**

The Code 1NP data record is used to report NO<sub>x</sub> emissions from NO<sub>x</sub> Process Units with SCAQMD assigned Device Ids. The Code 1NL data record is used to report NO<sub>x</sub> emissions from NO<sub>x</sub> Large Sources with SCAQMD assigned Device IDs. Starting January 1, 1998, these records shall only be used for devices which do not use multiple fuels and are not involved in multiple processes.

Location	Field	Length	Description
1-4	Record Identifier	4	"1NP" or "1NL" followed by 1 blank
5-10	SCAQMD Device ID	6	The SCAQMD assigned Device IDs for the equipment source. Left justify and fill with blanks
11-18	Date Emitted	8	The date emitted in the format "YYYYMMDD"
19-27	Total Emission	9(#####.##)	The total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
28 - 128	Filler	101	Blanks , used to fill unused remaining record positions

**Code 1NM - NO<sub>x</sub> Major Source Record**

The Code 1NM data record is used to report NO<sub>x</sub> emissions from Major NO<sub>x</sub> sources with SCAQMD assigned Device IDs. Starting January 1, 1998, this record shall only be used for devices which do not use multiple fuels and are not involved in multiple processes.

Location	Field	Length	Description
1-4	Record Identifier	4	Constant "1NM" followed by 1 blank
5-10	SCAQMD Device ID	6	The SCAQMD assigned Device IDs for the equipment source. Left justify and fill with blanks
11-18	Date Emitted	8	The date emitted in the format "YYYYMMDD"
19-27	Total Emission	9(#####.##)	The total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
28-36	Status Word	9	The nine character status word for the reporting day from the Status Word Table.
37 - 128	Filler	92	Blanks , used to fill unused remaining record positions

**Code 1SP - SO<sub>x</sub> Process Unit Record**

The Code 1SP data record is used to report SO<sub>x</sub> emissions from SO<sub>x</sub> Process Units with SCAQMD assigned Device IDs. Starting January 1, 1998, this record shall only be used for devices which do not use multiple fuels and are not involved in multiple processes.

Location	Field	Length	Description
1-4	Record Identifier	4	Constant "1SP" followed by 1 blank
5-10	SCAQMD Device ID	6	The SCAQMD assigned Device IDs for the equipment source. Left justify and fill with blanks
11-18	Date Emitted	8	The date emitted in the format "YYYYMMDD"
19-27	Total Emission	9(#####.##)	The total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
28 - 128	Filler	101	Blanks , used to fill unused remaining record positions

**Code 1SM - SO<sub>x</sub> Major Source Record**

The Code 1SM data record is used to report SO<sub>x</sub> emissions from Major SO<sub>x</sub> sources with SCAQMD assigned Device IDs. Starting January 1, 1998, this record shall only be used for devices which do not use multiple fuels and are not involved in multiple processes.

Location	Field	Length	Description
1-4	Record Identifier	4	Constant "1SM" followed by 1 blank
5-10	SCAQMD Device ID	6	The SCAQMD assigned Device IDs for the equipment source. Left justify and fill with blanks
11-18	Date Emitted	8	The date emitted in the format "YYYYMMDD"
19-27	Total Emission	9(#####.##)	The total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
28-36	Status Word	9	The nine character status word for the reporting day from the Status Word Table.
37 - 128	Filler	92	Blanks , used to fill unused remaining record positions

**Code 1NMF and 1SMF - NO<sub>x</sub> and SO<sub>x</sub> Major Source Emissions Report by Fuel Type**

The Codes 1NMF and 1SMF data records are used to report NO<sub>x</sub> and SO<sub>x</sub> emissions by fuel type from Major SO<sub>x</sub> sources with SCAQMD assigned Device IDs. Starting January 1, 1998, these records shall be used to report emissions from each Major SO<sub>x</sub> sources and each fuel used during a reporting day.

Location	Field	Length	Description
1-4	Record Identifier	4	1NMF or 1SMF
5-10	SCAQMD Device ID	6	The SCAQMD assigned Device IDs for the equipment source. Left justify and fill with blanks
11-18	Date Emitted	8	The date emitted in the format "YYYYMMDD"
19-38	Fuel Type	20	Code for Fuel Type utilized. Left justified, blank filled
39-47	Total Emission	9(#####.##)	The total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
48-56	Status Word	9	The nine character status word for the reporting day from the Status Word Table.
57 - 128	Filler	72	Blanks , used to fill unused remaining record positions

**Code 1NMS and 1SMS - NOx and SOx Major Source Emissions Report by SCC**

The Codes 1NMS and 1SMS data records are used to report NOx and SOx emissions by Source Classification Codes (SCC) from Major SOx sources with SCAQMD assigned Device IDs. Starting January 1, 1998, these records shall be used to report emissions from each Major SOx sources and each process conducted during a reporting day.

Location	Field	Length	Description
1-4	Record Identifier	4	1NMS or 1SMS
5-10	SCAQMD Device ID	6	The SCAQMD assigned Device IDs for the equipment source. Left justify and fill with blanks
11-18	Date Emitted	8	The date emitted in the format "YYYYMMDD"
19-26	SCC	8	Source Classification Code
27-35	Total Emission	9(#####.##)	The total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
36-44	Status Word	9	The nine character status word for the reporting day from the Status Word Table.
45 - 128	Filler	84	Blanks , used to fill unused remaining record positions

**Code 1NLF, 1NPF and 1SPF - NOx Large Source and NOx and SOx Process Unit Emissions Report by Fuel Type**

The Codes 1NLF, 1NPF and 1SPF data records are used to report NOx and SOx emissions by fuel type from NOx Large source, NOx and SOx Process Units, respectively, with SCAQMD assigned Device IDs. Starting January 1, 1998, these records shall be used to report emissions from each device and each fuel used during a reporting period.

Location	Field	Length	Description
1-4	Record Identifier	4	1NLF, 1NPF, or 1SPF
5-10	SCAQMD Device ID	6	The SCAQMD assigned Device IDs for the equipment source. Left justify and fill with blanks
11-18	Date Emitted	8	End date of reporting period in the format "YYYYMMDD"
19-38	Fuel Type	20	Code for Fuel Type utilized. Left justified, blank filled
39-47	Total Emission	9(#####.##)	The total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
48-56	Status Word	9	The nine character status word for the reporting day from the Status Word Table.
57 - 128	Filler	72	Blanks , used to fill unused remaining record positions

**Code 1NLS, 1NPS and 1SPS - NOx Large Source and NOx and SOx Process Units Emissions Report by SCC**

The Codes 1NLS, 1NPS and 1SPS data records are used to report NOx and SOx emissions by SCC from NOx Large source, NOx and SOx Process Units, respectively, with SCAQMD assigned Device IDs. Starting January 1, 1998, these records shall be used to report emissions from each device and each process conducted during a reporting period.

Location	Field	Length	Description
1-4	Record Identifier	4	1NLS, 1NPS, or 1SMS
5-10	SCAQMD Device ID	6	The SCAQMD assigned Device IDs for the equipment source. Left justify and fill with blanks
11-18	Date Emitted	8	End date of reporting period in the format "YYYYMMDD"
19-26	SCC	8	Source Classification Code
27-35	Total Emission	9(#####.##)	The total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
36-44	Status Word	9	The nine character status word for the reporting day from the Status Word Table.
45 - 128	Filler	84	Blanks , used to fill unused remaining record positions

**Code 1NMM, 1SMM, 1NMQ, 1NLQ, 1NPQ, 1SMQ, and 1SPQ - Aggregate Emissions Reports for Devices with District Assigned Device IDs**

The Codes 1NMM and 1SMM data records are used to report monthly total NOx and SOx emissions, respectively, from all NOx and SOx Major Sources within a facility. The Codes 1NMQ, 1SMQ, 1NLQ, 1NPQ, and 1SPQ data records are used to report quarterly total NOx and SOx emissions, respectively, from all NOx and SOx Major, NOx Large Sources, and NOx and SOx Process Units within a facility. Starting January 1, 1998, these records shall be used to report aggregate emissions from applicable classification of devices within each facility.

Location	Field	Length	Description
1-4	Record Identifier	4	1NMM, 1SMM, 1NMQ, 1SMQ, 1NLQ, 1NPQ, or 1SPQ
5-12	Date Emitted	8	End date of the reporting period in the format "YYYYMMDD"
13-21	Total Emission	9(#####.##)	Enter the total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
22 - 128	Filler	107	Blanks , used to fill unused remaining record positions

**Code 1NXQ, 1SXQ, 1NTQ, 1STQ, 1NUQ, and 1SUQ - Aggregate Quarterly Emissions Reports for Devices without District Assigned Device IDs**

The Code 1NXQ, 1SXQ, 1NTQ, 1STQ, 1NUQ, and 1SUQ data records are used to report quarterly total NOx and SOx emissions, respectively, from all Rule 219 exempt equipment, equipment operating under a various locations permit (e.g. rental equipment) and equipment without permit. Starting January 1, 1998, these records shall be used to report aggregate emissions from all applicable devices within each facility.

Location	Field	Length	Description
1-4	Record Identifier	4	1NXQ, 1SXQ, 1NTQ, 1STQ, 1NUQ, and 1SUQ
5-12	Date Emitted	8	End date of the reporting period in the format "YYYYMMDD"
13-21	Total Emission	9(#####.##)	Enter the total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
22 - 128	Filler	107	Blanks , used to fill unused remaining record positions

**Code 1NVF and 1SVF - NOx and SOx Emissions Reports by Fuel Type for Equipment Operated under a Various Locations Permit**

The Code 1NVF and 1SVF data records are used to report NOx and SOx emissions, respectively, by fuel type from each device operating under a various location permit (e.g. rental equipment). Starting January 1, 1998, these records shall be used to report emissions from each device in this category.

Location	Field	Length	Description
1-4	Record Identifier	4	1NVF or 1SVF
5-10	Permit Number	6	SCAQMD Permit Number. Left justified, blank filled
11-18	Date Emitted	8	End date of the reporting period in the format "YYYYMMDD"
19-38	Fuel Type	20	Code for Fuel Type utilized. Left justified, blank filled
39-47	Total Emission	9(#####.##)	Enter the total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
47 - 128	Filler	82	Blanks , used to fill unused remaining record positions

**Code 1NVS and 1SVS - NOx and SOx Emissions Reports by SCC for Equipment Operated under a Various Locations Permit**

The Code 1NVF and 1SVF data records are used to report NOx and SOx emissions, respectively, by SCC from each device operating under a various location permit (e.g. rental equipment). Starting January 1, 1998, these records shall be used to report emissions from each device in this category.

Location	Field	Length	Description
1-4	Record Identifier	4	1NVS or SVS
5-10	Permit Number	6	SCAQMD Permit Number. Left justified, blank filled
11-18	Date Emitted	8	End date of the reporting period in the format "YYYYMMDD"
19-26	SCC	8	Source Classification Code.
27-35	Total Emission	9(#####.##)	Enter the total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
36 - 128	Filler	93	Blanks , used to fill unused remaining record positions

**Code 1NRF, 1SRF, 1NWF, and 1SWF - NOx and SOx Emissions Reports by Fuel Type for Rule 219 Exempt Equipment, and Equipment Operated without a Permit**

Code 1NRF, 1SRF, 1NWF, and 1SWF are used to report NOx and SOx emissions by fuel type from all devices which are exempt from permit under Rule 219 or from all devices operating without a permit. Starting January 1, 1998, these records shall be used to report emissions from all devices in each of these category.

Location	Field	Length	Description
1-4	Record Identifier	4	1NRF, 1SRF, 1NWF, or 1SWF
5-12	Date Emitted	8	End date of the reporting period in the format "YYYYMMDD"
13-32	Fuel Type	20	Code for Fuel Type utilized. Left justified, blank filled
33-41	Total Emission	9(#####.##)	Enter the total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
42 - 128	Filler	82	Blanks , used to fill unused remaining record positions

**Code 1NRS, 1SRS, 1NWS, and 1SWS - NOx and SOx Emissions Reports by SCC for Rule 219 Exempt Equipment, and Equipment Operated without a Permit**

Code 1NRS, 1SRS, 1NWS, and 1SWS are used to report NOx and SOx emissions by SCC from all devices which are exempt from permit under Rule 219 or from all devices operating without a permit. Starting January 1, 1998, these records shall be used to report emissions from all devices in each of these category.

Location	Field	Length	Description
1-4	Record Identifier	4	1NRS, 1SRS, 1NWS, or 1SWS
5-12	Date Emitted	8	End date of the reporting period in the format "YYYYMMDD"
13-20	SCC	8	Source Classification Code.
21-29	Total Emission	9(#####.##)	Enter the total emission in lb to 2 decimal places. Omit the decimal point, right justify and zero fill. No negative numbers.
30-128	Filler	99	Blanks , used to fill unused remaining record positions

**Status Word Table**

The Status Word Table is used to compile the status word for the required reporting period. True is 1 and False is 0.

Location	Field	Length	Description
1-1	Valid Data	1	Enter true if valid data was obtained for the entire reporting period, else enter false
2-2	Calibration	1	Enter true if the monitoring system was calibrated during the reporting period, else enter false
3-3	Off-line	1	Enter true if the monitoring system was off-line at any time during the reporting period, else enter false.
4-4	Alternate Data Acquisition	1	Enter true if alternate data acquisition was used during the reporting period, else enter false.
5-5	Out of Control	1	Enter true if the CEMS was out of control during the reporting period, else enter false.
6-6	Fuel Switch	1	Enter true if more than one fuel type was used during the reporting period, else enter false.
7-7	10% range	1	Enter true if concentration was reported at 10% valid range when concentration value was below 10%, else enter false.
8-8	lower than 10% range	1	Enter true if concentration was reported at an actual value less than 10% valid range, else enter false.
9-9	non-operational	1	Enter true if the RECLAIM NOx source being monitored is non-operational for the entire day, else enter false.

**Format for Correcting Emissions Reports**

Name	Description
Record Identifier	Record Identifier starting with "2"
Record to be corrected	All information contained in previously submitted record which is to be corrected, except the original Record Identifier field and the filler field.
Correct Record	The correct record containing all information for the record type, except the original Record Identifier field and the filler field.
Filler	This field is blank filled to complete the 128 character fixed length reporting record.

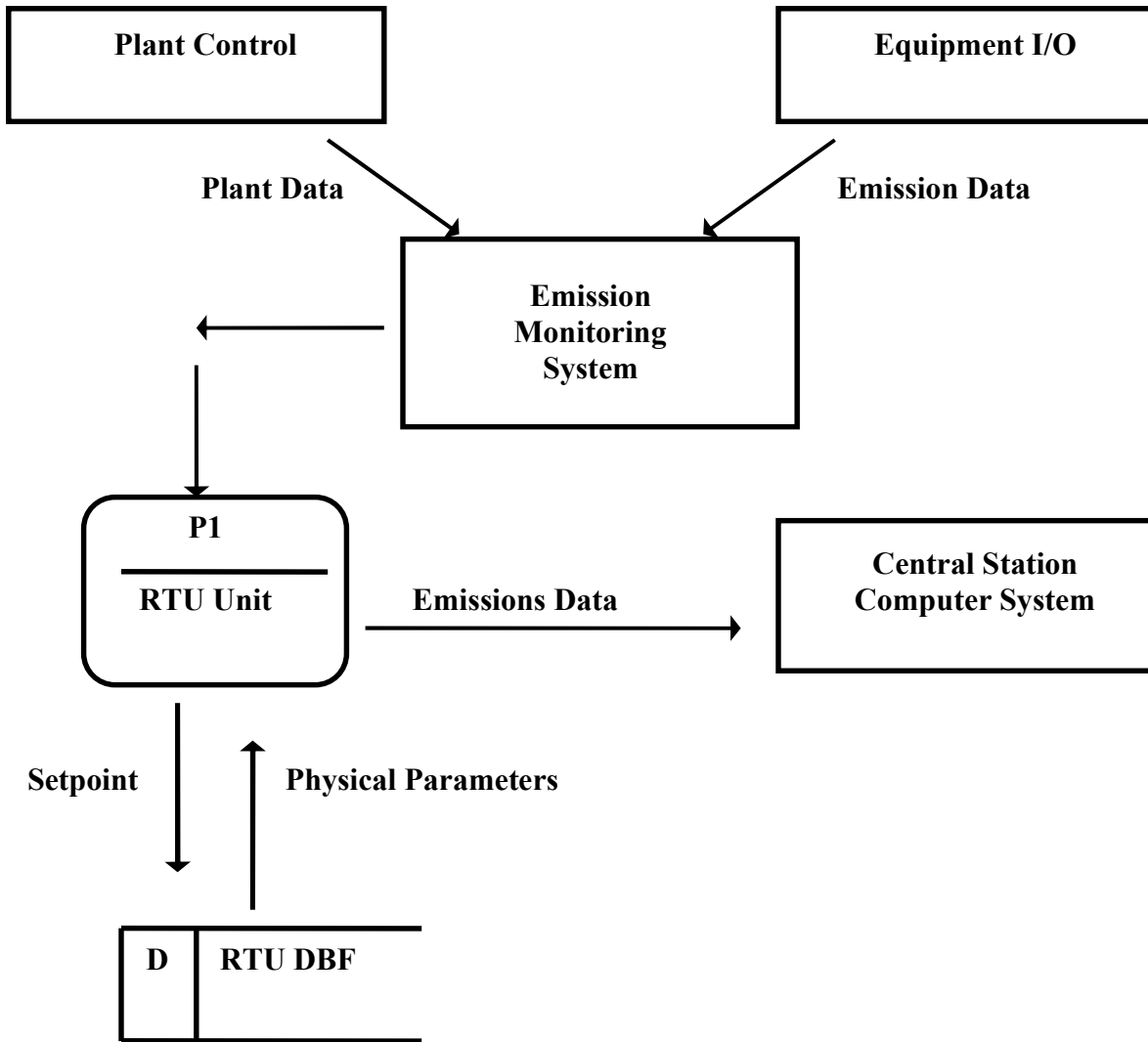
**Format for deleting Emissions Reports**

Name	Description
Record Identifier	Record Identifier starting with "3"
Record to be deleted	All information contained in previously submitted record which is to be deleted, except the original Record Identifier field and the filler field.

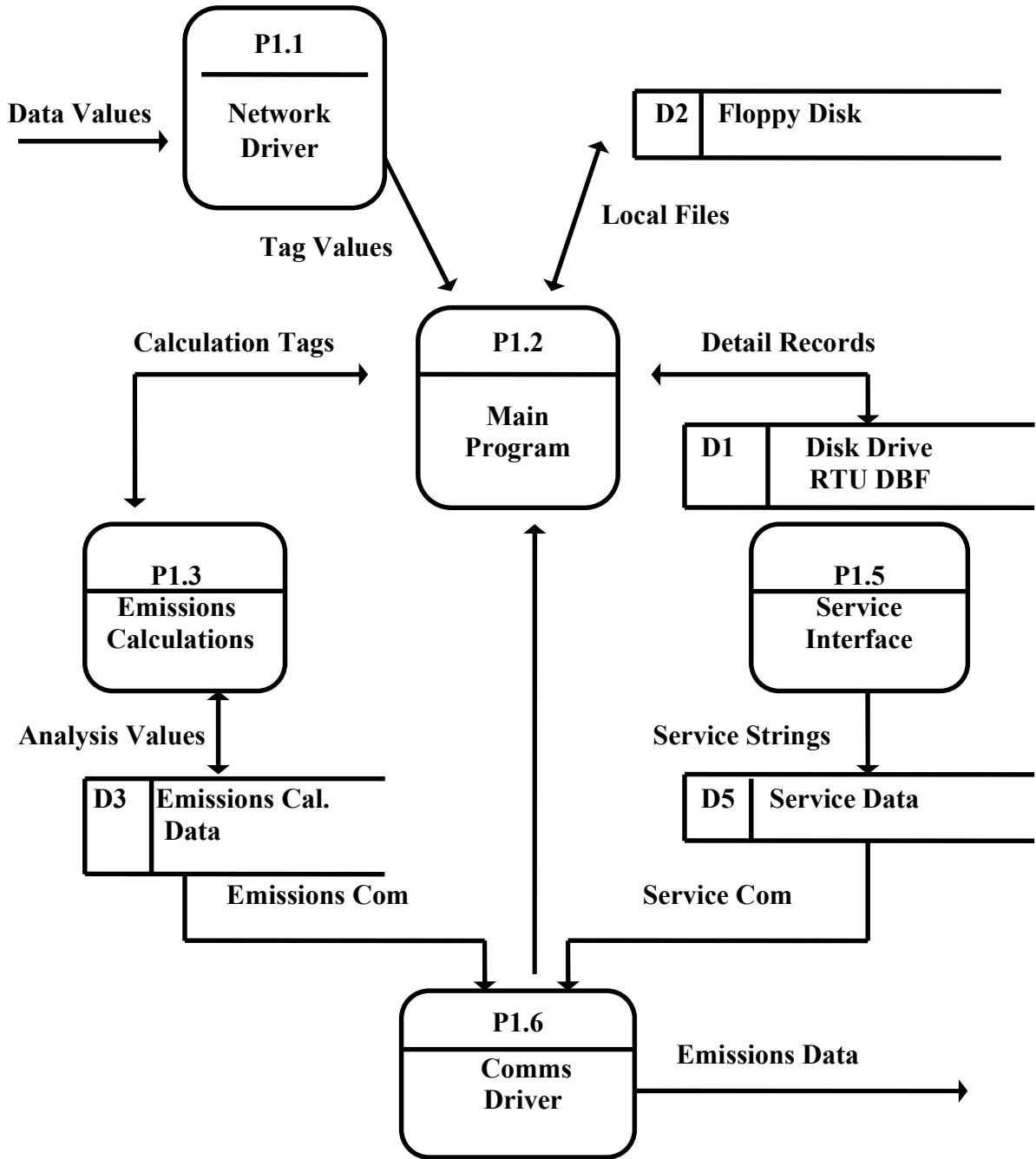
APPENDIX G

DIAGRAMS

### RTU Context Diagram



### RTU Data Flow Diagram



## ATTACHMENT H

(Adopted October 15, 1993)(Amended December 7, 1995)(Amended July 12, 1996)  
(Amended February 14, 1997)(Amended May 11, 2001)(Amended June 4, 2004)  
(Amended TBD)

### **PROPOSED AMENDED RULE 2015. BACKSTOP PROVISIONS**

#### **(RULE INDEX TO BE ADDED AFTER ADOPTION)**

- (a) Purpose  
This rule specifies RECLAIM program auditing requirements and backstop provisions.
- (b) Program Audits
- (1) Annual Audits  
The District will conduct an annual program audit. The annual audit will assess:
- (A) emission reductions;
  - (B) ~~per capita exposure to air pollution;~~emission control requirement impacts on stationary sources in the program compared to other stationary sources identified in the AQMP;
  - (C) facilities permanently ceasing operation of all sources;
  - (D) job impacts;
  - (E) average annual price of each type of RTC;
  - (F) availability of RTCs;
  - (G) ~~toxic risk reductions;~~emissions associated with equipment breakdowns pursuant to paragraph (d)(3);
  - (H) New Source Review permitting activity;
  - (I) ~~compliance issues, including~~ a list of facilities that were unable to reconcile emissions for that compliance year; and
  - (J) emissions trends/~~seasonal fluctuations;~~ and
  - (~~K~~) ~~emission control requirement impacts on stationary sources in the program compared to other stationary sources identified in the AQMP.; and~~
  - (~~L~~) ~~emissions associated with equipment breakdowns pursuant to paragraph (d)(3).~~

As part of the first three annual program audits, the Executive Officer will review the effectiveness of enforcement and protocols and recommend

revisions to the protocols to achieve improved measurement and enforcement of RECLAIM emission reductions while minimizing administrative cost to the District and RECLAIM participants. The first audit will be presented to the Governing Board in a public hearing on or before January 1996, ~~and by March of each subsequent year.~~ Beginning [Date of Adoption], Annual-annual audits will be duly noticed to the public, including a statement that the list specified in subparagraph (b)(1)(I) is available made publicly available by June of each subsequent year and included in Governing Board meeting materials. The audit report will be included henceforth in the District annual performance report to the California legislature.

(2) Mapping of Emissions

The Executive Officer will maintain, on a quarterly basis, a District-wide map indicating the most current sum of certified emissions. The information used to maintain the map will be obtained from the Quarterly Certification of Emissions and APEP required of Facility Permit holders pursuant to Rule 2004 - Requirements.

(3) Three-Year Audit

In 1997, at the close of the third year of trading, the District will conduct or commission a comprehensive audit to evaluate the performance of RECLAIM. This comprehensive audit will be presented to the Governing Board in a public hearing in the year 1998. The Governing Board will evaluate the performance of the program against the following criteria:

- (A) RECLAIM has produced the emission reductions required;
- (B) public health exposure to criteria air pollution has been significantly reduced, and public health exposure to toxics has not significantly increased as a result of RECLAIM;
- (C) RECLAIM has not accelerated business shutdowns, job loss or shifts in the occupational structure of the region;
- (D) the price of credits and the trading activity in each market has demonstrated adequate supply and demand;
- (E) the emission monitoring, recordkeeping, and penalty provisions of RECLAIM have produced a strong compliance program and adequate deterrence of violations;
- (F) RECLAIM is consistent with the provisions of the Federal Clean Air Act and the California Clean Air Act;

- (G) the emission factors listed in Rule 2002 - Allocations for Oxides of Nitrogen (NO<sub>x</sub>) and Oxides of Sulfur (SO<sub>x</sub>), Tables 1 and 2 are consistent with and appropriate for any recent technology advancements;
  - (H) RECLAIM has not resulted in disproportionate impacts measured in terms of required emission reductions, on stationary sources in the program, compared to other stationary sources identified in the AQMP;
  - (I) whether RECLAIM should include a broad spectrum of sources, including mobile, area and stationary; and
  - (J) control technology has advanced as much as projected under the AQMP.
- (4) Reports to the Governing Board
- The Hearing Board will present a written report to the District Governing Board regarding any increases in annual Allocations issued pursuant to permit appeals. The Executive Officer will report to the District Governing Board, any recommendations necessary to maintain equivalency. These reports shall be incorporated into the Annual Program Audit Report prepared pursuant to Rule 2015(b)(1). The Executive Officer will propose to the Governing Board, any AQMP amendments necessary to make up for any shortfall resulting from adjustments to Allocations issued pursuant to Hearing Board appeals. In addition, the Executive Officer will propose to the Governing Board rule amendments to adjust RECLAIM Allocations if the Hearing Board issues Allocation adjustments that create a shortfall and are of a type which, if made by the Executive Officer during the issuance of initial Facility Permits, would have resulted in altered Allocations and rates of reduction for RECLAIM facilities.
- (5) Program Amendment
- The District reserves the right to amend the program pursuant to program evaluations. Nothing in District rules shall be construed to limit the District's authority to condition, limit, suspend or terminate any RTCs or the authorization to emit which a Facility Permit represents.
- (6) Should the average RTC price be determined, pursuant to Rule 2015 (b)(1)(E), to have exceeded \$15,000 per ton, within six months of the

determination thereof, the Executive Officer shall submit to the Air Resources Board and the Environmental Protection Agency the results of an evaluation and review of the compliance and enforcement aspects of the RECLAIM program, including the deterrent effect of Rule 2004 paragraphs (d)(1) through (d)(4). This review shall be in addition to the audits to be performed pursuant to Rule 2015. The evaluation shall include, but not be limited to, an assessment of the rates of compliance with applicable emission caps, an assessment of the rate of compliance with monitoring, recordkeeping and reporting requirements, an assessment of the ability of the South Coast Air Quality Management District to obtain appropriate penalties in cases of noncompliance, and an assessment of whether the program provides appropriate incentives to comply. The Executive Officer shall submit, with the results of the evaluation, either a recommendation that paragraphs (d)(1) through (d)(4) be continued without change, or amendments to the RECLAIM rules setting forth revisions to paragraphs (d)(1) through (d)(4) of Rule 2004, if the District's Governing Board determines that revisions are appropriate in light of the results of the evaluation.

- (7) Power Producing Facilities shall rejoin the full RECLAIM program in the 2004 compliance year only if it is determined by the Governing Board in a public hearing prior to July 2003 that their reentry will not result in any negative impact on the remainder of the RECLAIM facilities or on California's energy security needs.

(c) AQMP Revisions

- (1) In conjunction with the preparation of future AQMP revisions, the Executive Officer shall evaluate the relative potential emission reductions between RECLAIM and non-RECLAIM sources. Said evaluation shall include consideration of technology advancements and cost-effectiveness. The Executive Officer will propose to the Governing Board, AQMP revisions which ensure that any increases in Allocations which occur based on any adjustments made pursuant to Rule 2002 (c)(12), Rule 2015 (c)(2), and Rule 2015 (e) shall be offset in the AQMP.
- (2) In conjunction with the preparation of future AQMP revisions, the Executive Officer will quantify additional energy demand and the potential need for increased Allocations resulting from implementation of

the AQMP. In accordance with the results of the evaluation, the Executive Officer will propose amendments to Rule 2002, if appropriate, and if amendments are adopted, the Executive Officer will recalculate the Allocations for the year 2003 and subsequent years, and will issue these Allocations to affected electric generating and natural gas distribution facilities. The Executive Officer's evaluation will establish a need for any such increase in Allocations.

(3) Evaluation of Emission Factors

(A) In conjunction with the preparation of the 1994 AQMP revision, the Executive Officer will complete the evaluation of the ending emission factors found in Tables 1 and 2 of Rule 2002 for the source categories listed in subparagraph (c)(3)(B) of this rule. The Executive Officer shall take into account the environmental, energy, and economic impacts by each source category in evaluating the achievability of NO<sub>x</sub> emission reduction technologies for each source category. In accordance with the results of the evaluation, the Executive Officer will propose amendments to Rule 2002, if appropriate, and if amendments are adopted, the Executive Officer will recalculate and reissue all affected Allocations for RECLAIM facilities in the source categories found in subparagraph (c)(3)(B). The Executive Officer will propose that any increases in Allocations which occur based on any adjustments made pursuant to this provision shall be offset in the AQMP.

(B) The Executive Officer will reevaluate the ending emission factors for the following source categories in accordance with subparagraph (c)(3)(A):

- (i) glass melting furnaces;
- (ii) gray cement kilns;
- (iii) steel slab reheating, flat rolled product annealing and flat rolled product galvanizing furnaces;
- (iv) metal melting furnaces;
- (v) hot mix asphalt operations; and
- (vi) petroleum coke calciners (NO<sub>x</sub> only).

(C) The Executive Officer will reevaluate the accuracy of emission factors for SO<sub>3</sub> emissions from petroleum refineries. In

accordance with the results of the evaluation, the Executive Officer will propose amendments to Regulation XX, which may include, but are not limited to:

- (i) enhanced monitoring requirements; and
- (ii) revision of Allocations.

- (D) For gray portland cement kilns, the operator may submit a plan no later than August 1, 1996 for the Executive Officer's approval which sets forth an alternative to the NOx emissions factor listed in Table 1 of Rule 2002. The plan shall include: (i) a demonstration of indirect firing with a low-NOx burner and mid kiln firing NOx reduction technologies; and (ii) emission testing pursuant to District approved methods of such demonstration that shall be completed and submitted to the AQMD by March 1, 1998. If the demonstration is completed in accordance with the requirements and timeline specified in this subparagraph and the demonstration of this emission factor shows a higher NOx emission factor than the emission factor listed in Table 1 of Rule 2002, the Executive Officer shall change the NOx ending emission factor and reissue all affected Allocations for RECLAIM facilities for gray cement kilns.

(d) Program-Specific Backstops

- (1) Based on annual and three-year audits conducted pursuant to paragraphs (b)(1) and (b)(3), or upon discovery by the Executive Officer, the Executive Officer will propose that the Governing Board amend the program to address any specific program problems. In addition, upon discovery that actual emissions from RECLAIM sources exceeded Allocations for any annual period by five percent or greater, the Executive Officer will propose amendment to the RECLAIM program to the Governing Board. Recommendation may include, but are not limited to:
- (A) restricting trading;
  - (B) requiring pre-approval of trades;
  - (C) enhanced monitoring;
  - (D) increasing rates of reduction;
  - (E) implementing technology-specific emission reductions; and
  - (F) increased penalties.

- (2) If such program adjustments are determined to have failed to correct the specific program problems, the Executive Officer shall recommend that the Governing Board, after holding a Public Hearing, consider reinstating all or a portion of the source category-specific emission limits or control measures contained in the then current AQMP in lieu of the RECLAIM program.
- (3) Beginning with the Annual Audit for the 2004 compliance year, conducted pursuant to paragraph (b)(1), the Executive Officer will:
  - (A) annually compare the total quantity of NO<sub>x</sub> and SO<sub>x</sub> breakdown emissions that were not counted against RECLAIM facility annual Allocations, pursuant to Rule 2004(i)(3)(D), to the amount of unused RTCs for the entire RECLAIM program for the same compliance year covered in the Annual Audit, and
  - (B) subtract the full amount of unmitigated breakdown emissions from unused RTCs available, and if the unmitigated breakdown emissions exceed the unused RTCs for the same compliance year covered by the Annual Audit, any excess breakdown emissions remaining will either be offset:
    - (i) by adjusting all RTC holdings from the facilities that had unmitigated breakdown emissions from the compliance year following the completion of the Annual Audit based on a proportion of each facility's contribution to the total amount of unmitigated breakdown emissions, applied to the excess breakdown emissions remaining, and rounded to the nearest pound; and/or
    - (ii) with RTCs obtained by the Executive Officer from the compliance year following the completion of the Annual Audit in an amount sufficient to offset the unmitigated breakdown emissions.
- (e) **Severability, Effect of Judicial Order**

In the event that any portion of this regulation is held by judicial order to be invalid or inapplicable with respect to any source or category of sources, such order shall not affect the validity or applicability of this regulation to any other sources. In such event, all emission limitation provisions listed in Rule 2001 Table 1 and Table 2, which in the absence of Rule 2001 would be applicable to

such source or category of sources, shall become effective immediately; or if the emission limitation provisions require the installation of control equipment, one year after such order. In addition, the Executive Officer will, as expeditiously as possible, propose rules for adoption by the Governing Board which will require that each source or source category affected by the order comply with emission limitations representing Best Available Retrofit Control Technology, as defined in Health and Safety Code Section 40406.

ATTACHMENT I



**South Coast  
Air Quality Management District**

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • [www.aqmd.gov](http://www.aqmd.gov)

**SUBJECT: NOTICE OF EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT**

**PROJECT TITLE: PROPOSED AMENDED RULE 2011 – REQUIREMENTS FOR MONITORING, REPORTING, AND RECORDKEEPING FOR OXIDES OF SULFUR (SOX) EMISSIONS, PROPOSED AMENDED RULE 2012 – REQUIREMENTS FOR MONITORING, REPORTING, AND RECORDKEEPING FOR OXIDES OF NITROGEN (NOX) EMISSIONS, AND PROPOSED AMENDED RULE 2015 – BACKSTOP PROVISIONS**

Pursuant to the California Environmental Quality Act (CEQA) Guidelines, the South Coast Air Quality Management District (South Coast AQMD), as Lead Agency, has prepared a Notice of Exemption pursuant to CEQA Guidelines Section 15062 – Notice of Exemption for the project identified above.

If the proposed project is approved, the Notice of Exemption will be filed for posting with the county clerks of Los Angeles, Orange, Riverside, and San Bernardino Counties. The Notice of Exemption will also be electronically filed with the State Clearinghouse of the Governor’s Office of Land Use and Climate Innovation for posting on their CEQAnet Web Portal which may be accessed via the following weblink: <https://ceqanet.lci.ca.gov/Search/Recent>. In addition, the Notice of Exemption will be electronically posted on the South Coast AQMD’s webpage which can be accessed via the following weblink: <http://www.aqmd.gov/nav/about/public-notices/ceqa-notices/notices-of-exemption/noe---year-2026>.

**NOTICE OF EXEMPTION FROM THE  
CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

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**To:** County Clerks for the Counties of Los Angeles, Orange, Riverside, and San Bernardino; and Governor's Office of Land Use and Climate Innovation – State Clearinghouse

**From:** South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765

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**Project Title:** Proposed Amended Rule 2011 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SO<sub>x</sub>) Emissions, Proposed Amended Rule 2012 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO<sub>x</sub>) Emissions, and Proposed Amended Rule 2015 – Backstop Provisions

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**Project Location:** The proposed project is located within the South Coast Air Quality Management District's (South Coast AQMD) jurisdiction, which includes the four-county South Coast Air Basin (all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties), and the Riverside County portion of the Salton Sea Air Basin and the non-Palo Verde, Riverside County portion of the Mojave Desert Air Basin.

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**Description of Nature, Purpose, and Beneficiaries of Project:** Proposed Amended Rule (PAR) 2011, PAR 2012, and PAR 2015 seek to update and modernize the emissions reporting and annual auditing requirements in Regulation XX – Regional Clean Air Incentives Market (RECLAIM). PAR 2011 and PAR 2012 establish a new compliance option which will allow the use of an alternative electronic reporting system approved by the Executive Officer in lieu of using a modem-based reporting system. PAR 2015 streamlines and updates the requirements for RECLAIM annual audit reports by: 1) removing the “per capita exposure to air pollution” and “toxic risk reductions” components, as those items are covered comprehensively in South Coast AQMD's Multiple Air Toxics Exposure Study; 2) clarifying the focus of compliance assessments; 3) removing the requirement to include seasonal fluctuations as historical data has not shown significant seasonal changes; 4) modifying how the audit report is provided to the Governing Board; and 5) revising the month when the RECLAIM annual audit is published. Minor corrections and clarifications to PAR 2011, PAR 2012, and PAR 2015 are also included. While no emission reductions are expected, expanding the emission reporting methods available to facilities for demonstrating compliance with the RECLAIM program, streamlining the annual audit report requirements, and updating the annual audit report procedures will benefit stakeholders by providing improved clarity for implementing the applicable requirements.

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**Public Agency Approving Project:**  
South Coast Air Quality Management District

**Agency Carrying Out Project:**  
South Coast Air Quality Management District

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**Exempt Status:** CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption

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**Reasons why project is exempt:** South Coast AQMD, as Lead Agency, has reviewed the proposed project (PAR 2011, PAR 2012 and PAR 2015) pursuant to: 1) CEQA Guidelines Section 15002(k) General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA; and 2) CEQA Guidelines Section 15061 Review for Exemption, procedures for determining if a project is exempt from CEQA. It can be seen with certainty that there is no possibility that implementation of PAR 2011, PAR 2012 and PAR 2015 may have a significant adverse effect on the environment because the proposed project includes clarifications and administrative changes without requiring any physical modifications. Therefore, the proposed project is exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption.

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NOTICE OF EXEMPTION FROM CEQA (concluded)

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**Date When Project Will Be Considered for Approval (subject to change):**

South Coast AQMD Governing Board Public Hearing: June 5, 2026

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**CEQA Contact Person:**

Farzaneh Khalaj, Ph.D.

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**Proposed Project Contact Person:**

Isabelle Shine

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(909) 396-3064

**Email:**

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**Date Received for Filing:** \_\_\_\_\_

**Signature:** (Signed and Dated Upon Board Approval)

Kevin Ni

Program Supervisor, CEQA

Planning, Rule Development, and Implementation



Proposed Amended Rule 2011 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SO<sub>x</sub>) Emissions

Proposed Amended Rule 2012 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO<sub>x</sub>) Emissions

Proposed Amended Rule 2015 – Backstop Provisions

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Board Meeting

**JUNE 5, 2026**

# RECLAIM Background

2

Regional Clean Air Incentives Market (RECLAIM) was adopted on October 15, 1993

Includes two markets for facilities with NO<sub>x</sub> or SO<sub>x</sub> emissions  $\geq$  4 tons per year

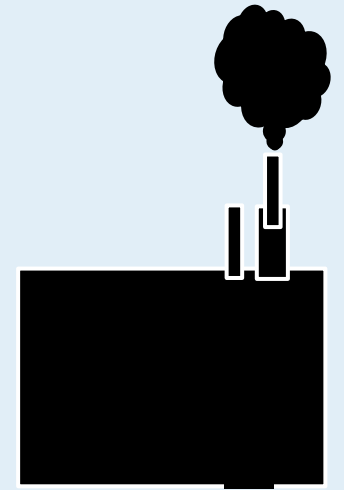
Facilities were initially issued an allocation of RECLAIM Trading Credits (RTCs)

- Facilities must hold RTCs that are equal to or greater than their actual emissions

RECLAIM was designed to achieve emission reductions and allow compliance flexibility



**RTC Holdings**  
10,000 lbs/year



**Actual Emissions**  
8,000 lbs/year

# Background on Proposed Amended Rules

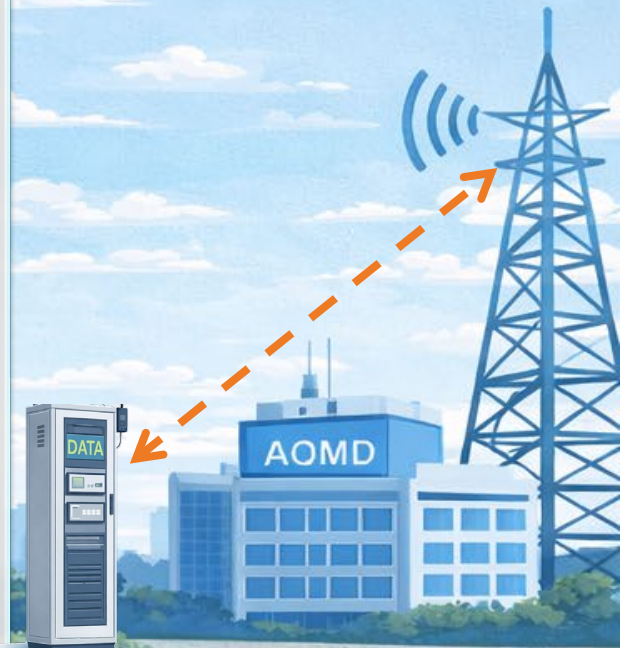
## Rule 2011 and Rule 2012

Specifies monitoring, reporting, and recordkeeping requirements

## Rule 2015

Specifies backstop provisions and RECLAIM auditing requirements

- RECLAIM annual audit includes an evaluation of emission reductions and trends, price and availability of RTCs, job impacts, and toxic risk reductions
  - Audits are the basis to trigger backstop provisions
- Backstop provisions ensure that amendments are proposed if program problems are identified (e.g., annual actual emissions exceed allocations by five percent or greater)



# Proposed Amended Rules 2011 and 2012

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## Outdated Modems

- ▶ Difficult to maintain or replace obsolete models of modems
- ▶ Information can now be sent electronically without modem



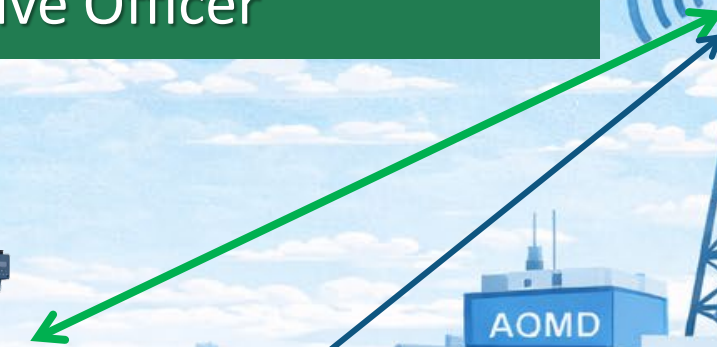
## Rule Language Restriction

Current rule language specifies that a modem, with no alternative option, is required for daily data transmittal for major source devices



## Incorporate Alternative Reporting Method

Allow an alternative electronic reporting system approved by the Executive Officer



## Streamlined Audit

- Historical data has not shown significant seasonal fluctuations
- MATES evaluates items related to air toxics more comprehensively, as RECLAIM regulates NO<sub>x</sub> and SO<sub>x</sub>

### Proposed Amendments

- Streamlining items related to emission trends and compliance issues
- Removing items analyzed in MATES and AB 2588 annual report

## Report Procedures

- Rule 2015 requires the annual audit to be presented by March
- Limited time to complete facility compliance audits and prepare the annual audit report

### Proposed Amendments

- Provide written annual audit report with no presentation
- Revise the annual audit due date to June

# Impact Assessments

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## California Environmental Quality Act (CEQA)

- Proposed Amended Rules 2011, 2012, and 2015 contain administrative changes which will not require physical modifications that would result in adverse environmental impacts
- A Notice of Exemption will be prepared

## Socioeconomic Impact Assessment

Not required by Health and Safety Code Sections 40440.8 and 40728.5 because:

- Proposed Amended Rules 2011, 2012, and 2015 contain administrative changes which will not significantly affect air quality or emission limitations
- No socioeconomic impacts expected

# Staff Recommendation

## Adopt Resolution:

- Determining that Proposed Amended Rule 2011, Proposed Amended Rule 2012, and Proposed Amended Rule 2015 are exempt from the requirements of CEQA
- Amending Rule 2011, Rule 2012, and Rule 2015