

### **RECLAIM REMOTE TERMINAL UNIT (RTU)**

### **Clarifications to Data Record Format**

- Data records filled with spaces up to 128 characters. (No tilde character).
- Password field added to Transmitter Record.
- **Transmitter ID initialized to Facility ID.**
- **Device ID listed in the Facility Permit is used to identify each emission source.**
- New record identifiers added see Record Identifiers Summary Table.
- <sup>1</sup> The phone number for sending valid data to SCAQMD is (877)727-1117.
- The phone number for sending test data to SCAQMD is (909)396-3947.

#### **Questions?** :

For questions or additional information please contact:

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## **COMMUNICATION DETAILS :**

A series of 1-800 telephone numbers will be provided by SCAQMD for the Remote Terminal Units (RTU) and Computers. Communications will be XMODEM protocol conducted at 1200 Baud, at 8-Data Bits, No Parity, and 1 Stop Bit. User emissions data will be sent to the SCAQMD in the following manner:

(also reference chart on the next page)

- 1. The transmitter will call the Host machine which will answer and respond by raising carrier.
- 2. The transmitter then raises carrier itself and awaits a response from the Host Computer which will send a NAK every 3 seconds for up to 3 tries.
- 3. Upon trapping for these messages, the facility computer sends emission data using XMODEM with a checksum (CKSUM) calculated on each data record and it's contents.
- 4. Upon successful receipt of this file, the Host machine responds with an acknowledgment (ACK).
- 5. The facility machine will then respond with an end of transmission character (EOT) which the Host machine subsequently waits for.
- 6. The Host machine then replies with another acknowledgment.
- 7. At this point communication under XMODEM protocol ends.
- 8. The host's enhanced protocol now oversees the remaining communication.
- 9. The facility machine now sends an inquiry (ENQ) message every 3 seconds for up to 3 tries.
- 10. The Host machine sends a response packet. The response packet will contain the number of emission records sent and a reference number or an error message.
- 11. Having successfully obtained the response packet, the facility sends back an acknowledgment (ACK) every 3 seconds for up to 3 tries. (File will be saved if ACK is received before 9 seconds)
- 12. The Host machine will answer by sending another end of transmission character (EOT).
- 13. At this point the file has been successfully received by the host.
- 14 Both machines can now proceed to end communication and hang up.

Terminal	Data Flow	Host
Calls	==>	Answers
Raise Originate Carrier	<=>	Raise Carrier
	<==	Sends NAK
		3 Second Delay (up to 3 tries)
<soh> <blk> <ckblk></ckblk></blk></soh>	==>	
[128 Char. Data(1n)] <cksum></cksum>		
	<==	Send ACK
Send EOT	==>	
	<==	Send ACK (XMODEM protocol ends)
Send ENQ	==>	
3 Second Delay (up to 3 tries)		
	<==	Send Response Packet
Send ACK	==>	
3 Second Delay (up to 3 tries)		
	<==	Send EOT (file successfully captured by Host)
Hang-Up		Hang-Up

**Communication Reference Chart** 

Response Packet:

Upon receipt of the data file, the host will send a response packet which indicates that the data file was good, or that it was bad. The response packet is formatted as follows:

<STX> [Response Message] <ETX> <LRC>

The response message format varies for good and bad data files as follows:

Response message for good data file:

OK\_ \_#####\_sdddlyyjjjhhmmss

Response message for bad data file:

BAD\_#####\_[ASCII text message (up to 23 characters)]

where:

"\_" = Space (character decimal 32).
###### = The number of records received.
sdddlyyjjjhhmmss = 16 digit reference number (receipt) formatted as follows:

s = system# (alpha/num.) ddd = Ldev (MDI port#) (alpha/num.) l = Leaf/Modem no. (port Modem#) (alpha/num.) yy = Year (num.)  $\begin{array}{ll} jjj &= Julian \ day \ of \ year \ record \ sent \ to \ PDN \ (001 - 365) \\ hh &= Hour \ (00 - 23) \\ mm &= Minutes \ (00 - 59) \\ ss &= Seconds \ (00 - 59) \end{array}$ 

Reference Guide:

<stx></stx>	Hex 02
<etx></etx>	Hex 03
<lrc></lrc>	XOR of all bytes in response excluding <stx> but including <etx></etx></stx>
<nak></nak>	Hex 15
<ack></ack>	Hex 06
<soh></soh>	Hex 01
<blk></blk>	Sequential Block Number
<ckblk></ckblk>	One's complement of Sequential Block Number
<cksum></cksum>	One Byte Sum of all the Data Bytes
<eot></eot>	Hex 04
<enq></enq>	Hex 05

## The following are the ERS error codes:

Error	
<u>Number</u>	Description
0001	PASSWORD
0002	TRANSMITTER ID
0003	FACILITY ID
0004	DEVICE ID
0005	RECORD TYPE
0006	RECORD FORMAT
0007	FAC TOTAL
0008	TRANSMITTER INACTIVE
0012	FACILITY INACTIVE
0013	DEVICE INACTIVE
0014	OUT OF ORDER (Record is not 128 bytes or characters long)
0020	ILLEGAL CHARACTER
0060	ILLEGAL DIGIT
0061	BAD DATE
0062	EXPECTED Y OR N
0063	EXPECTED 1 OR 0
0064	FILLER NON BLANK
0069	CALL PDN

## **DATA FILE DESCRIPTION**

A properly composed data file is comprised of the following data records:

- Transmitter Record (1A)
- Facility Record (1F)
- Emission Detail Record(s) [At least one record]
  - -New Report: 5 existing and 115 new records
  - -Update Previous Report: 120 new records
  - -Delete Previous Report: 120 new records
- Facility Total Record (1FT)
- Final Total Record (1T)

### **DATA RECORD DESCRIPTION :**

The following pages contain the data record format used to report compliance information. RTU and computer will use the same file record format.

Record Identifier for		for	
Adding a	Updating a	Deleting a	Description
record	record	record	
1A*			Transmitter Record
1F*			Facility Record
1FT*			Facility Total Record
1T*			Final Total Record
1NP	2NP	3NP	Quarterly NOx Emissions Report from each Process Unit
1NL	2NL	3NL	Monthly NOx Emissions Report from each Large Source
1NM	2NM	3NM	Daily NOx Emissions Report from each Major Source
1SP	2SP	3SP	Quarterly SOx Emissions Report from each Process Unit
1SM	2SM	3SM	Daily SOx Emissions Report from each Major Source
1NPF	2NPF	3NPF	Quarterly NOx Emissions Report from each Process Unit by Fuel Type
1SPF	2SPF	3SPF	Quarterly SOx Emissions Report from each Process Unit by Fuel Type
1NLF	2NLF	3NLF	Monthly NOx Emissions Report from each Large Source by Fuel Type
1NMF	2NMF	3NMF	Daily NOx Emissions Report from each Major Source by Fuel Type
1SMF	2SMF	3SMF	Daily SOx Emissions Report from each Major Source by Fuel Type
1NPS	2NPS	3NPS	Quarterly NOx Emissions Report from each Process Unit by SCC
1SPS	2SPS	3SPS	Quarterly SOx Emissions Report from each Process Unit by SCC
1NLS	2NLS	3NLS	Monthly NOx Emissions Report from each Large Source by SCC
1NMS	2NMS	3NMS	Daily Nox Emissions Report from each Major Source by SCC
1SMS	2SMS	3SMS	Daily SOx Emissions Report from each Major Source by SCC
1NMM	2NMM	3NMM	Monthly NOx Aggregate Emissions Report from all Major Sources at a facility
1SMM	2SMM	3SMM	Monthly SOx Aggregate Emissions Report from all Major Sources at a facility
1NMQ	2NMQ	3NMQ	Quarterly NOx Aggregate Emissions Report from all Major Sources at a facility
1SMQ	2SMQ	3SMQ	Quarterly SOx Aggregate Emissions Report from all Major Sources at a facility
1NLQ	2NLQ	3NLQ	Quarterly NOx Aggregate Emissions Report from all Large Sources at a facility
1NRF	2NRF	3NRF	Quarterly NOx Emissions Report by fuel type from all Rule 219 Exempt
			Equipment
1SRF	2SRF	3SRF	Quarterly SOx Emissions Report by fuel type from all Rule 219 Exempt
			Equipment
1NRS	2NRS	3NRS	Quarterly NOx Emissions Report by SCC from all Rule 219 Exempt Equipment
1SRS	2SRS	3SRS	Quarterly SOx Emissions Report by SCC from all Rule 219 Exempt Equipment
R	ecord Identifier	for	

#### **Record Identifiers Summary Table**

Adding a	Updating a	Deleting a	Description
record	record	record	
1NVF	2NVF	3NVF	Quarterly NOx Emissions Report by fuel type from each Equipment Operating
101/0	20175	201/15	
ISVF	2SVF	38VF	Quarterly SOx Emissions Report by fuel type from each Equipment Operating under a Various Locations Permit
1NVS	2NVS	3NVS	Quarterly NOx Emissions Report by SCC from each Equipment Operating under a Various Locations Permit
1SVS	2SVS	3SVS	Quarterly SOx Emissions Report by SCC from each Equipment Operating under a Various Locations Permit
1NWF	2NWF	3NWF	Quarterly NOx Emissions Report by fuel type from all Equipment Operating Without Permit or District assigned Device Ids
1SWF	2SWF	3SWF	Quarterly SOx Emissions Report by fuel type from all Equipment Operating Without Permit or District assigned Device Ids
1NWS	2NWS	3NWS	Quarterly NOx Emissions Report by SCC from all Equipment Operating Without Permit or District assigned Device Ids
1SWS	2SWS	3SWS	Quarterly SOx Emissions Report by SCC from all Equipment Operating Without Permit or District assigned Device Ids
1NPO	2NPO	3NPO	Ouarterly NOx Aggregate Emissions Report from all Process Units
1SPO	2SPO	3SPO	Ouarterly SOx Aggregate Emissions Report from all Process Units
1NXQ	2NXQ	3NXQ	Quarterly NOx Aggregate Emissions Report from all Rule 219 Exempt Equipment
1SXQ	2SXQ	3SXQ	Quarterly SOx Aggregate Emissions Report from all Rule 219 Exempt Equipment
1NTQ	2NTQ	3NTQ	Quarterly NOx Aggregate Emissions Report from all Equipment Operating under a Various Locations Permit
1STQ	2STQ	3STQ	Quarterly SOx Aggregate Emissions Report from all Equipment Operating under a Various Locations Permit
1NUQ	2NUQ	3NUQ	Quarterly NOx Aggregate Emissions Report from all Equipment Operating without a Permit
1SUQ	2SUQ	3SUQ	Quarterly SOx Aggregate Emissions Report from all Equipment Operating without a Permit

\* Header or trailer records

### **Code 1A - Transmitter Initialization Message**

The Code 1A data message 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 blank spaces.
5-10	SCAQMD Facility ID	6	The 6-digit SCAQMD facility ID of the facility submitting the data file. Right
			justify, zero fill.
11-16	Password	6	Password to verify acceptance. Left justify, fill with blank spaces.
17-128	Filler	112	Blank spaces, used to fill unused remaining record positions.

#### **Code 1F - Facility Identifier Message**

Location	Field	Length	Description
1-4	Record Identifier	4	Constant "1F" followed by 2 blank spaces.
5-10	SCAQMD Facility ID	6	The 6-digit SCAQMD facility ID for the facility whose emissions
			are being reported. Usually the same ID # as in 1A message. Right justify, zero fill.
11-128	Filler	118	Blank spaces, used to fill unused remaining record positions.

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

#### **Code 1FT - Facility Total Message**

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 space.
5-11	Number of Emission	7	The total number of emission data records reported for the facility
	Data Records		(excluding the 1A, 1F, 1T and the 1FT data records). Right justify,
			zero fill.
12-128	Filler	117	Blank spaces, used to fill unused remaining record positions .

#### **Code 1T - Final Total Message**

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 blank spaces
5-11	Number of Data	7	The total number of all data records reported (including the Code 1T) in the data file. Right justify, zero fill.
12-128	Filler	117	Blank spaces, used to fill unused remaining record positions .

### Code 1NP and 1NL - $NO_X$ Process Unit and Large Source Messages

The Code 1NP data record is used to report quarterly  $NO_x$  emissions from each  $NO_x$  Process Unit with SCAQMD assigned Device ID. The Code 1NL data record is used to report monthly NOx emissions from each NOx Large Source with SCAQMD assigned Device ID.

Location	Field	Length	Description
1-4	Record Identifier	4	"1NP" or "1NL"followed by 1 blank space
5-10	SCAQMD Device	6	The SCAQMD assigned Device ID for the equipment source. No letters,
	ID		left justify and fill with blank spaces
11-18	Date Emitted	8	The end date of the reporting period 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	Blank spaces, used to fill unused remaining record positions

#### Code 1NM - NOx Major Source Message

The Code 1NM data record is used to report daily  $NO_X$  emissions from each Major  $NO_X$  sources with SCAQMD assigned Device ID.

Location	Field	Length	Description
1-4	Record Identifier	4	Constant "1NM" followed by 1 blank space
5-10	SCAQMD Device	6	The SCAQMD assigned Device ID for the equipment source. No letters,
	ID		left justify and fill with blank spaces
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	Blank spaces, used to fill unused remaining record positions

#### Code 1SP - SO<sub>X</sub> Process Unit Message

The Code 1SP data record is used to report quarterly SOx emissions from each SOx Process Units with SCAQMD assigned Device ID.

Location	Field	Length	Description
1-4	Record Identifier	4	Constant "1SP" followed by 1 blank space
5-10	SCAQMD Device	6	The SCAQMD assigned Device ID for the equipment source. No
	ID		letters, left justify and fill with blank spaces
11-18	Date Emitted	8	The end date of the reporting period 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	Blank spaces, used to fill unused remaining record positions

#### Code 1SM - SOx Major Source Message

The Code 1SM data record is used to report daily SOx emissions from each Major SOx sources with SCAQMD assigned Device ID.

Location	Field	Length	Description
1-4	Record Identifier	4	Constant "1SM" followed by 1 blank space
5-10	SCAQMD Device ID	6	The SCAQMD assigned Device ID for the equipment source. No letters, left justify and fill with blank spaces
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	Blank spaces, used to fill unused remaining record positions

#### Code 1NMF and 1SMF - NOx and SOx Major Source Emissions Report by Fuel Type Messages

The Codes 1NMF and 1SMF data records are used to report NOx and SOx emissions, respectively, by fuel type from each Major source with SCAQMD assigned Device ID.

Location	Field	Length	Description
1-4	Record Identifier	4	1NMF or 1SMF
5-10	SCAQMD Device	6	The SCAQMD assigned Device ID for the equipment source. No
	ID		letters, left justify and fill with blank spaces
11-18	Date Emitted	8	The date emitted in the format "YYYYMMDD"
19-38	Fuel Type	20	Code for Fuel Type utilized. Left justify, fill with blank spaces
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	Blank spaces, used to fill unused remaining record positions

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

The Codes 1NMS and 1SMS data records are used to report daily NOx and SOx emissions, respectively, by Source Classification Codes (SCC) from each Major source with SCAQMD assigned Device ID.

Location	Field	Length	Description
1-4	Record Identifier	4	1NMS or 1SMS
5-10	SCAQMD Device ID	6	The SCAQMD assigned Device ID for the equipment source. No letters, left justify and fill with blank spaces
11-18	Date Emitted	8	The date emitted in the format "YYYYMMDD"
19-26	SCC	8	Source Classification Code. Left justify, fill with blank spaces.
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	Blank spaces, 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 Messages

The Codes 1NLF, 1NPF and 1SPF data records are used to report NOx and SOx emissions by fuel type monthly from NOx Large source, and quarterly from NOx and SOx Process Units, respectively, with SCAQMD assigned Device IDs.

Location	Field	Length	Description
1-4	Record Identifier	4	1NLF, 1NPF, or 1SPF
5-10	SCAQMD Device	6	The SCAQMD assigned Device ID for the equipment source. No
	ID		letters, left justify and fill with blank spaces
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 justify, fill with blank spaces
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 - 128	Filler	81	Blank spaces, 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 Messages

The Codes 1NLS, 1NPS and 1SPS data records are used to report NOx and SOx emissions by SCC, monthly from NOx Large source, and quarterly from NOx and SOx Process Units, respectively, with SCAQMD assigned Device IDs.

Location	Field	Length	Description
1-4	Record Identifier	4	1NLS, 1NPS, or 1SPS
5-10	SCAQMD Device	6	The SCAQMD assigned Device ID for the equipment source. No
	ID		letters, left justify and fill with blank spaces
11-18	Date Emitted	8	End date of reporting period in the format "YYYYMMDD"
19-26	SCC	8	Source Classification Code. Left justify, fill with blank spaces
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 - 128	Filler	93	Blank spaces, 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 Messages

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 from all NOx and SOx Major Sources, NOx Large Sources, and NOx and SOx Process Units, respectively, within a facility.

Location	Field	Length	Description
1-4	Record Identifier	4	1NMM, 1SMM, 1NMQ, 1NLQ, 1NPQ, 1SMQ, 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	Blank spaces, 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 Messages

The Code 1NXQ and 1SXQ are used to report quarterly total NOx and SOx emissions, respectively, from all Rule 219 exempt equipment. Codes 1NTQ and 1STQ are used to report quarterly total NOx and SOx emissions, respectively, from equipment operating under a various locations permit (e.g. rental equipment). Codes 1NUQ and 1SUQ data records are used to report quarterly total NOx and SOx emissions, respectively, from equipment operating without a permit.

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	Blank spaces, 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 Messages**

The Code 1NVF and 1SVF data records are used to report quarterly NOx and SOx emissions, respectively, by fuel type from each device operating under a various location permit (e.g. rental equipment).

Location	Field	Length	Description
1-4	Record Identifier	4	1NVF or 1SVF
5-10	Permit Number	6	SCAQMD Permit Number. Left justify, fill with blank spaces
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 justify, fill with blank spaces
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.
48 - 128	Filler	81	Blank spaces, 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 Messages

The Code 1NVF and 1SVF data records are used to report quarterly NOx and SOx emissions, respectively, by SCC from each device operating under a various location permit (e.g. rental equipment).

Location	Field	Length	Description
1-4	Record Identifier	4	1NVS or 1SVS
5-10	Permit Number	6	SCAQMD Permit Number. Left justify, fill with blank spaces
11-18	Date Emitted	8	End date of the reporting period in the format "YYYYMMDD"
19-26	SCC	8	Source Classification Code. Left justify, fill with blank spaces.
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	Blank spaces, 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 Messages

Codes 1NRF and 1SRF are used to report quarterly NOx and SOx emissions, respectively, by fuel type from all devices which are exempt from permit under Rule 219. Codes 1NWF and 1SWF are used to report quarterly NOx and SOx emissions, respectively, by fuel type from all devices operating without a permit.

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 justify, fill with blank spaces
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	87	Blank spaces, 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 Messages

Codes 1NRS and 1SRS are used to report quarterly NOx and SOx emissions, respectively, by SCC from all devices which are exempt from permit under Rule 219. Codes 1NWS and 1SWS are used to report quarterly NOx and SOx emissions, respectively, by SCC from all devices which are operating without a permit.

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. Left justify, fill with blank spaces
21-29	Total Emission	9	Enter the total emission in lb to 2 decimal places. Omit the decimal
			point, right justify and zero init. No negative numbers.
30-128	Filler	99	Blank spaces, 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. A TRUE value is set to 1 and a FALSE value is set to 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	1	Enter true if alternate data acquisition was used during the
	Acquisition		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% at any
			time during the reporting period, else enter false.
8-8	lower than	1	Enter true if concentration was reported at an actual value
	10% range		less than 10% valid range at any time during the reporting
			period, else enter false.
9-9	non-	1	Enter true if the RECLAIM NOX/SOX source being
	operational		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.

#### Sample Emission Detail Records for Updating Previous Reports

- Record Identifier: 2NM, 2NL, 2NP, 2SM, 2SP followed by 1 space
- Previously Reported Record to be corrected, i.e.:

2(space)(space) (space)(space)19970731000001225110000000 • Correct Record, i.e:

- 2(space) (space) (space)(space)19970731000004250110000000
- Filler blank spaces up to 128 characters.

The following is a diagram to describe the record usage and formatting:



#### **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

#### Sample Emission Detail Recordsfor Deleting Previous Reports

- Record Identifier: 3NM, 3NL, 3NP, 3SM, or 3SP followed by 1 space
- Record to be deleted, i.e.

2(space)(space)(space)(space)19970731000001225110000000

• Filler - blank spaces up to 128 characters.

#### **Sample Printout File**

 1A
 1234569999

 1F
 123456

 1NP
 70
 19990331000077700

 1NL
 75
 19990331000077700

 3NP
 10
 19990331000077700

 2NP
 1
 19990331000060001

 1NLQ19990331000025000
 1999033100005000

 1NRF19990331000660000
 1NRF1999033100066000

 1NRF19990331004567805
 000000100

 1NXQ19990331004567805
 1FT

 1FT
 0000013

## Fuel Codes.

Fuel Type	Description
AMB363	AMBER 363
BUTANE	Butane
COAL	Coal
СОКЕ	COKE
COKECOAL	COKE AND COAL
DIESEL	Diesel Fuel
DIG_GAS	DIGESTER GAS
FIELD_GAS	FIELD GAS
FUELOIL	FUEL OIL
FUEL_OIL_2	FUEL OIL NO. 2
FUEL_OIL_6	FUEL OIL NO. 6
GASOLINE	Gasoline
H2S	HYDROGEN SULFIDE
ISO_PENT	ISO-PENTANE
JP4	Jet Fuel (JP4)
JP5	JP-5
JPA	Jet Fuel (JPA)
LNFL_GAS	Landfill Gas
LPG	Liquified Petroleum Gas
METHANOL	Methanol
NAT_GAS	Natural Gas
OXY_FUEL	OXY-FUEL
PROCESS_GAS	PROCESS GAS
PROPANE	Propane
PSA_GAS	PSA GAS
REF_GAS	REFINERY GAS
TIRE_FUEL	TIRE DERIVED FUEL
WOOD	Wood

## **STEPS TO FOLLOW TO RECEIVE RTU/MODEM CERTIFICATION**

1. Submit an addendum with changes to an existing RTU submittal **OR** complete one for the facilities that have not complied with this requirement.

2. Transmit all record format types as required by the rule for your specific case.

3. Email (ghaddad@aqmd.gov) or fax him (909-396-2882) a copy of the file(s), for all record format types applicable to your specific case, which you previously transmitted, with explanation of what each field in a line or record means including your confirmation message. \*\*NOTE: You need to Email or fax

the explanation just ONCE. However, you SHALL transmit, as required by the RECLAIM RULES, all record format types applicable to your specific case to the 877-727-1117 line

4. Upon successful completion of all the above steps, each facility shall have all applicable record formats transmitted to the 877-727-1117 line.

5. I will then send a certification letter to the responsible person at the facility.

## **RTU Submittal Requirements**

- a. <u>Shop Drawing</u>:
  - i. Submit two (2) copies of the following in accordance with the applicable rule compliance dates.
    - o A Title Sheet
    - o Single Line Diagrams
    - o Wiring Diagrams or Run Sheets
    - o Physical Details of Custom Assemblies (System Schematic Drawing)
  - 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. <u>RTU Components List</u>:

- i. The RTU Component List shall contain the following information for all materials, components, devices, wire and equipment used:
  - o Quantity for that system.
  - o Description (generic).
  - o Manufacturers Name and Model number.
- c. <u>Software Design Description (SDD)</u>. Indicate how the developed software will meet the defined software requirements (Software description, software design, software drawings and flow charts). The SDD shall be based on ANSI/IEEE standards, specifically 1016 (SDD) and 730 (Quality Assurance).
- d. <u>Software Listing</u>. Provide a source code listing of all developed software required by the applicable emission monitoring requirements (Global parameters, selected procedures).
- e. <u>Additional Requirements Provision</u>. The District may request the facility operator to submit at a later date additional information not listed in the RTU submittal requirements a. thru d.