

Active Error codes in the Summary, Sequence, Formula, and LME Program



Error Code **ETS COULD NOT PROCESS THIS QUARTERLY REPORT** (*Status Code 6 error*)

ETS could not process the quarterly report due to a mainframe database problem or system problem. If the Stack/Unit/Pipe configuration has changed from the prior quarter, or if this report is for a new source that is reporting for the first time, ensure that all Stack/Unit/Pipe IDs match those identified in the Certificate of Representation Form and the Monitoring Plan previously submitted to EPA (or submit this information as soon as possible so that it can be processed and EPA's database updated accordingly). NOTE: If the report contains a common/multiple stack (or pipe) configuration, ensure that the Stack/Pipe ID records are the first in the file, sorted in alphanumeric order, followed by Unit ID records. If you cannot identify the source of the problem, contact your EPA analyst for assistance. Otherwise, correct the EDR and resubmit it before the submission deadline.

Error Code 2 **INVALID RECORD FORMAT FOR RECORD TYPE** (*Status Code 5 error*)

The record does not match the EDR format. Ensure that the fields are the correct length and data type (character, integer, or decimal).

Error Code 3 **INVALID DATE OR TIME REPORTED IN ONE OR MORE RECORDS** (*Status Code 5 error*)

An invalid date or time was reported in the Record Type identified above. Either the date lies outside the calendar quarter reported in RT 100 or the reported month is greater than 12, the day is greater than 31, or the hour is greater than 23. First, ensure the calendar year/quarter reported in RT 100 are correct. Next, review the example record displayed below to determine if the record format or date/time information are incorrect. Finally, determine if any records are for a different quarter and were erroneously included in this quarterly report (remove them and ensure all correct records are included). The quarterly report must be resubmitted to correct this problem.

Error Code 4 **NUMERIC FIELD IN HOURLY RECORD CONTAINS NON-NUMERIC DATA** (*Status Code 5 error*)

An invalid value was reported in the hourly record type identified above. The first occurrence of the problem is displayed below. Check each numeric field in the record to determine the presence of non-numeric data and ensure all data items are reported in the correct column locations according to the EDR Specifications. Correct the problem record(s) and resubmit the revised report before the submission deadline.

Error Code 5 **NUMERIC FIELD IN CUMULATIVE RECORD CONTAINS NON-NUMERIC DATA** (*Status Code 5*)

An invalid value was reported in the Cumulative Emissions Record Type identified above, for the Stack/Unit/Pipe ID displayed below. Check each numeric field in the record to determine the presence of non-numeric data and ensure all data items are reported in the correct column locations according to the EDR Specifications. Correct the problem record(s) and resubmit the revised report before the submission deadline.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 6 **NEGATIVE VALUE REPORTED IN CUMULATIVE EMISSIONS RECORD** (Status Code 5)

A negative value was reported in the Cumulative Emissions Record Type identified above, for the Stack/Unit/Pipe ID displayed below. Review the record to identify the invalid value(s) and review the associated hourly records. Correct the problem record(s) and resubmit the revised report before the submission deadline.

Error Code 7 **OPERATING TIME GREATER THAN 1.00 HOUR REPORTED IN RT 300** (Status Code 5 error)

The Operating Time reported in RT 300, column 18, was greater than 1.00 for one or more hours for the Stack/Unit/Pipe ID identified below. The Date/Time of the first occurrence of this problem is also displayed. The reported Operating Time cannot be greater than 1.00 hour. Review and correct the RT 300 to ensure that the correct Operating Time is reported for the hour. If the Stack/Unit/Pipe did not operate during the hour, report 0.00 for the Operating Time. If the Stack/Unit/Pipe operated during the hour, report the fraction of the clock hour during which operation occurred. Review and correct all occurrences of this problem and resubmit the report before the submission deadline.

Error Code 15 **SO2 EMISSIONS FROM QUARTERLY AND HOURLY RECORDS NOT EQUAL** (Status Code 5 error)

The Quarterly SO2 Mass Emissions value calculated from the hourly values does not match the value reported in RT 301, column 16. A difference of 0.5 ton or greater was found. The Quarterly SO2 Mass Emissions value was recalculated by multiplying each hourly SO2 value (in RT 310 or RT 313/314, as appropriate) by the Unit Operating Time or Fuel Usage Time for the hour, summing these values for the calendar quarter, and then converting the result to tons. Correct and resubmit the report before the submission deadline.

Error Code 16 **NOX RATES FROM QUARTERLY AND HOURLY RECORDS NOT EQUAL** (Status Code 5 error)

The quarterly NOx Emission Rate calculated from the hourly data does not equal the value reported in RT 301, column 36. A difference of more than 0.01 lb/mmBtu was found. The quarterly NOx emission rate was recalculated by summing the NOx rate values reported in RTs 320, 323, 324, and 325 and dividing by the number of these records, in accordance with equation F-9 from Part 75. Whenever two RT 324s are reported for the same hour, the average of the two records reported in RT 325 is used in the recalculation. Review the DAHS calculation, correct the problem and resubmit the report before the submission deadline.

Error Code 17 **CO2 EMISSIONS FROM QUARTERLY AND HOURLY RECORDS NOT EQUAL** (Status Code 5 error)

The quarterly CO2 Mass Emissions calculated from the hourly data does not equal the quarterly value reported in RT 301, column 62. A difference of more than 100 tons and 2% was found. EPA recalculated the quarterly value by weighting each hourly value reported in RT 330 by the operating time for the hour, summing these values, and adding any daily CO2 mass values reported in RT 331. Review the DAHS calculation, correct the problem and resubmit the file before the submission deadline.

Error Code 18 **HEAT INPUT FROM QUARTERLY AND HOURLY RECORDS NOT EQUAL** (Status Code 5 error)

The quarterly Heat Input value calculated from the hourly data does not equal the value reported in RT 301, column 82. A difference of more than 1000 mmBtu and 1% was found. EPA recalculated the quarterly value by weighting each hourly Heat Input value in RT 300 by the operating time for the hour, and then

Active Error codes in the Summary, Sequence, Formula, and LME Program

summing these values. Review the DAHS calculation, correct the problem and resubmit the file before the submission deadline.

Error Code 20 **SO2 MASS EMISSIONS RECORD NOT FOUND FOR OPERATING HOUR** (Status Code 5 error)

No Hourly SO2 Mass Emissions record (RT 310) was reported for an hour where the Operating Time reported in RT 300, column 18 was greater than 0.25 hour for the Unit/Stack ID displayed below. Investigate all occurrences of this problem and correct and resubmit the report before the submission deadline.

Error Code 21 **MULTIPLE SUMMARY EMISSIONS RECORDS REPORTED FOR UNIT/STACK/PIPE** (Status Code 5 error)

More than one summary emissions record (either RT 301 or RT 307, as listed above) was reported for the Stack/Unit/Pipe ID identified below. For sources affected by the Acid Rain Program, report one RT 301 for each Stack/Unit/Pipe ID reported in the file. For sources affected by the NOx Budget Program, report one RT 307 for each Stack/Unit/Pipe ID reported in the file. Correct the report and resubmit it before the submission deadline.

Error Code 22 **REPORTED ANNUAL SO2 MASS EMISSIONS VALUE EXCEEDS MAXIMUM** (Status Code 5 error)

The Cumulative Annual SO2 Mass Emissions value reported in RT 301, column 26, for this Stack/Unit ID exceeds 180,000 tons, which exceeds the maximum value expected for any source. If this value is not correct review and correct the hourly and/or cumulative SO2 Mass Emissions values and resubmit the report before the submission deadline. If the reported value is correct, please contact your EPA Analyst identified in this letter for further guidance.

Error Code 23 **REPORTED ANNUAL AVERAGE NOX EMISSION RATE EXCEEDS MAXIMUM** (Status Code 5 error)

The Cumulative Annual Average NOx Emission Rate value reported in RT 301, column 49, for this Stack/Unit ID exceeds 3.0 lb/mmBtu, which exceeds the maximum value expected for any source. If this value is not correct, review and correct the hourly and/or cumulative NOx Emission Rate values and resubmit the report before the submission deadline. If the reported value is correct, please contact your EPA Analyst identified in this letter for further guidance.

Error Code 24 **EPA ACCEPTED AND CUMULATIVE ANNUAL VALUES NOT EQUAL** (Status Code 5 error)

Based on the values displayed in the Cumulative Data Summary Table at the beginning of this letter, the EPA Accepted value does not equal the Cumulative Annual value for one or more pollutants and/or heat input. Listed below are the pollutants and/or heat input values for which this problem was found. Review and correct the hourly and/or cumulative values and resubmit the file before the submission deadline.

Error Code 25 **FORMULA CODE IN RT 520 NOT APPROPRIATE FOR SO2 MASS EMISSIONS** (Status Code 5 error)

The hourly SO2 Mass Emissions Formula ID reported in RT 310, column 32, matches a Formula ID in RT 520, column 11, but the Formula Code in column 18 of the RT 520 is not appropriate for SO2 Mass Emissions calculations. The allowable Formula Codes are F-1, F-2, and F-23. Ensure that the correct Formula ID is reported in both RT 310 and RT 520 and that the corresponding RT 520 Formula Code is

Active Error codes in the Summary, Sequence, Formula, and LME Program

appropriate for SO₂ emissions calculations. Correct and resubmit the report before the submission deadline.

Error Code 26 **SO₂ MASS EMISSIONS RECORD REPORTED FOR NON-OPERATING HOUR** (Status Code 5 error)

An hourly SO₂ Mass Emissions Rate record (RT 310) was reported for an hour where the Operating Time reported in RT 300, column 18 was either 0.00 or blank. The Date/Time of the first occurrence of this problem is displayed below. Ensure the correct Operating Time value is reported in RT 300 for the Stack/Unit ID. If the correct Operating Time is 0.00 then do not report RT 310 for the hour. If the correct Operating Time is greater than 0.00 then ensure the RT 310 contains the correct SO₂ Mass Emissions Rate data for the hour. The report must be corrected and resubmitted before the submission deadline.

Error Code 27 **RT 200 REPORTED FOR HOUR WHERE F-23 DEFAULT USED FOR SO₂** (Status Code 5 error)

RT 200 was reported for an hour where the SO₂ Formula ID reported in RT 310, column 32, indicates that SO₂ mass emissions value in RT 310 was calculated using Formula F-23 (the alternative formula for an hour where only gas was combusted). Review the data for the hour. If only gas was combusted, and Formula F-23 was used, do not report RT 200 for the hour. If the hour does not qualify for use of Formula F-23, insure that RT 310 contains the correct Formula ID corresponding to use of CEMS-measured values to calculate the SO₂ emissions. The report must be corrected and resubmitted before the submission deadline.

Error Code 28 **QUALIFYING FUELS FOR USE OF F-23 EQUATION NOT FOUND** (Status Code 9 error)

You indicated the use of equation F-23 to calculate SO₂ mass emissions reported in RT 310, but the fuel type information for the unit, or units(s) associated with the stack, does not indicate the use of pipeline natural gas or natural gas.

Error Code 29 **NO MATCHING RT 531 FOUND FOR NATURAL GAS SO₂ EMISSION RATE** (Status Code 5 error)

The SO₂ mass emissions value reported in RT 310 was calculated using Formula F-23 for an hour where only natural gas was combusted. However no matching RT 531 was located that provides the default SO₂ emission rate for this fuel type (Fuel Type code "NNG" was reported in RT 587, column 10). If "NNG" is the correct fuel type code, then a valid RT 531 must be reported to provide the SO₂ emission rate for the fuel type. NOTE: only "Pipeline Natural Gas" (Fuel Type code "PNG") qualifies for use of the default constant SO₂ emission rate of 0.0006 lb/mmBtu. The report must be corrected and resubmitted before the submission deadline.

Error Code 30 **NO TYPE 504 RECORD FOUND FOR UNIT ID DEFINED IN RT 503** (Status Code 5 error)

No RT 504 (unit information record) was reported for a unit ID that was reported in column 30 of a RT 503 (Stack/Header Definition Table). The problem Unit ID is displayed below. Check each RT 503 to ensure that the Unit IDs are valid for this source. If not, correct the unit ID(s) in RT 503, ensure that an RT 504 is correctly reported for each unit, and resubmit the quarterly report before the submission deadline.

Error Code 50 **NO VALID RATA TESTS (RT 610) REPORTED FOR RATA RESULT (RT 611)** (Status Code 5 error)

Active Error codes in the Summary, Sequence, Formula, and LME Program

For the Unit/Stack ID, System ID, and Operating Level displayed below, a RATA result (RT 611) was not accompanied by any matching RT 610s that have the same Unit/Stack ID, Monitoring System ID, Operating Level, and Test Number. Each reported RT 611 must be supported by a minimum of 9 matching, valid RT 610s (a valid RT 610 must have a Run Status Flag of "1" reported in column 62). Do not report RT 611 for an aborted RATA attempt (i.e., for RT 610s with Run Status Flag of "9" reported in column 62). Review and correct the RT 610s and/or RT 611 and resubmit the report before the submission deadline.

Error Code 52 **RT 611 SYSTEM ID NOT FOUND IN MONITORING PLAN RT 510** (*Status Code 5 error*)

The System ID reported in RT 611 (RATA and Bias Test Result), column 10, was not found in column 13 of a corresponding RT 510 in the monitoring plan. The reported System ID is displayed below. Ensure that the reported System ID is not blank, and that the RATA test result is for a monitoring system that is used at this Stack/Unit. If so, correct the RT 611 and/or monitoring plan records. If not, remove the invalid RT 611(s) from the file and replace them with the correct RT 611(s) for this Stack/Unit, if a RATA was performed at this monitoring location during the quarter. The report must be corrected and resubmitted before the submission deadline.

Error Code 53 **DUPLICATE RATA TEST DATA RECORDS (RT 610) FOUND** (*Status Code 5 error*)

The file contains one or more duplicate RATA and Bias Test data records (RT 610). The first duplicate RT 610 is displayed below. Review the RT 610s in the file to ensure they are unique, and correct or eliminate the duplicate record(s). The report must be corrected and resubmitted before the submission deadline.

Error Code 55 **A SET OF RATA RUNS (RT 610s) CONTAINS FEWER THAN 9 VALID RUNS** (*Status Code 5 error*)

A set of Relative Accuracy Test Audit (RATA) runs (RT 610s) was reported, however the set contains fewer than nine matching, valid, records. Each of the RT 610s has the same Stack/Unit ID, Monitoring System ID, Operating Level, Test Number, and Run Status Flag (the Run Status Flag in RT 610, column 62 is "1", indicating the run was used.). The first RATA run (RT 610) in the set is displayed below. Nine valid RATA runs must be present to support the RATA Result in the corresponding RT 611. Review the RATA test data, make any necessary corrections, and resubmit the report before the submission deadline.

Error Code 56 **DUPLICATE RUN NUMBERS REPORTED IN RATA TEST DATA (RT 610s)** (*Status Code 5 error*)

For one or more reported relative accuracy test audits (RATAs) at this Unit or Stack, two or more RATA runs (RT 610) had duplicate Run Numbers reported in RT 610, column 60. The first RATA run (RT 610) that has the duplicate Run Number is displayed below. Review the RT 610s for each test to ensure each Run Number is unique and that the test data are correct for each unique run. Make any necessary corrections and resubmit the quarterly report before the submission deadline.

Error Code 57 **MATCHING RATA RESULT (RT 611) NOT FOUND FOR RATA RUNS (RT 610s)** (*Status Code 5 error*)

A matching RATA Result Record (RT 611) was not found for a set of valid RATA Test Data records (RT 610s). Ensure the RT 611 is reported and review both the RT 611 and each corresponding RT 610 to ensure that the Unit/Stack ID, Monitoring System ID, Operating Level code (H, L, M, or N), and Test Number are the same for both Record Types. Make any necessary corrections and resubmit the quarterly report before the submission deadline.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 58 **RT 610 SYSTEM ID NOT FOUND IN MONITORING PLAN RT 510** (*Status Code 5 error*)

The System ID reported in RT 610 (RATA and Bias Test Data), column 10, was not found in column 13 of a corresponding RT 510 in the monitoring plan. The reported System ID is displayed below. Ensure that the reported System ID is not blank, and that the RATA test data are for a monitoring system that is used at this Stack/Unit. If so, correct the RT 610 and/or monitoring plan records. If not, remove the invalid RT 610(s) from the file and replace them with the correct RT 610(s) for this Stack/Unit, if a RATA was performed at this monitoring location during the quarter. The report must be corrected and resubmitted before the submission deadline.

Error Code 59 **HEAT INPUT RATE OF ZERO REPORTED FOR SO2 F-23 HOUR** (*Status Code 9 error*)

You reported SO2 mass emissions using equation F-23 for an hour in which the heat input rate reported in RT 300 was zero. Ensure that both the heat input and SO2 values are calculated and reported correctly.

Error Code 60 **DUPLICATE LINEARITY TEST RECORDS (RT 601) FOUND** (*Status Code 5 error*)

The file contains one or more duplicate Linearity Test Data records (RT 601). The first duplicate RT 601 is displayed below. Review the RT 601s in the file to ensure they are unique, and correct or eliminate the duplicate record(s). The report must be corrected and resubmitted before the submission deadline.

Error Code 61 **MULTIPLE LINEARITY RECORDS (RT 601) HAVE SAME DATE AND TIME** (*Status Code 5 error*)

For the Unit/Stack ID displayed below, two or more Linearity Test records (RT 601) were reported for the same Date/Time (columns 16-25) for the same Component ID (601:10), System ID (601:13), Span Scale (RT 601:66) and Test Number (RT 601:67). When a linearity check of a particular monitoring system component is performed, the reported dates and times for two gas injections at the same level cannot be identical. Review and correct the test data and resubmit the quarterly report before the submission deadline.

Error Code 62 **NOT ENOUGH RT 601s REPORTED FOR A LINEARITY RESULT (RT 602)** (*Status Code 5 error*)

Quarterly Linearity Check results were reported in a RT 602 without three corresponding RT 601s to provide the calibration gas injection results. Check for missing RT 601(s) and review each reported RT 601 to ensure that the Unit/Stack ID, Component ID, System ID, Calibration Gas Level, Span Value, Span Scale, and Test Number match those reported in the corresponding RT 602. NOTE: if the Linearity Test was aborted, do not report RT 602 for that test. Review and correct the test data and results and resubmit the quarterly report before the submission deadline.

Error Code 63 **ZERO STACK FLOW RATE REPORTED FOR SO2 MASS EMISSIONS HOUR** (*Status Code 9 error*)

The Adjusted Volumetric Flow Rate value reported in RT 220, column 39, was blank or zero for an hour where an RT 310 (SO2 Mass Emissions) was reported for the Stack/Unit ID displayed below. The Time/Date of the first occurrence of this problem is also displayed. Note: if start-up or shut-down conditions result in a stack flow rate that is too low to be registered by the stack flow monitor, you may report a default minimum stack flow rate of 1000 scfh (use Method of Determination Code "55" in RT 220,

Active Error codes in the Summary, Sequence, Formula, and LME Program

column 56). Review the operating data for the hour to determine that the correct stack flow value has been reported for the hour and that the hourly SO₂ Mass Emissions value is also correct.

Error Code 64 NO MATCHING RT 302 FOUND FOR RT 313 SO₂ EMISSIONS FROM OIL
(Status Code 5 error)

While recalculating the hourly SO₂ mass emissions rate from OIL in RT 313, ETS did not locate a matching RT 302 (Oil Fuel Flow) for the same Unit/Pipe ID, fuel flow System ID, and date/time. Ensure that each RT 313 has a corresponding RT 302 that has the same Unit/Pipe ID, system ID, and date/time. If SUBSTITUTE data are reported for this hour either report the Primary system ID in both RT 302 and RT 313, or leave the system ID blank in both records. Correct the affected records and resubmit the report before the submission deadline.

Error Code 65 ZERO OR BLANK OIL MASS FLOW RATE VALUE REPORTED IN RT 302
(Status Code 5 error)

The Mass Flow Rate of Oil during Oil Combustion, reported in RT 302, column 21 is either blank or zero. Ensure the correct Mass Flow rate value is reported in RT 302 and that data reported in RT 313 are correct as well. If no oil was combusted during the hour, do not report RT 302 and RT 313 for the hour. The report must be corrected and resubmitted before the submission deadline.

Error Code 66 MISSING DENSITY VALUE FOR HOUR MEASURING VOLUMETRIC FLOW
(Status Code 9 error)

You reported a zero or blank density in RT 302 for an hour in which the mass of oil reported was based on volumetric flow measurements.

Error Code 67 MISSING OR BLANK VOLUMETRIC FLOW RATE (Status Code 9 error)

You reported a zero or blank volumetric flow in RT 302 for an hour in which the mass of oil reported was based on volumetric flow measurements.

Error Code 68 REPORTED AND CALCULATED MASS FLOW RATE NOT EQUAL
(Status Code 5 error)

While recalculating the hourly SO₂ Mass Emission Rate from Oil reported in RT 313, column 30, EPA found that the hourly Mass Flow Rate of Oil recalculated from the Volumetric Flow Rate (RT 302, column 59) and the Oil Density (RT 302, column 75) does not equal the Mass Flow Rate of Oil value reported in RT 302, column 21. The difference between the two values is greater than or equal to 50.0 lb/hr. Review the Oil consumption data for the hour and the calculation of the Oil Mass Flow Rate. The report must be corrected and resubmitted before the submission deadline.

Error Code 69 ZERO OR BLANK VALUE REPORTED FOR OIL SULFUR CONTENT (Status Code 5 error)

The Sulfur Content for Oil reported in RT 313, column 21 was either zero or blank. Ensure the correct Sulfur Content value is reported for Oil that was combusted during the hour. If no Oil was combusted during the hour do not report RT 313 and RT 302 for the hour. The report must be corrected and resubmitted before the submission deadline.

Error Code 70 CALIBRATION ERROR RESULT INCORRECTLY CALCULATED (Status Code 9 error)

The EPA-calculated daily calibration error value does not match the value reported in RT 230, columns 63-67. Ensure that the correct calibration error formula was used for the type of monitoring component that

Active Error codes in the Summary, Sequence, Formula, and LME Program

was tested. For CO₂ and O₂ components, use the R-A formula. If the component type is NO_x or SO₂, the R-A formula may only be used if the Instrument Span in column 24 is less than or equal to 200 ppm (Low-emitter) and the Alternative Performance Specification (APS) Flag in column 68 is set to "1". If the component type is FLOW, the R-A formula may only be used for Low-span differential pressure monitors (also report "1" for APS flag in column 68).

Error Code 71 **REPORTED "ZERO-LEVEL" REFERENCE VALUE TOO HIGH FOR SPAN** (Status Code 9 error)

The Reference Value reported in RT 230, column 37, is not appropriate for one or more daily calibration error tests performed at the ZERO level. The reported zero-level Reference Value is greater than 20% of the Instrument Span value reported in column 24. The zero-level Reference Value must be from 0% to 20% of the Instrument Span reported in column 24.

Error Code 72 **REPORTED "HIGH-LEVEL" REFERENCE VALUE INAPPROPRIATE FOR SPAN** (Status Code 9 error)

The Reference Value reported in RT 230, column 37, is not appropriate for one or more daily calibration error tests performed at the HIGH level. For GAS monitors, the high-level Reference Value must be from 80% to 100% of the Instrument Span value reported in column 24. For FLOW monitors, the high-level Reference Value must be from 50% to 70% of the Instrument Span reported in column 24.

Error Code 73 **SO₂ OR NO_x SPAN TOO LARGE FOR ALTERNATE PERFORMANCE SPECIFICATION** (Status Code 5 error)

The Alternative Performance Specification (APS) Flag reported in RT 230, column 68, is incorrectly set to "1" for an SO₂ or NO_x component that has an Instrument Span of 200 ppm or greater reported in column 24. The APS flag value "1" may only be used for a NO_x or SO₂ component with a Span value less than 200 ppm and where the R-A formula is used to calculate the calibration error. Review the reported Span value, Calibration Error Result, and APS flag and correct any errors. Resubmit the report before the submission deadline.

Error Code 74 **IMPROPER CALIBRATION GAS OR REFERENCE SIGNAL LEVEL REPORTED** (Status Code 9 error)

The Calibration Gas or Reference Signal Level code reported in RT 230 column 71 is invalid. For flow monitors, the Reference Signal level must be "Z" (Zero) or "H" (High). For SO₂, NO_x, CO₂, and O₂ monitors the Calibration Gas level must be "Z" (Zero), "M" (Mid), or "H" (High). Ensure that this field is not blank, and that the code is upper-case.

Error Code 75 **IMPROPER STATUS REPORTED FOR FLOW MONITOR INTERFERENCE CHECK** (Status Code 9 error)

The status reported in Record Type 231 for one or more flow monitor interference checks is not "P" (Pass) or "F" (Fail). The only valid status codes for an interference check are "P" and "F".

Error Code 76 **COMPONENT/SYSTEM ID IN RT 230 DOES NOT MATCH RT 510** (Status Code 5 error)

The Component ID and System ID reported in columns 10-15 of a Daily Calibration (RT 230) do not match the Component ID/System ID reported in columns 10-15 of any RT 510 in the monitoring plan. Ensure that the Component and System IDs are correctly entered in both RT 230 and RT 510 and check for missing RT 510(s). Also, ensure that the reported calibration tests are for a system installed at this Stack or Unit. The report must be corrected and resubmitted before the submission deadline.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 77 **REPORTED "MID-LEVEL" REFERENCE VALUE INAPPROPRIATE FOR SPAN** (Status Code 9 error)

The Reference Value reported in RT 230, column 37, is not appropriate for one or more daily calibration error tests performed at the MID level for a GAS monitor. The mid-level Reference Value must be from 50% to 60% of the Instrument Span reported in column 24.

Error Code 78 **NO DAILY CALIBRATIONS FOUND FOR SYSTEM(S) IDENTIFIED IN RT 510s** (Status Code 9 error)

No matching daily calibrations (RT 230) were found for any of the SO₂ and/or NO_x monitoring systems defined in RT 510s for the Unit/Stack ID displayed below. For each monitoring system ensure the Component ID and System ID reported in RT 230, columns 10 and 13, match the Component ID and System ID in columns 10 and 13 of the corresponding RT 510s. Ensure that all required RT 510s are reported for all monitoring systems used at this Unit/Stack, and that all required daily calibrations (RT 230s) are properly reported for the monitoring systems that are used to report quality-assured data.

Error Code 79 **COMPONENT ID IN RT 230 NOT FOUND IN AN RT 510** (Status Code 5 error)

The Component ID reported in column 10 of a RT 230 (Daily Calibration) was not found in column 10 of a RT 510 in the monitoring plan. The first RT 230 where this error was found is displayed below. Check for incorrectly reported component IDs, missing RT 510(s) for a primary or backup system component, and ensure that the reported calibration tests are for a system installed at this Stack or Unit. Correct the problem record(s) and resubmit the revised report before the submission deadline.

Error Code 80 **INVALID METHOD OF DETERMINATION CODE (MODC) REPORTED** (Status Code 5 error)

An invalid Method of Determination Code (MODC) was reported in the Record Type displayed above. The invalid MODC is displayed below. Refer to the EDR Instructions for the list of valid MODCs for the Record Type, and ensure the MODC is valid for the monitoring system or value used to measure and report the hourly data. Ensure the reported MODC is not zero or blank. Correct the MODC and any affected data and resubmit the report before the submission deadline.

Error Code 81 **ZERO OR BLANK FUEL FLOW RATE REPORTED FOR GAS COMBUSTION HOUR** (Status Code 9 error)

While recalculating the hourly SO₂ Mass Emission Rate from Gas reported in RT 314, column 37, EPA found that the corresponding Flow Rate of Gas value reported in RT 303, column 21 was blank or zero. Review the Unit/Pipe operation and fuel consumption data for the hour. If gas was combusted during the hour, ensure the correct gas flow rate and heat input rate values are reported in RT 303 for the hour and that the correct SO₂ Mass Emission Rate value is reported in the corresponding RT 314 for the hour. If gas was not combusted during the hour do not report RT 303 and RT 314 for that hour.

Error Code 82 **GAS FUEL TYPE CODE IS BLANK** (Status Code 5 error)

The code reported in RT 303, column 56 for the type of gas combusted during the hour was blank. Do not leave this field blank. If no gas was combusted during the indicated clock hour, do not report RT 303 for that hour. The report must be corrected and resubmitted by the submission deadline.

Error Code 83 **BOTH GAS SO₂ DEFAULT EMISSION RATE AND SULFUR CONTENT REPORTED** (Status Code 5 error)

For the Date and Hour listed below, the RT 314 (SO₂ Mass Emissions from Gas) contained an SO₂ Default Emission Rate value (columns 30-36) and a Sulfur Content of Gas Sample value (columns 21 - 28). Only one of these parameters is required to be reported for calculation of the SO₂ Mass Emission Rate from Gas

Active Error codes in the Summary, Sequence, Formula, and LME Program

for the hour. Check the RT 314 to ensure the correct value is reported for the SO₂ Mass calculation method used, and ensure that each data element in the record is reported in the correct column location.

Error Code 84 GAS SO₂ DEFAULT EMISSION RATE AND SULFUR CONTENT ARE BLANK/ZERO (Status Code 5 error)

In RT 314 the values for both Sulfur Content of Gas Sample (column 21) and Default SO₂ Emission Rate (column 30) were either blank or zero for the hour displayed below. If SO₂ Mass Emissions from Gas are calculated using a Default SO₂ Emission Rate and Hourly Heat Input (Equation D-5), ensure the correct SO₂ Emission Rate is reported in column 30. If SO₂ Mass Emissions from Gas are calculated using Sulfur Content from Gas Sampling and Hourly Volumetric Flow Rate of Gas (Equation D-4), ensure the correct Sulfur Content of Gas value is reported in column 21. Also ensure that the resulting SO₂ Mass Emissions Rate from Gas value reported in RT 314, column 37 is correct.

Error Code 85 INVALID GAS FUEL TYPE CODE REPORTED FOR SO₂ METHODOLOGY (Status Code 5 error)

A gas Fuel Type Code other than "PNG", "NNG", "PRG", or "OGS" was reported in RT 303, column 56 for an hour where an SO₂ Default Emission Rate, reported in RT 314, column 30 is used to calculate hourly SO₂ emissions from gas. Ensure that the correct Fuel Type Code is reported in RT 303 and that the data in the associated RT 314 are correct for the fuel type combusted during the hour.

Error Code 86 ZERO OR BLANK HEAT INPUT RATE REPORTED FOR GAS COMBUSTION HOUR (Status Code 9 error)

While recalculating the hourly SO₂ Mass Emission Rate from Gas reported in RT 314, column 37, EPA found that the corresponding Heat Input Rate from Gas value reported in RT 303, column 45 was blank or zero. Review the Unit/Pipe operation and gas fuel consumption data for the hour. If gas was combusted during the hour ensure the RT 303 contains the correct values for Gas Flow Rate (column 21), Gas Heat Content (column 34), and Heat Input Rate (column 45), and that the correct SO₂ Mass Emission Rate value is reported in the corresponding RT 314 for the hour. If gas was not combusted during the hour, do not report RT 303/314 for that hour.

Error Code 87 MATCHING RT 300 NOT FOUND FOR HOUR WHERE CO₂ EMISSIONS REPORTED (Status Code 5 error)

A RT 300 (Unit Operating Parameters) was not found for a Unit/Stack/Pipe ID in an hour in which CO₂ Mass Emissions were reported in RT 330 for the same Unit/Stack/Pipe ID. A RT 300 must be reported for every clock hour in the quarter for every affected Unit ID, and for every Stack or Pipe location at which emissions are measured. Correct the problem and resubmit the file before the submission deadline.

Error Code 88 CO₂ MASS EMISSIONS RECORD REPORTED FOR NON-OPERATING HOUR (Status Code 5 error)

An hourly CO₂ Mass Emissions Rate record (RT 330) was reported for an hour where the Operating Time reported in RT 300, column 18 was either 0.00 or blank. The Date/Time of the first occurrence of this problem is displayed below. Ensure the correct Operating Time value is reported in RT 300 for the Stack/Unit ID. If the correct Operating Time is 0.00 then do not report RT 330 for the hour. If the correct Operating Time is greater than 0.00 then ensure the RT 330 contains the correct CO₂ Mass Emissions Rate data for the hour. The report must be corrected and resubmitted before the submission deadline.

Error Code 89 FORMULA CODE IN RT 520 NOT APPROPRIATE FOR CO₂ MASS EMISSIONS (Status Code 5 error)

Active Error codes in the Summary, Sequence, Formula, and LME Program

The hourly CO₂ Mass Emissions Formula ID reported in RT 330, column 28, matches a Formula ID in RT 520, column 11, but the Formula Code in column 18 of the RT 520 is not appropriate for CO₂ Mass Emissions calculations. The allowable Formula Codes are F-2, F-11, G-4, and G-4A. Ensure that the correct Formula ID is reported in both RT 330 and RT 520 and that the corresponding RT 520 Formula Code is appropriate for CO₂ emissions calculations. Correct and resubmit the report before the submission deadline.

Error Code 90 **SO₂ CONCENTRATION (RT 200) NOT FOUND FOR SO₂ MASS EMISSIONS** (Status Code 5 error)

The SO₂ Formula ID reported in RT 310, column 32, indicates that a SO₂ concentration record (RT 200) is required for calculating the SO₂ mass emissions for the hour indicated below, however the corresponding RT 200 was not found. Ensure the RT 310 Formula ID is correct, if so, ensure that RT 200 is also reported for the hour. The report must be corrected and resubmitted before the submission deadline.

Error Code 91 **MATCHING RT 220 NOT FOUND FOR HOUR WHERE SO₂ EMISSIONS REPORTED** (Status Code 5 error)

A RT 220 (Volumetric Stack Flow) was not found for a Unit/Stack ID for an hour in which SO₂ Mass Emissions were reported in RT 310 for the same Unit/Stack ID. The Formula ID reported in RT 310, column 32, and the SO₂ Formula Code reported in RT 520, column 18, indicate that stack flow monitoring is used to determine the hourly SO₂ mass emissions rate. The report must be corrected and resubmitted before the submission deadline.

Error Code 96 **INCONSISTENT QUARTERLY AND ANNUAL SO₂ EMISSIONS VALUES** (Status Code 9 error)

The Quarterly SO₂ Emissions value reported in RT 301, column 16, for the First Quarter does not equal the cumulative Annual SO₂ Emissions value reported in RT 301, column 26. Ensure the correct Quarterly and Annual SO₂ Emissions values are reported in RT 301 for the First Quarter of the calendar year.

Error Code 97 **INCONSISTENT QUARTERLY AND ANNUAL NO_x EMISSION RATE VALUES** (Status Code 9 error)

The Quarterly Average NO_x Emission Rate value reported in RT 301, column 36, for the First Quarter does not equal the cumulative Annual Average NO_x Emission Rate value reported in RT 301, column 49. Ensure the correct Quarterly and Annual Average NO_x Emission Rate values are reported in RT 301 for the First Quarter of the calendar year.

Error Code 98 **INCONSISTENT QUARTERLY AND ANNUAL CO₂ EMISSIONS VALUES** (Status Code 9 error)

The Quarterly CO₂ Emissions value reported in RT 301, column 62, for the First Quarter does not equal the cumulative Annual CO₂ Emissions value reported in RT 301, column 72. Ensure the correct Quarterly and Annual CO₂ Emissions values are reported in RT 301 for the First Quarter of the calendar year.

Error Code 99 **DILUENT CAP INDICATOR REPORTED IN RT 330 BUT NOT RT 300** (Status Code 9 error)

The Diluent Cap Indicator reported in RT 330, column 43, was 'Y', indicating that a CO₂ Diluent Cap value was used in calculating the CO₂ Mass Emissions value reported in RT 330, column 18. However, the Diluent Cap Indicator in RT 300, column 56, was blank for the same hour indicating that the CO₂ Diluent Cap was NOT used in calculating the Heat Input Rate for the hour. If the Diluent Cap is used for the CO₂ Mass Emissions calculation it must also be used for the Heat Input Rate calculation. Review the data for

Active Error codes in the Summary, Sequence, Formula, and LME Program

the hour to determine if a Diluent Cap value was used in the calculations, and correct the Diluent Cap Indicator in RT 330 or RT 330 as necessary.

Error Code 100 UNIT TYPE CANNOT BE DETERMINED FOR CO2 DILUENT CAP HOUR (Status Code 9 error)

The Unit Type could not be determined for an hour in which the Diluent Cap Indicator reported in RT 330, column 43, was "Y", indicating that a CO2 Diluent Cap value was used in calculating the CO2 Mass Emissions value for the hour. Ensure that the correct Unit Type code for the Unit ID is reported in RT 504, column 10, so that the correct CO2 Diluent Cap value can be determined and used in recalculating the CO2 Mass Emissions value for the hour.

Error Code 101 CO2 MASS EMISSIONS FORMULA ID NOT FOUND IN RT 520 (Status Code 5 error)

The CO2 Mass Emissions Formula ID reported in RT 330, column 28, was not found in an active monitoring plan Formula Record (RT 520, column 11) for the same Unit/Stack ID. The Date and Hour of the first occurrence of this problem is displayed below. Review the RT 330 and the corresponding RT 520 for the same Unit/Stack ID to ensure the Formula IDs match. Check for missing RT 520(s), and ensure the correct Status Code is reported in column 10 (U, A, or C) to indicate the RT 520 is active. The report must be corrected and resubmitted before the submission deadline.

Error Code 102 NO DAILY CALIBRATIONS (RT 230) FOUND IN FILE (Status Code 9 error)

The monitoring plan information (RT 585) indicates that one or more CEMS systems are used to monitor emissions at this facility. The quarterly report must contain adequate daily calibration test results (RT 230) to validate the data reported from the CEMS systems. Ensure that all calibrations that were performed are included in the quarterly report. If any calibrations were inadvertently omitted, the report should be revised to include them and the revised report resubmitted to EPA.

Error Code 103 NO FLOW MONITOR INTERFERENCE CHECKS (RT 231) REPORTED (Status Code 9 error)

The Parameter and Monitoring Methodology codes reported in RT 585 columns 10 and 14 indicate that Flow Monitor(s) are used in determining the hourly Emissions and/or Heat Input Rate values for one or more Stack/Unit IDs contained in the quarterly report. The report must contain Flow Monitor Interference Check results (RT 231) to validate the hourly Volumetric Flow Rate data reported in RT 220.

Error Code 104 INVALID NUMBER OF RECORD TYPE 300S IN FILE (Status Code 5 error)

The number of RT 300s (Hourly Stack/Unit/Pipe Operating Parameters) reported for each Stack/Unit/Pipe ID in the file must equal the number of clock hours in the quarter or the number of ozone season clock hours in the quarter. Check for missing RT 300s (often at the beginning or end of the reporting period), duplicate RT 300s, or RT 300s from a different calendar quarter that were erroneously included in the report. Ensure the appropriate number of RT 300s are included in the quarterly report and resubmit the revised file before the submission deadline.

Error Code 107 APPENDIX D RECORD TYPES FOR OIL AND/OR GAS INCORRECTLY REPORTED (Status Code 5 error)

The Appendix D record types for fuel consumption and SO2 emissions were incorrectly reported. Check for missing record types for each fuel that was combusted and check for records that were erroneously reported for a fuel that was not combusted during the quarter: If GAS was combusted, report both RT 303 and RT 314 for each hour in which gas was combusted. If no gas was combusted during the quarter do not

Active Error codes in the Summary, Sequence, Formula, and LME Program

report RT 303 or RT 314. If OIL was combusted, report both RT 302 and RT 313 for each hour in which oil was combusted. If no oil was combusted during the quarter do not report RT 302 or RT 313. Ensure that the proper hourly records are reported for each of the fuel types that were combusted during the calendar quarter, and resubmit the quarterly report before the submission deadline.

Error Code 108 **INAPPROPRIATE USE OF DILUENT CAP VALUE FOR A TURBINE**

(Status Code 9 error)

For the hour displayed below, the Diluent Cap Indicator flag reported in RT 330, column 43 was "Y", indicating use of the 1.0% CO₂ Diluent Cap value in calculating the CO₂ Mass emissions for the hour, however the measured CO₂ concentration reported in RT 202, column 24 for the same hour exceeded 1.0%. Review the data for the hour, either correct the Diluent Cap Indicator flag in RT 330, or ensure the correct CO₂ Diluent Cap value is reported in RT 202, column 24.

Error Code 109 **ZERO STACK FLOW RATE REPORTED FOR CO₂ MASS EMISSIONS HOUR**

(Status Code 9 error)

The Adjusted Volumetric Flow Rate value reported in RT 220, column 39, was blank or zero for an hour where an RT 330 (CO₂ Mass Emissions) was reported for the Stack/Unit ID displayed below. The Time/Date of the first occurrence of this problem is also displayed. Note: if start-up or shut-down conditions result in a stack flow rate that is too low to be registered by the stack flow monitor, you may report a default minimum stack flow rate of 1000 scfh (use Method of Determination Code "55" in RT 220, column 56). Review the operating data for the hour to determine that the correct stack flow value has been reported for the hour and that the hourly CO₂ Mass Emissions value is also correct.

Error Code 110 **DUPLICATE RECORDS REPORTED FOR SAME HOUR** *(Status Code 5 error)*

For the Record Type identified above, more than one record was reported for the same hour for the Unit/Stack/Pipe ID identified below. The first of the problem records is also displayed below. Review the data in the EDR and eliminate or correct the duplicate record(s) as appropriate and resubmit the report before the submission deadline.

Error Code 111 **MULTIPLE GAS FLOW RECORDS REPORTED FOR SAME HOUR AND SYSTEM ID** *(Status Code 5 error)*

More than one RT 303 (Gas Fuel Flow) was reported in an hour for the same Gas Fuel Flow Monitoring System ID. The Date and Hour of the first occurrence of this problem is displayed below. Review the System ID reported in column 10 of each RT 303 reported for the hour and check if multiple types of gas were combusted during the hour or if substitute data were reported for one or more Gas Fuel System IDs.

Make any necessary corrections and resubmit the report before the submission deadline.

Error Code 112 **BLANK MONITORING SYSTEM ID REPORTED FOR OIL SYSTEM**

(Status Code 5 error)

While recalculating the hourly Heat Input Rate from Oil, EPA found the Oil Fuel Flow Monitoring System ID in RT 302, column 10 was blank for an hour in which the Source of Data Code for Mass Oil Flow Rate (RT 302, column 31) indicates that a measured Mass Oil Flow value was reported in RT 302, column 21 instead of a substitute value. Review the oil consumption data and ensure the System ID and Source of Data Code reported in RT 302 are correct for the hour, and resubmit the file before the submission deadline.

Error Code 113 **INVALID PARAMETER TYPE REPORTED IN RT 520 FOR CO₂ FORMULA**

(Status Code 5 error)

Active Error codes in the Summary, Sequence, Formula, and LME Program

The hourly CO2 Mass Emission Rate Formula ID reported in RT 330, column 28, was found in an RT 520 (Formula Record), however the Parameter Monitored code reported in RT 520, column 14 is not 'CO2'. The Date and Hour of the first occurrence of this problem is displayed below, along with the reported RT 330 Formula ID, RT 520 Formula Code, and the RT 520 Parameter Code. Ensure that the correct CO2 Formula ID is reported in RT 330 and that it matches the Formula ID in an RT 520 that defines the hourly CO2 Mass Emission Rate Formula. The report must be corrected and resubmitted before the submission deadline.

Error Code 114 **BLANK FORMULA ID REPORTED FOR HOURLY CO2 MASS EMISSIONS** (Status Code 5 error)

The CO2 Mass Emissions Formula ID reported in RT 330, column 28, was blank. The Date and Hour of the first occurrence of this problem is displayed below. The Formula ID cannot be blank, report the Formula ID from RT 520, column 11 that represents the equation used to calculate the CO2 Mass Emissions Rate for the hour. The report must be corrected and resubmitted before the submission deadline.

Error Code 117 **CORRESPONDING RT 212 OR RT 531 NOT FOUND FOR RT 310** (Status Code 9 error)

While attempting to recalculate hourly SO2 mass emissions, ETS was unable to locate a RT 212 (for moisture data) or a RT 531 (for a moisture default) for the same unit/stack ID and for the same time as the RT 310. According to the formula code in the monitoring plan, moisture data are needed to calculate SO2 for this unit/stack ID.

Error Code 118 **MATCHING RT 300 NOT FOUND FOR HOUR WHERE SO2 EMISSIONS REPORTED** (Status Code 5 error)

A RT 300 (Unit Operating Parameters) was not found for a Unit/Stack/Pipe ID for an hour in which SO2 Mass Emissions were reported in RT 310 for the same Unit/Stack/Pipe ID. A RT 300 must be reported for every clock hour in the quarter for every affected Unit ID, and for every Stack or Pipe location at which emissions are measured. Correct the problem and resubmit the file before the submission deadline.

Error Code 120 **REPORTED AND CALCULATED HOURLY SO2 EMISSIONS NOT EQUAL** (Status Code 9 error)

The hourly SO2 mass emissions value that EPA calculated from the appropriate 200-level records using formula F-1, F-2, or F-23 (whichever is identified in your monitoring plan) does not match the value reported in RT 310, column 25.

Error Code 122 **REPORTED AND CALCULATED HOURLY SO2 EMISSIONS NOT EQUAL** (Status Code 9 error)

The hourly SO2 Mass Emissions Rate from OIL, reported in RT 313 column 30, does not equal the value EPA recalculated using Equation D-2 and data reported in RT 302 and RT 313 for the hour. Review the DAHS calculation and ensure that the data reported in RT 302 and RT 313 are correct for the oil combusted during the hour.

Error Code 125 **REPORTED AND CALCULATED HOURLY SO2 EMISSIONS NOT EQUAL** (Status Code 9 error)

The hourly SO2 Mass Emission Rate from Gas reported in RT 314, column 37 does not equal the value recalculated by EPA from data reported in the RT 314 and the corresponding RT 303 for the hour. Review the DAHS calculation to ensure that the correct Appendix D Equation (D-4 or D-5) was used for the type of Gas that was combusted.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 126 **NOX EMISSION RATE RECORD REPORTED FOR NON-OPERATING HOUR** (Status Code 5 error)

An hourly NOx Emissions Rate record (RT 320) was reported for an hour where the Operating Time reported in RT 300, column 18 was either 0.00 or blank. The Date/Time of the first occurrence of this problem is displayed below. Ensure the correct Operating Time value is reported in RT 300 for the Stack/Unit ID. If the correct Operating Time is 0.00 then do not report RT 320 for the hour. If the correct Operating Time is greater than 0.00 then ensure the RT 320 contains the correct NOx Emissions Rate data for the hour. The report must be corrected and resubmitted before the submission deadline.

Error Code 127 **FORMULA CODE IN RT 520 NOT APPROPRIATE FOR NOX EMISSION RATE** (Status Code 5 error)

The hourly NOx Emission Rate Formula ID reported in RT 320, column 50, matches a Formula ID in RT 520, column 11, but the Formula Code in column 18 of the RT 520 is not appropriate for NOx Emission Rate calculations. The allowable Formula Codes are: F-5, F-6, 19-1, 19-2, 19-3, 19-3D, 19-4, 19-5, 19-5D, 19-6, 19-7, 19-8, and 19-9. Ensure that the correct Formula ID is reported in both RT 320 and RT 520 and that the corresponding RT 520 Formula Code is appropriate for NOx Emission Rate calculations. Correct and resubmit the report before the submission deadline.

Error Code 128 **NOX SYSTEM ID DOES NOT MATCH RT 201 NOX SYSTEM ID** (Status Code 5 error)

The Monitoring System ID reported in RT 201, column 13, for NOx concentration data does not match the System ID in the corresponding NOx emission rate record (RT 320, column 10) for the same hour. Ensure both record types contain the correct System ID for the NOx system that was used to report data for the hour, especially if a backup system was used. Correct and resubmit the report before the submission deadline.

Error Code 129 **F-FACTOR MISSING FOR HOUR USING CEMS FOR NOX EMISSION RATE** (Status Code 5 error)

The F-factor in RT 320, column 26, was zero or blank for an hour where CEMS were used to determine the hourly NOx emission rate. Review the data and correct the F-factor and the resulting NOx emission rate value. The report must be corrected and resubmitted before the submission deadline.

Error Code 130 **NOX CONCENTRATION RECORD (RT 201) NOT FOUND FOR RT 320 NOX RATE** (Status Code 5 error)

The Method of Determination Code (MODC) reported in RT 320, column 53 indicates that a NOx concentration record (RT 201) is required for calculating the NOx emission rate for the hour indicated below, however the corresponding RT 201 was not found. Review the RT 320 and ensure the correct MODC is reported for the hour, and also include RT 201 for the hour if it is required. The report must be corrected and resubmitted before the submission deadline.

Error Code 131 **O2 DILUENT RECORD (RT 211) NOT FOUND FOR RT 320 NOX RATE** (Status Code 5 error)

The Method of Determination Code (MODC) reported in RT 320, column 53 and the NOx Rate Formula Code reported in RT 520 indicate that an O2 diluent record (RT 211) is required for calculating the NOx emission rate for the hour indicated below. However, a corresponding RT 211 was not found for the same Unit/Stack ID, Monitoring System ID, date, and time. Review the RT 320 and ensure the correct MODC is reported for the hour, and also include RT 211 for the hour if it is required. The report must be corrected and resubmitted before the submission deadline.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 132 **CO2 DILUENT RECORD (RT 210) NOT FOUND FOR RT 320 NOX RATE** (Status Code 5 error)

The Method of Determination Code (MODC) reported in RT 320, column 53 and the NOx Rate Formula Code reported in RT 520 indicate that a CO2 diluent record (RT 210) is required for calculating the NOx emission rate for the hour indicated below. However, a corresponding RT 210 was not found for the same Unit/Stack ID, Monitoring System ID, date, and time. Review the RT 320 and ensure the correct MODC is reported for the hour, and also include RT 210 for the hour if it is required. The report must be corrected and resubmitted before the submission deadline.

Error Code 134 **REPORTED AND CALCULATED HOURLY NOX RATES NOT EQUAL** (Status Code 9 error)

The unadjusted NOx emission rate reported in RT 320, column 36, does not equal the value calculated by EPA from the data reported in RTs 201, 210, (or 211), and 212 (or 531), as applicable. Review the DAHS calculation and ensure that the data reported in each relevant record type are correct (including the appropriate Method of Determination Code for the hour(s) in question).

Error Code 135 **RT 211 WITH APPROPRIATE MOISTURE BASIS NOT FOUND FOR RT 320** (Status Code 9 error)

You did not report a RT 211 (O2 diluent data) for the same unit/stack ID, date and hour as the RT 320 with a moisture basis appropriate to the formula code in the monitoring plan.

Error Code 136 **REPORTED NOX RATE FORMULA REQUIRES USE OF DILUENT CAP** (Status Code 9 error)

The NOx Formula ID reported in RT 320, column 50, indicates that the NOx Emission Rate for the hour was calculated using the O2 Diluent Cap value (Equation 19-3D or 19-5D). However, the Method of Determination Code (MODC) reported in RT 320, column 53, was not "14", which is required to identify an hour where the Diluent Cap was used. Review the RT 320 data and make any necessary corrections to the reported NOx Formula ID and the Method of Determination code for the hour.

Error Code 137 **UNIT TYPE CANNOT BE DETERMINED FOR DILUENT CAP HOUR** (Status Code 9 error)

The Unit Type could not be determined for an hour where Method of Determination Code "14" was reported in RT 320, column 53, indicating that the hourly NOx Emission Rate reported in RT 320, column 36 was calculated using an O2 or CO2 Diluent Cap value. Either no RT 504 was reported for the Unit ID or an invalid Unit Type code was reported in RT 504, column 10. Ensure the correct Unit Type code is reported in RT 504 for the Unit ID.

Error Code 138 **CO2 OR O2 DILUENT CAP VALUE USED FOR NON-QUALIFYING HOUR** (Status Code 9 error)

The Method of Determination Code "14" was reported in RT 320, column 53, indicating that a default CO2 or O2 Diluent Cap value was used in calculating the NOx Emission Rate for the hour. However the hour does not qualify for use of the Diluent Cap based on the measured CO2 (or O2) value reported for the hour. For CO2 the measured value exceeds 5.0% (for a boiler) or exceeds 1.0% (for a turbine). For O2 the measured value is less than 14.0% (for a boiler) or is less than 19.0% (for a turbine). Either correct the Diluent Cap Indicator or ensure the correct CO2 or O2 value is reported for the hour.

Error Code 139 **NO MOISTURE VALUE FOUND FOR NOX EMISSION RATE CALCULATION** (Status Code 9 error)

Active Error codes in the Summary, Sequence, Formula, and LME Program

For the Date and Time listed below, the NO_x Emission Rate value reported in RT 320, column 36, is calculated using one of the following Formula Codes: 19-3, 19-3D, 19-4, 19-5, 19-5D, 19-8, or 19-9. These formulas require a moisture value, however no moisture value was reported for the hour. If a Default Moisture value was used, ensure that an RT 531 is correctly reported to provide the value. If a Moisture Monitoring System is used, ensure that an RT 212 is reported for the hour to provide the moisture value.

Error Code 140 CORRESPONDING CO2 CONCENTRATION (RT 202) NOT FOUND FOR RT 330 CO2 EMISSIONS (*Status Code 5 error*)

The Formula Code reported in RT 520, column 18, and the CO₂ Formula ID reported in RT 330, column 28 indicate that CO₂ Concentration (RT 202) is required for calculating the RT 330 CO₂ Mass Emissions value for the hour displayed below. However, no corresponding RT 202 was found for the same Unit/Stack ID, date, and time. The report must be corrected and resubmitted before the submission deadline.

Error Code 141 CORRESPONDING TYPE 220 RECORD NOT FOUND FOR RT 330 (*Status Code 9 error*)

While attempting to recalculate hourly CO₂ mass emissions rate, ETS was unable to locate the RT 220 (flow data) with the same unit/stack ID and time as the RT 330. According to the formula code in EPA's monitoring plan database, flow data is needed to calculate CO₂ mass for this unit.

Error Code 142 CORRESPONDING RT 212 OR RT 531 NOT FOUND FOR RT 330 (*Status Code 9 error*)

While attempting to recalculate hourly CO₂ mass emissions rate, ETS was unable to locate the RT 212 (moisture data) or a RT 531 containing a moisture default with the same unit/stack ID and time as the RT 330. According to the formula code in EPA's monitoring plan database, moisture data is needed to calculate CO₂ mass for this unit or stack.

Error Code 144 REPORTED AND CALCULATED HOURLY CO2 EMISSIONS NOT EQUAL (*Status Code 9 error*)

The hourly CO₂ mass emissions value that EPA calculated from the appropriate 200-level records using F-2 or F-11 (as identified in your monitoring plan) does not match the value reported in RT 330, column 18.

Error Code 145 ZERO HEAT INPUT REPORTED FOR OPERATING TIME > 0.25 HOUR (*Status Code 9 error*)

Zero heat input was reported in RT 300, column 36, for an hour where the operating time in RT 300, column 18, was greater than 0.25 hour. Investigate all occurrences of this situation for the Unit/Stack ID displayed below, and correct any data errors. If this occurred only during start-up or shut-down conditions where the calculated heat input value was zero, or where a negative heat input value was replaced with zero, this message is provided for data review purposes only.

Error Code 146 HEAT INPUT FORMULA ID WAS NOT FOUND IN RT 520 (*Status Code 5 error*)

The Heat Input Rate Formula ID reported in RT 300, column 43, was not found in an active monitoring plan Formula Record (RT 520, column 11) for the same Unit/Stack ID. The Date and Hour of the first occurrence of this problem is displayed below. Review the RT 300 and the corresponding RT 520 for the same Unit/Stack ID to ensure the Formula IDs match. Check for missing RT 520(s), and ensure the correct Status Code is reported in column 10 (U, A, or C) to indicate the RT 520 is active. The report must be corrected and resubmitted before the submission deadline.

Error Code 147 RT 520 FORMULA CODE FOR HOURLY HEAT INPUT IS BLANK (*Status Code 5 error*)

Active Error codes in the Summary, Sequence, Formula, and LME Program

A RT 520 containing the formula information for Hourly Heat Input Rate reported in RT 300 was found, however the Formula Code required in column 18 was blank. The allowable Formula Codes for Heat Input are: F-15, F-16, F-17, F-17D, and F-18. Ensure the RT 520 contains the appropriate Formula Code for the formula that is used to calculate the Hourly Heat Input Rate for this facility, and resubmit the report before the submission deadline.

Error Code 148 FORMULA CODE IN RT 520 NOT APPROPRIATE FOR HOURLY HEAT INPUT *(Status Code 5 error)*

The hourly Heat Input Rate Formula ID reported in RT 300, column 43, matches a Formula ID in RT 520, column 11, but the Formula Code in column 18 of the RT 520 is not appropriate for hourly Heat Input Rate calculations. The allowable Formula Codes are F-15, F-16, F-17, F-17D, and F-18. Ensure that the correct Formula ID is reported in both RT 300 and RT 520 and that the corresponding RT 520 Formula Code is appropriate for Heat Input Rate calculations. Correct and resubmit the report before the submission deadline.

Error Code 149 F-FACTOR MISSING FOR HOUR WHERE CEMS USED FOR HEAT INPUT RATE *(Status Code 5 error)*

The F-factor was not reported in RT 300, column 46, for an operating hour where CEMS were used to determine the hourly heat input rate. If you use CEMS or another F-factor based methodology to determine heat input rate, the F-factor must be reported in RT 300 for each hour or partial hour of operation. The report must be corrected and resubmitted before the submission deadline.

Error Code 158 REPORTED AND CALCULATED HOURLY HEAT INPUT NOT EQUAL *(Status Code 9 error)*

The hourly Heat Input Rate recalculated using Formula F-15, F-16, F-17, F-17D or F-18 (whichever is identified in the RT 300 and RT 520) does not match the value reported in RT 300, column 36. Review the relevant data values reported for the hour (including the Bias-Adjusted Volumetric Flow value reported in RT 220) and correct any calculation errors. If an O₂ or CO₂ Diluent Cap value is used in the calculation, ensure the Diluent Cap Indicator reported in RT 300, column 56, is set to "Y" for the hour.

Error Code 159 REPORTED AND CALCULATED HOURLY HEAT INPUT RATE NOT EQUAL *(Status Code 9 error)*

The hourly Heat Input Rate from Oil calculated by EPA using Equation F-19 (or F-19V for Subpart H units) and the reported Oil GCV (RT 302, column 34) and Oil Flow Rate (RT 302, column 21 if Mass Flow Rate is used, or RT 302, column 59 if Volumetric Flow Rate is used) does not match the value reported in RT 302, column 45. Ensure that the oil flow and GCV values reported in RT 302 are correct and are used in the DAHS calculation for Equation F-19 or F-19V.

Error Code 160 REPORTED AND CALCULATED HOURLY HEAT INPUT RATE NOT EQUAL *(Status Code 9 error)*

The hourly Heat Input Rate from Gas calculated by EPA using the reported Gas Fuel Flow (RT 303, column 21) and the Gas GCV (RT 303, column 34) does not match the value reported in RT 303, column 45. Ensure that the Fuel Flow and GCV values reported in RT 303 are correct and are used in the DAHS calculation for Equation F-20.

Error Code 161 FLOW RATE RECORD (RT 220) NOT FOUND FOR RT 300 HEAT INPUT *(Status Code 9 error)*

No hourly Volumetric Flow Rate record (RT 220) was reported for one or more hours where the Hourly Heat Input Rate value reported in RT 300, column 36, is calculated using the CEMS Heat Input Methodology. The Date/Time of the first occurrence of this problem is displayed below, along with the

Active Error codes in the Summary, Sequence, Formula, and LME Program

associated Stack/Unit ID. Review the data for the hour and ensure that all data required for calculating the hourly heat input rate are reported.

Error Code 162 **ZERO STACK FLOW REPORTED FOR HOUR USING CEMS FOR HEAT INPUT RATE** (*Status Code 9 error*)

The Adjusted Volumetric Flow Rate value reported in RT 220, column 39, was blank or zero for an hour where hourly Heat Input rate is reported in RT 300 for the Stack/Unit ID displayed below. The Time/Date of the first occurrence of this problem is also displayed. Note: if start-up or shut-down conditions result in a stack flow rate that is too low to be registered by the stack flow monitor, you may report a default minimum stack flow rate of 1000 scfh (use Method of Determination Code "55" in RT 220, column 56). Review the operating data for the hour to determine that the correct stack flow value has been reported for the hour and that the hourly Heat Input rate value is also correct.

Error Code 163 **CO2 CONCENTRATION VALUE NOT FOUND FOR CEMS HEAT INPUT CALC.** (*Status Code 5 error*)

The Formula Code reported in RT 520, column 18, and the Heat Input Formula ID reported in RT 300, column 43, indicate that a CO2 concentration (from RT 202 or RT 210) is required for calculating the RT 300 Heat Input Rate value for the hour displayed below (equations F-15 or F-16). However, no corresponding RT 202 or RT 210 was found for the same Unit/Stack ID, Date, and Hour. The report must be corrected and resubmitted before the submission deadline.

Error Code 164 **O2 CONCENTRATION (RT 211) NOT FOUND FOR CEMS HEAT INPUT CALC.** (*Status Code 5 error*)

The Formula Code reported in RT 520, column 18, and the Heat Input Formula ID reported in RT 300, column 43, indicate that O2 concentration (RT 211) is required for calculating the RT 300 Heat Input Rate value for the hour displayed below (equations F-17, F-17D, or F-18). However, no corresponding RT 211 was found for the same Unit/Stack ID, date, and time. The report must be corrected and resubmitted before the submission deadline.

Error Code 165 **MULTIPLE RTS 211 WITHOUT PROPER IDENTIFICATION OF MOISTURE BASIS** (*Status Code 9 error*)

The file indicates the use of equation F-17, F-17D or F-18 which require oxygen measured on either a wet or dry basis to determine heat input. While attempting to recalculate your heat input two RTs 211 were found for the same operating hour. The records did not contain the moisture basis in field 211:31, therefore causing the recalculation to fail.

Error Code 166 **INCONSISTENT FORMULA CODE AND DILUENT CAP INDICATOR** (*Status Code 9 error*)

You reported the use of equation F-17D which supports the use of diluent cap value for heat input rate, but did not indicate the use of a diluent cap value in RT 300 for the hour.

Error Code 167 **UNIT TYPE CANNOT BE DETERMINED FOR DILUENT CAP HOUR** (*Status Code 9 error*)

The Unit Type could not be determined for an hour in which the Diluent Cap Indicator reported in RT 300, column 56, shows that a CO2 or O2 Diluent Cap value was used in calculating the Heat Input Rate. Ensure that the correct Unit Type code is reported in RT 504, column 10, for the Unit ID, so that the correct CO2 or O2 diluent cap value can be used to recalculate the Heat Input Rate for the hour.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 168 **CO2 OR O2 DILUENT CAP VALUE USED FOR NON-QUALIFYING HOUR** (Status Code 9 error)

The Diluent Cap Indicator reported in RT 300, column 56, is "Y", indicating that a default CO2 or O2 Diluent Cap value was used in calculating the Heat Input Rate for the hour. However the hour does not qualify for use of the Diluent Cap based on the measured CO2 (or O2) value reported for the hour. For CO2 the measured value exceeds 5.0% (for a boiler) or exceeds 1.0% (for a turbine). For O2 the measured value is less than 14.0% (for a boiler) or is less than 19.0% (for a turbine). Either correct the Diluent Cap Indicator or ensure the correct CO2 or O2 value is reported for the hour.

Error Code 169 **NO MOISTURE VALUE FOUND FOR HEAT INPUT RATE CALCULATION** (Status Code 9 error)

For the Date and Time listed below, the Heat Input Rate value reported in RT 300, column 36, is calculated using one of the following Formula Codes: F-16, F-17, F-17D, or F-18. These formulas require a moisture value, however no moisture value was reported for the hour. If a Default Moisture value was used, ensure that an RT 531 is correctly reported to provide the value. If a Moisture Monitoring System is used, ensure that an RT 212 is reported for the hour to provide the moisture value.

Error Code 173 **INVALID BIAS ADJUSTMENT FACTOR USED FOR SO2 SYSTEM** (Status Code 5 error)

The Bias-Adjusted SO2 concentration reported in RT200, column 35, is less than the Unadjusted value reported in RT200, column 29. Ensure that your software is using the correct Bias Adjustment Factor (it must be greater than or equal to 1.0) and check for other problems that may have caused this error. The report must be corrected and resubmitted before the submission deadline.

Error Code 174 **INVALID BIAS ADJUSTMENT FACTOR USED FOR FLOW SYSTEM** (Status Code 5 error)

The Bias-Adjusted Flow value reported in RT220, column 39, is less than the Unadjusted value reported in RT220, column 29. Ensure that your software is using the correct Bias Adjustment Factor (it must be greater than or equal to 1.0) and check for other problems that may have caused this error. The report must be corrected and resubmitted before the submission deadline.

Error Code 175 **INVALID BIAS ADJUSTMENT FACTOR USED FOR NOx SYSTEM** (Status Code 5 error)

The Bias-Adjusted NOx emission rate reported in RT320, column 42 is less than the Unadjusted value reported in RT320, column 36. Ensure that your software is using the correct Bias Adjustment Factor (it must be greater than or equal to 1.0) and check for other problems that may have caused this error. The report must be corrected and resubmitted before the submission deadline.

Error Code 176 **ZERO OR BLANK HEAT INPUT RATE FROM OIL REPORTED** (Status Code 5 error)

The Heat Input Rate from Oil during Oil Combustion, reported in RT 302 column 45 is either blank or zero. Ensure the correct Heat Input Rate value is reported in RT 302. If no oil was combusted during the hour do not report RT 302. The report must be corrected and resubmitted before the submission deadline.

Error Code 177 **ZERO OR BLANK OIL FUEL USAGE TIME REPORTED IN RT 302** (Status Code 5 error)

The Fuel Usage Time reported in RT 302, column 52, was 0.00 or blank for one or more hours. The first occurrence of this problem is displayed below. If Oil was combusted during the hour, correct the fuel

Active Error codes in the Summary, Sequence, Formula, and LME Program

usage time. If Oil was not combusted during the hour do not report RT 302 for the hour. The report must be corrected and resubmitted before the submission deadline.

Error Code 178 MONITORING SYSTEM ID NOT FOUND IN MONITORING PLAN RT 510 *(Status Code 5 error)*

The OIL fuel flow System ID reported in RT 302, column 10 was not found in an RT 510 of the monitoring plan for this Unit/Pipe ID. The problem System ID is displayed below. Ensure that the RT 302 contains the correct System ID and that the oil fuel flow system components are correctly identified in RT 510s (including the correct System ID reported in RT 510, column 13). The report must be corrected and resubmitted before the submission deadline.

Error Code 179 INVALID MONITORING SYSTEM PARAMETER CODE FOR OIL SYSTEM *(Status Code 5 error)*

The Monitoring System Parameter Code reported in RT 510, column 17 for the OIL Fuel Flow System ID reported in RT 302, column 10 is not appropriate for the Source of Data Code reported in RT 302, column 31. Ensure the correct Oil System ID and Source of Data Code are reported in RT 302, and that the correct Parameter Code is reported in RT 510 for the Oil System ID. The report must be corrected and resubmitted before the submission deadline.

Error Code 180 UNADJUSTED SO2 EXCEEDS MAXIMUM POTENTIAL CONCENTRATION *(Status Code 9 error)*

The SO₂ Concentration value reported in RT 200, column 29 is greater than the high-scale SO₂ Maximum Potential Concentration (MPC) reported in RT 530, column 17. The reported value and the corresponding MPC value are displayed below, along with the Date and Time. Ensure that the correct SO₂ MPC value (SO₂ ppm, 3 decimal places) is reported in RT 530, and that the Monitoring System ID reported in RT 200, column 13, matches the high-scale SO₂ Monitoring System ID identified in RT 510, column 13.

Error Code 181 UNADJUSTED NOX EXCEEDS MAXIMUM POTENTIAL CONCENTRATION *(Status Code 9 error)*

The NO_x Concentration value reported in RT 201, column 24 is greater than the high-scale NO_x Maximum Potential Concentration (MPC) reported in RT 530, column 17. The reported value and the corresponding MPC value are displayed below, along with the Date and Time. Ensure that the correct NO_x MPC value (NO_x ppm, 3 decimal places) is reported in RT 530, and that the Monitoring System ID reported in RT 201, column 13, matches the high-scale NO_x Concentration Monitoring System ID identified in RT 510, column 13.

Error Code 183 SO2 COMPONENT ID/SYSTEM ID IN RT 200 DOES NOT MATCH RT 510 *(Status Code 5 error)*

The Method of Determination Code (MODC) reported in RT 200, column 41, indicates that the reported SO₂ value is from a CEM system (MODC = 01, 02, 03, 04, 17, 19, or 20). However the Component ID and System ID reported in columns 10-15 of the RT 200 do not match the Component ID and System ID reported in columns 10-15 of any RT 510 in the monitoring plan. If you are reporting a Missing Data value for SO₂, correct the MODC and leave the Component/System ID blank. Otherwise, ensure RT 200 contains a valid Component ID/System ID that is also defined in RT 510 for the SO₂ system used to report the data. Correct and resubmit the report before the submission deadline.

Error Code 184 INVALID COMPONENT TYPE CODE FOR SO2 COMPONENT *(Status Code 9 error)*

Active Error codes in the Summary, Sequence, Formula, and LME Program

The component code associated with the component ID for SO₂ concentration reporting is invalid. Please investigate the issue and ensure that the correct component code associated with SO₂ concentration is reported in your next quarterly report.

Error Code 185 **VALID RT 530 NOT FOUND FOR HIGH-SCALE SO₂ SPAN** (*Status Code 9 error*)

For SO₂ concentration reported in RT 200 from a dual or high-scale SO₂ component there was no matching active high-scale SO₂ span record (RT 530) reported in the monitoring plan. Check that there is a RT 530 reported in the monitoring plan for the high-scale SO₂ component. If the span was changed ensure that the span effective date/hour and the old span inactivation date/hour are correctly reported. Also ensure that the RT 530 component and parameter codes are valid and upper-case.

Error Code 188 **AVERAGE SO₂ CONCENTRATION NOT EQUAL TO DEFAULT HIGH RANGE VALUE** (*Status Code 9 error*)

For one or more hours, a MODC of 19 was reported in RT 200, column 41 to indicate that the reported SO₂ concentration value in column 29 should be 200% of MPC, Default High-Range value (defined in RT 530, column 85 for the SO₂ high-scale component). However, the reported SO₂ concentration value does not equal the Default High-Range value.

Error Code 190 **NO HOURLY SO₂ MASS EMISSIONS RECORDS FOUND IN FILE** (*Status Code 5 error*)

No hourly SO₂ records were reported for the Stack/Unit/Pipe ID identified below. Sources affected by the Acid Rain Program must report SO₂ Mass Emissions for every operating hour. If SO₂ emissions are monitored using a CEM, report RT 310 for every operating hour. If SO₂ emissions are measured using an Appendix D methodology for oil and/or gas combustion, then report RT 302/313 (for oil) and/or RT 303/314 (for gas) for every operating hour. If this source operated, ensure that the hourly SO₂ records are included in the EDR and resubmit the report before the submission deadline. If this source did NOT operate during the calendar quarter, ensure the EDR is correctly formatted for a non-operating source (do not report 600-level records or RT 230/231 daily QA tests if the source did not operate during the entire quarter) and resubmit before the submission deadline.

Error Code 191 **NO HOURLY NO_x EMISSION RATE RECORDS FOUND IN FILE** (*Status Code 5 error*)

No hourly NO_x Emission Rate records were reported in the file. Sources affected by the Acid Rain Program must report NO_x Emission Rate records for every operating hour. If NO_x emissions are monitored using a CEM, report RT 320 for every operating hour. If NO_x emissions are measured using an Appendix E methodology, report hourly RT 323 or RT 324 (as appropriate) for every operating hour. If the source operates ensure that the hourly NO_x rate records are included in the EDR and resubmit the report before the submission deadline. If this source did NOT operate during the calendar quarter, ensure the EDR is correctly formatted for a non-operating source (do not report 600-level records or RT 230/231 daily QA tests if the source did not operate during the entire quarter) and resubmit before the submission deadline.

Error Code 192 **NO CO₂ MASS EMISSIONS RECORDS FOUND IN FILE** (*Status Code 5 error*)

No CO₂ Mass Emissions records were reported for the Stack/Unit/Pipe ID identified below. For sources affected by the Acid Rain Program, a RT 330 must be reported for each hour of unit operation or, if applicable, a RT 331 must be reported for each day of unit operation. If this source operated, ensure that the required CO₂ records are included in the EDR and resubmit the report before the submission deadline. If this source did NOT operate during the calendar quarter, ensure the EDR is correctly formatted for a non-operating source (do not report 600-level records or RT 230/231 daily QA tests if the source did not operate during the entire quarter) and resubmit before the submission deadline.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 193 NO HOURLY HEAT INPUT REPORTED IN RECORD TYPE 300 (*Status Code 9 error*)

No hourly heat input rate was reported in RT 300 for five or more consecutive hours during which the Stack/Unit/Pipe operated (operating time reported in RT 300 columns 18-21 is greater than 0.25). For units associated with a common stack, common pipe, multiple stack, or multiple pipe, gross unit MW load or steam load was reported during hours when zero heat input was reported for five or more consecutive hours of unit operation. Ensure that the hourly heat input rate is correctly reported when the unit is operating, and ensure that the operating time is also correctly reported for each clock hour.

Error Code 194 NO RECORD TYPE 300s REPORTED FOR STACK/UNIT/PIPE (*Status Code 9 error*)

No RT 300s were reported for the Stack/Unit/Pipe ID identified below. For sources affected by the Acid Rain Program: if a unit operated during a calendar quarter, a RT 300 must be reported for each clock hour during the quarter for the unit, and a RT 300 must be reported for each clock hour for any Stack or Pipe associated with that unit (as defined in the monitoring plan). Units that qualify as a Low Mass Emissions (LME) unit are not subject to this requirement (they report RT 360 instead). If you received this error message please contact your EPA analyst.

Error Code 195 INCONSISTENT SO2 CONCENTRATION FOR FULL SCALE EXCEEDANCE HOUR (*Status Code 9 error*)

The value for SO2 concentration during an hour in which a full-scale range exceedance was reported does not equal 200% of the full scale range for the active SO2 high scale span record in your monitoring plan.

Error Code 196 NO OIL FLOW RATE VALUE REPORTED IN RT 302 (*Status Code 5 error*)

The Oil Fuel Flow Rate reported in RT 302 was blank or zero for the hour indicated below. If oil was combusted during the hour, the flow rate must be reported. If Mass flow rate of oil is required for this Unit/Pipe, report the value in RT 302, column 21. If Volumetric flow rate of oil is required, report the value in RT 302, column 59. If oil was not combusted during the hour, do not report RT 302 for that hour. Review the oil consumption data and correct the hourly record(s) as necessary. The report must be corrected and resubmitted by the submission deadline.

Error Code 197 MISSING VOLUMETRIC OR MASS OF OIL FLOW RATE IN RT 302 (*Status Code 9 error*)

In RT 302 you did not report both the volumetric flow rate (column 59) and mass flow rate (column 21) for oil for an hour in which the Source of Data Code (column 31) indicates the mass of oil was calculated from a measured volumetric flow rate.

Error Code 198 MISSING OIL DENSITY VALUE FOR HOUR MEASURING VOLUMETRIC FLOW (*Status Code 9 error*)

You reported a zero or blank Density of Oil in RT 302, column 75, for an hour in which the reported value for mass of oil (column 21) was calculated from the volumetric flow rate (column 59).

Error Code 199 REPORTED AND CALCULATED OIL MASS FLOW RATE NOT EQUAL (*Status Code 9 error*)

While recalculating the hourly Heat Input Rate from Oil value reported in RT 302, column 45, EPA found that the hourly Mass Flow Rate of Oil recalculated from the Volumetric Flow Rate (column 59) and the Oil Density (column 75) does not equal the Mass Flow Rate of Oil value reported in RT 302, column 21.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 200 **RECORD TYPE 504 REPORTED FOR A STACK OR PIPE** (*Status Code 5 error*)

RT 504 was reported for the Stack or Pipe ID displayed below. Do not use RT 504 to define a Stack or Pipe. Only report RT 503 (Stack/Pipe Definition Table) to define a Stack or Pipe. Correct the quarterly report and resubmit it before the submission deadline.

Error Code 201 **RECORD TYPE 503 REPORTED FOR A UNIT** (*Status Code 5 error*)

RT 503 was reported for the Unit ID displayed below. Do not use RT 503 to define a unit. Only report RT 504 (Unit Information) to define a unit. RT 503 (Stack/Pipe Definition Table) is only used to define a common, multiple, or complex Stack or Pipe. Correct the quarterly report and resubmit it before the submission deadline.

Error Code 202 **PRIMARY SO2 MONITOR NOT FOUND FOR SO2 CEMS UNIT** (*Status Code 9 error*)

RT 585 indicates the use of an SO2 CEM system at this unit. The RT 510 data for this unit, however, does not contain any SO2 system(s) for the unit. For each unit or associated stack using SO2 CEMS there must be at least one primary SO2 CEM system in the quarterly data file 510 records.

Error Code 203 **SO2 MONITOR NOT FOUND FOR UNIT REPORTING USE OF SO2 CEMS** (*Status Code 9 error*)

RT 585 indicates the use of an SO2 CEM system at this unit. The RT 510 data for this unit, however, does not contain any SO2 system(s) for the unit. For each unit or associated stack using SO2 CEMS there must be at least one primary SO2 CEM system in the quarterly data file 510 records.

Error Code 204 **PRIMARY SO2 MONITOR NOT FOUND FOR SO2 CEMS STACK** (*Status Code 9 error*)

The monitoring plan (RT 585) indicates the use of an SO2 CEM system at this stack. The RT 510 data for this stack, however, does not contain a primary SO2 system. For each stack using SO2 CEMS there must be at least one primary SO2 CEM system in the quarterly data file 510 records.

Error Code 205 **SO2 MONITOR NOT FOUND FOR STACK REPORTING USE OF SO2 CEMS** (*Status Code 9 error*)

The Monitoring Methodology Information (RT 585) indicates that CEMS monitoring methodology is used to report SO2 emissions for the Stack ID and associated Unit ID displayed below. However the monitoring systems identified in RT 510s for the Stack ID do not include an active SO2 CEM system for the calendar quarter. If an SO2 system was used in the quarter, ensure that at least one primary SO2 CEM system is defined in RT 510s, and that the system Status code reported in RT 510, column 16, is not 'D' (to indicate the system was active during the quarter).

Error Code 208 **PRIMARY OILM OR OILV SYSTEM NOT FOUND FOR OIL UNIT** (*Status Code 9 error*)

RT 585 indicates the use of Appendix D oil methods at this unit. The RT 510 data for this unit, however, does not contain a primary OILM or OILV fuel flowmeter system. For each unit using Appendix D estimation procedures there must be at least one primary oil flowmeter system in the quarterly data file 510 records.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 209 **OILM OR OILV SYSTEM NOT FOUND FOR OIL UNIT** (*Status Code 9 error*)

RT 585 indicates the use of Appendix D oil methods at this unit. The RT 510 data for this unit, however, does not contain any OILM or OILV fuel flowmeter system(s) for the unit. For each unit or associated pipe using Appendix D estimation procedures there must be at least one primary oil flowmeter system in the quarterly data file 510 records.

Error Code 210 **PRIMARY OILM OR OILV SYSTEM NOT FOUND FOR OIL PIPE** (*Status Code 9 error*)

RT 585 indicates the use of Appendix D oil methods at this unit. The RT 510 data for this unit, however, does not contain a primary OILM or OILV fuel flowmeter system for the pipe associated with this unit. For each unit/pipe using Appendix D estimation procedures there must be at least one primary oil flowmeter system in the quarterly data file 510 records.

Error Code 211 **OILM OR OILV SYSTEM NOT FOUND FOR OIL PIPE** (*Status Code 9 error*)

RT 585 indicates the use of Appendix D oil methods at this unit. The RT 510 data for pipe associated with the unit, however, does not contain any OILM or OILV fuel flowmeter system(s). For each unit or associated pipe using Appendix D estimation procedures there must be at least one primary oil flowmeter system in the quarterly data file 510 records.

Error Code 212 **PRIMARY GAS SYSTEM NOT FOUND FOR GAS UNIT** (*Status Code 9 error*)

RT 585 indicates the use of Appendix D gas methods at this unit. The RT 510 data for this unit, however, does not contain a primary GAS fuel flowmeter system. For each unit using Appendix D estimation procedures there must be at least one primary gas flowmeter system in the quarterly data file 510 records.

Error Code 213 **GAS SYSTEM NOT FOUND FOR GAS UNIT** (*Status Code 9 error*)

RT 585 indicates the use of Appendix D gas methods at this unit. The RT 510 data for this unit, however, does not contain any GAS fuel flowmeter system(s) for the unit. For each unit or associated pipe using Appendix D estimation procedures there must be at least one primary gas flowmeter system in the quarterly data file 510 records.

Error Code 214 **PRIMARY GAS SYSTEM NOT FOUND FOR GAS PIPE** (*Status Code 9 error*)

RT585 indicates the use of Appendix D gas methods at this unit. The RT 510 data, however, does not contain a primary GAS fuel flowmeter system for the pipe associated with this unit. For each unit/pipe using Appendix D estimation procedures there must be at least one primary gas flowmeter system in the quarterly data 510 records.

Error Code 215 **GAS SYSTEM NOT FOUND FOR GAS PIPE** (*Status Code 9 error*)

RT 585 indicates the use of Appendix D gas methods at this unit. The RT 510 data for the pipe associated with the unit, however, does not contain any GAS fuel flowmeter system(s). For each unit or associated pipe using Appendix D estimation procedures there must be at least one primary gas flowmeter system in the quarterly data file 510 records.

Error Code 216 **SO2 ANALYZER COMPONENT NOT FOUND FOR SO2 SYSTEM** (*Status Code 5 error*)

An SO2 Monitoring System is identified at this Unit/Stack in RT 510 of the monitoring plan. However, no SO2 monitor component (component type SO2, SO2A, SO2H, or SO2L) was defined in column 23 of a RT 510 for the same system ID. The report must be corrected and resubmitted before the submission deadline.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 217 FLOW COMPONENT NOT FOUND FOR FLOW MONITORING SYSTEM (Status Code 5 error)

A Flow Monitoring System is identified at this Unit/Stack in RT 510 of the monitoring plan. However, no Flow monitor component (component type FLOW) was defined in column 23 of a RT 510 for the same system ID. The report must be corrected and resubmitted before the submission deadline.

Error Code 218 GAS FUEL FLOWMETER COMPONENT NOT FOUND FOR GAS SYSTEM (Status Code 5 error)

A gas fuel flow system is identified at this unit or pipe in RT 510 of the monitoring plan. However, no gas Fuel Flowmeter hardware component (component type GFFM or BGFF) was defined in a RT 510 for the same system ID. Each gas fuel flow system defined in the monitoring plan must include a RT 510 for the gas flowmeter component as well as a RT 510 for the DAHS component. The report must be corrected and resubmitted before the submission deadline.

Error Code 219 OIL FUEL FLOWMETER COMPONENT NOT FOUND FOR OIL SYSTEM (Status Code 5 error)

An oil fuel flow system is identified at this unit or pipe in RT 510 of the monitoring plan. However, no oil Fuel Flowmeter hardware component (component type OFFM or BOFF) was defined in a RT 510 for the same system ID. Each oil fuel flow system defined in the monitoring plan must include a RT 510 for the oil flowmeter component as well as a RT 510 for the DAHS component. The report must be corrected and resubmitted before the submission deadline.

Error Code 220 DAHS COMPONENT NOT FOUND FOR MONITORING SYSTEM (Status Code 5 error)

The monitoring system ID indicated below does not have a DAHS component defined in a RT 510 in the monitoring plan. Ensure that a RT 510 is included for the DAHS component and that the Component Type Code reported in column 23 is "DAHS". Every monitoring system must have a DAHS component defined in a RT 510. Review and correct the monitoring plan records and resubmit the report before the submission deadline.

Error Code 221 SYSTEM PARAMETER CODE INCORRECTLY REPORTED FOR COMPONENT(S) (Status Code 5 error)

The System Parameter Monitored code reported in RT 510, column 17, is not the same for all components defined for the Monitoring System ID listed below. The code must be identical for each component associated with a unique System ID. Review the RT 510s to ensure that the Component and System IDs are correct for each monitoring system. Next, for each System ID ensure the correct Parameter code is reported and that the code is identical for each system component (the code must be upper-case). Correct the problem and resubmit the report before the submission deadline.

Error Code 222 RT 510 PRIMARY/BACKUP CODE INCORRECTLY REPORTED FOR SYSTEM ID (Status Code 5 error)

The Primary/Backup Designation code reported in RT 510, column 21 does not match for all components of the Monitoring System ID identified below. Check the RT 510 for each system component to ensure the Designation Code is valid. All codes must be upper-case. The valid codes are "P", "B", "DB", "RB", "CI", "RM", and "PE". All components within the same System ID must have the same Primary/Backup Designation code. The report must be corrected and resubmitted before the submission deadline.

Error Code 225 BLANK COMPONENT ID FOUND IN RECORD TYPE 510 (Status Code 5 error)

Active Error codes in the Summary, Sequence, Formula, and LME Program

A blank Monitoring System Component ID was found in a RT 510 reported for the Unit/Stack/Pipe ID identified below. Do not leave this field blank. Each RT 510 must contain a valid three-character Component ID in columns 10 through 12. Review all RT 510s and correct each occurrence of this problem. The report must be corrected and resubmitted before the submission deadline.

Error Code 226 INVALID COMPONENT ID FOUND IN RECORD TYPE 510 *(Status Code 5 error)*

An invalid Monitoring System Component ID was found in a RT 510 reported for the Unit/Stack/Pipe ID identified below. The Component ID cannot contain any blanks. Each RT 510 must contain a valid three-character Component ID in columns 10 through 12. Review all RT 510s and correct each occurrence of this problem. The report must be corrected and resubmitted before the submission deadline.

Error Code 227 BLANK SYSTEM ID FOUND IN RECORD TYPE 510 *(Status Code 5 error)*

A blank Monitoring System ID was found in a RT 510 reported for the Stack/Unit/Pipe ID identified below. Do not leave this field blank. Each RT 510 must contain a valid three-character System ID in columns 13 through 15. Review all RT 510s and correct each occurrence of this problem. The report must be corrected and resubmitted before the submission deadline.

Error Code 228 INVALID SYSTEM ID FOUND IN RECORD TYPE 510 *(Status Code 5 error)*

An invalid Monitoring System ID was found in a RT 510 reported for the Unit/Stack/Pipe ID identified below. The System ID cannot contain any blanks. Each RT 510 must contain a valid three-character System ID in columns 13 through 15. Review all RT 510s and correct each occurrence of this problem. The report must be corrected and resubmitted before the submission deadline.

Error Code 229 RT 601 SYSTEM ID NOT FOUND IN MONITORING PLAN RT 510 *(Status Code 5 error)*

The System ID reported in RT 601 (Linearity Check Data), column 13, was not found in column 13 of a corresponding RT 510 for this unit/stack ID. Ensure that the test data are for a monitoring system that is used at this Unit/Stack ID. If so, correct the test data and/or monitoring plan records. The report must be corrected and resubmitted before the submission deadline.

Error Code 230 OZONE SEASON NOX FROM HOURLY AND CUMULATIVE RECORDS NOT EQUAL *(Status Code 5 error)*

The total NOx Mass Emissions calculated from the hourly data does not equal the Cumulative Ozone Season value reported in RT 307, column 28. The hourly total is calculated by summing the Total NOx Mass values reported in all RT 328s and dividing by 2000 to convert to tons. For the 2nd quarter, the hourly values starting with the first hour of the first day of May to the end of the quarter were used. A difference of 0.5 ton or greater was found. Review the hourly values (RT 328) and the Cumulative Ozone Season value reported in RT 307. Correct the problem and resubmit the report before the submission deadline.

Error Code 231 REPORTING PERIOD NOX FROM HOURLY AND CUMULATIVE RECORDS NOT EQUAL *(Status Code 5 error)*

The total Reporting Period NOx Mass Emissions value calculated from the hourly data does not equal the Reporting Period NOx Mass value reported in RT 307, column 18. A difference of 0.5 ton or greater was found. The Reporting Period NOx Mass value was recalculated by summing the hourly Total NOx Mass values reported in RT 328, column 32, and dividing the total by 2000 to convert to tons. Correct the problem and resubmit the report before the submission deadline.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 232 **HEAT INPUT FROM OZONE SEASON AND HOURLY RECORDS NOT EQUAL** (*Status Code 5 error*)

Ozone Season heat input from RT 307, column 48, does not equal the value calculated from all RT 300s (each hourly value for the ozone season was weighted by unit operating time, all resulting hourly values were then summed and the total compared against the Ozone Season total reported in RT 307). A difference of more than 1000 mmBtu and 1% is indicated. Review the hourly values (RT 300) and the Ozone Season value reported in RT 307. Correct the problem and resubmit the report before the submission deadline.

Error Code 233 **HEAT INPUT FROM HOURLY AND REPORTING PERIOD RECORDS NOT EQUAL** (*Status Code 5 error*)

The Reporting Period Heat Input calculated from the hourly records (RT 300) does not equal the Reporting Period value reported in RT 307, column 38. Each hourly value was weighted by unit operating time for each hour, then summed and compared to the Reporting Period value reported in RT 307. Based on the calculation, a difference of more than 1000 mmBtu and 1% is indicated. Review the hourly values (RT 300) and the Reporting Period value reported in RT 307. Correct the problem and resubmit the report before the submission deadline.

Error Code 234 **NO VALID RT 585 REPORTED FOR NOX FOR UNIT IDENTIFIED IN RT 504** (*Status Code 5 error*)

No valid RT 585 (Monitoring Methodology Information) for NOx method was reported for the Unit ID displayed below. Either the RT 585 is missing or is not "active" (based on the reported dates), or an invalid NOx Parameter Code was reported in column 10. The valid NOx Parameter Codes are: NOXR and NOXM. An active RT 585 has a Methodology Start Date in column 34 that is on or before the last day of the quarter and a Methodology End Date in column 42 that is blank or after the first day of the quarter. Correct the error and resubmit the report before the submission deadline.

Error Code 235 **INVALID RT 587 REPORTED FOR UNIT IDENTIFIED IN RT 504** (*Status Code 5 error*)

An invalid RT 587 (Unit Fuel Type) was reported for the Unit ID displayed below. Either the RT 587 is not "active" (based on the reported dates) or an invalid Fuel Type Code was reported in column 10. The valid Fuel Type Codes are: C, CRF, DSL, LPG, NNG, OGS, OIL, OOL, OSF, PNG, PRG, PRS, R, W, and WL. An active RT 587 has a Fuel Type Start Date in RT 587, column 13 that is on or before the last day of the quarter and a Fuel Type End Date in RT 587, column 21 that is blank or after the first day of the quarter. Correct the error and resubmit the report before the submission deadline.

Error Code 236 **RT 504 REPORTED WITHOUT REQUIRED SUPPORTING RECORDS** (*Status Code 5 error*)

A RT 504 (Unit Information) was reported for the Unit ID(s) displayed below that was not accompanied by all of the required supporting Record Types for the same Unit ID: RT 505 (Program Reporting Indicator), RT 585 (Monitoring Methodology Information), RT 587 (Unit Fuel Type). Review each RT 504 in the file to ensure the Unit ID is correct and that it is accompanied by each of the required supporting record types identified above. The report must be corrected and resubmitted before the submission deadline.

Error Code 237 **IMPROPER STATUS FOR DAILY QA REFERENCE CHECK FOR NON-CEM PARAMETER** (*Status Code 9 error*)

The status reported in RT 232 (Daily QA Reference Checks for Non-CEMS Parameters) is neither "P" (Pass) or "F" (Fail). Please ensure that the proper status is reported in your next quarterly report.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 238 **IMPROPER STATUS FOR OTHER DAILY QA CHECKS** (*Status Code 9 error*)

The status reported in RT 233 (Other Daily QA Checks) is neither "P" (Pass) or "F" (Fail). Please ensure that the proper status is reported in your next quarterly report.

Error Code 239 **RT 602 SYSTEM ID NOT FOUND IN MONITORING PLAN RT 510** (*Status Code 5 error*)

The System ID reported in RT 602 (Linearity Check Results), column 13, was not found in column 13 of a corresponding RT 510 for this unit/stack ID. Ensure that the linearity test result data are for a monitoring system that is used at this Unit/Stack ID. If so, correct the test data and/or monitoring plan records. The report must be corrected and resubmitted before the submission deadline.

Error Code 240 **NOX MASS FORMULA ID REPORTED IN RT 328 NOT FOUND IN AN RT 520** (*Status Code 5 error*)

The Total Hourly NOx Mass Formula ID reported in RT 328, column 42 was not found in a corresponding RT 520 that has the Parameter Code "NOXM" reported in column 14. Ensure that an RT 520 is reported to provide the NOx Mass Formula, and that the Formula ID reported in the RT 520, column 11, matches the Total Hourly NOx Mass Formula ID reported in RT 328, column 42.

Error Code 241 **REPORTED OZONE SEASON NOX MASS EMISSIONS VALUE EXCEEDS MAXIMUM** (*Status Code 5 error*)

The Cumulative Ozone Season NOx Mass Emissions value reported in RT 307, column 28, for this Stack/Unit ID exceeds 100,000 tons, which exceeds the maximum value expected for any source. If this value is not correct review and correct the hourly and/or Cumulative NOx Mass Emissions values and resubmit the report before the submission deadline. If the reported value is the correct actual Cumulative Ozone Season NOx Mass Emissions, please contact your EPA Analyst identified in this letter for further guidance.

Error Code 242 **FORMULA ID FOR TOTAL HOURLY NOX MASS EMISSIONS IS BLANK** (*Status Code 9 error*)

The Formula ID for Total NOx Mass Emissions is blank in the Record Type identified above (RT 328 or RT 520). The Formula ID for Total NOx Mass must be reported in the hourly RT 328, column 42 and in the monitoring plan in RT 520, column 11 (the RT 520 for the Total NOx Mass formula has the "NOXM" parameter code reported in column 14). Do not leave the Formula ID blank. Ensure that the correct Formula ID is reported in both RT 328 and in RT 520.

Error Code 243 **SO2 EMISSIONS CALCULATION ERRORS FOUND FOR 15 OR MORE HOURS** (*Status Code 5 error*)

The Adjusted SO2 Mass Emission Rate reported in RT 310 does not equal EPA's recalculated value for a total of 15 or more hours. For these hours EPA recalculated the SO2 mass emissions value using data from the appropriate 200-level records and formula F-1, F-2, or F-23 (whichever is identified in your monitoring plan). For a specific hourly example see the message for error code 120. Review the DAHS calculation (including the formula), the 200-level records, and any other related data (Bias Adjustment Factor (BAF), for example) to determine the cause of the problem. The report must be corrected and submitted before the resubmission deadline.

Error Code 244 **NOX EMISSION RATE CALCULATION ERRORS FOUND FOR 15 OR MORE HOURS** (*Status Code 5 error*)

Active Error codes in the Summary, Sequence, Formula, and LME Program

The average NOx Emission Rate reported in RT 320, column 36 does not equal EPA's recalculated value for a total of 15 or more hours. For these hours the hourly NOx emission rate was recalculated by EPA using the data reported in RTs 201, 210, (or 211), and 212 (or 531), as applicable. For a specific hourly example see the message for error code 134. Review the DAHS calculation (including the formula) and the relevant 200-level records to determine the cause of the problem. The report must be corrected and submitted before the resubmission deadline.

Error Code 245 CO2 EMISSION CALCULATION ERRORS FOUND FOR 15 OR MORE HOURS (Status Code 5 error)

The CO2 Mass Emission Rate reported in RT 330, column 18 does not equal EPA's recalculated value for a total of 15 or more hours. For these hours EPA recalculated the CO2 Mass Emission Rate using data from the appropriate 200-level records and formula F-2 or F-11 (as identified in the monitoring plan). For a specific hourly example see the message for error code 144. Review the DAHS calculation (including the formula), the 200-level records, and any other related data to determine the cause of the problem. The report must be corrected and submitted before the resubmission deadline.

Error Code 246 HEAT INPUT CALCULATION ERRORS FOUND FOR 15 OR MORE HOURS (Status Code 5 error)

The Hourly Heat Input Rate reported in RT 300, column 36 does not equal EPA's recalculated value for a total of 15 or more hours. For these hours EPA recalculated the Heat Input Rate using formula F-15, F-16, F-17, F-17d, or F-18 (whichever is identified in the RT 300 for the hour and in RT 520 in the monitoring plan). For a specific hourly example see the message for Error Code 158. Review the DAHS calculation (including formulas, Flow BAF application, and rounding) and any other related data to determine the cause of the problem. The report must be corrected and submitted before the resubmission deadline.

Error Code 247 NOX MASS EMISSION CALCULATION ERRORS FOUND FOR 15 OR MORE HOURS (Status Code 5 error)

The Total NOx Mass Emission Rate reported in RT 328, column 32 does not equal EPA's recalculated value for a total of 15 or more hours. For these hours EPA recalculated the NOx Mass Emissions value using the NOx Emission Rate from RT 320, column 42 and weighing by the Operating Time and Heat Input reported in RT 300 for the hour. For a specific hourly example see the message for error code 371. Review the DAHS calculation (including the formula) and any other related data (RT 320, for example) to determine the cause of the problem. The report must be corrected and submitted before the resubmission deadline.

Error Code 248 NOX MASS EMISSION CALCULATION ERRORS FOUND FOR 15 OR MORE HOURS (Status Code 5 error)

The Total NOx Mass Emissions value reported in RT 328, column 32 does not equal EPA's recalculated value for a total of 15 or more hours. For these hours EPA recalculated the NOx Mass Emissions value using the Adjusted NOx Concentration value from RT 201, the Adjusted Volumetric Stack Flow value from RT 220, and then weighing by the Operating Time reported in RT 328. For a specific hourly example, see the message for Error Code 379 in this feedback report. Review the DAHS calculation (including the formula and BAF Application for NOx and Flow) in order to determine the cause of the problem. The report must be corrected and submitted before the resubmission deadline.

Error Code 249 SO2 EMISSION CALCULATION ERRORS FOUND FOR 15 OR MORE HOURS (Status Code 5 error)

Active Error codes in the Summary, Sequence, Formula, and LME Program

The reported SO₂ Mass Emissions Rate from Oil Combustion, reported in RT 313, column 30 does not equal EPA's recalculated value for a total of 15 or more hours. For these hours, EPA recalculated the SO₂ Emissions using data from RTs 302 and 313 and Equation D-2 (from Appendix D to Part 75). For a specific hourly example see the message for error code 122. Review the data reported in RT 302 and the corresponding RT 313 to determine the cause of the problem. The report must be corrected and submitted before the resubmission deadline.

Error Code 255 **HEAT INPUT RATE IN RT 300 IS HIGH** (*Status Code 5 error*)

The heat input rate reported in RT 300, column 36 is greater than or equal to 99999. If this is the actual Heat Input rate for the hour, please contact your EPA assigned analyst. If this is not the actual Heat Input rate for the hour, a resubmission will be necessary to correct the problem. Please ensure that the correct heat input rate is reported in the file and resubmit this file before the submission deadline.

Error Code 256 **CO₂ MASS EMISSION RATE IN RT 330 IS HIGH** (*Status Code 5 error*)

The CO₂ mass emission rate reported in RT 330, column 18 is greater than or equal to 9999. If this is the actual CO₂ mass emission rate for the hour, please contact your EPA assigned analyst. If this is not the actual CO₂ rate for the hour, a resubmission will be necessary to correct the problem. Please ensure that the correct CO₂ mass emission rate is reported in the file and resubmit this file before the submission deadline.

Error Code 257 **SO₂ MASS EMISSION RATE IN RT 3XX IS HIGH** (*Status Code 5 error*)

The SO₂ mass emissions rate reported in RT 310 or RT 313 and/or RT 314 is greater than 99,999. If this is the actual SO₂ mass emission rate for the hour, please contact your EPA analyst. If this is not the actual SO₂ mass emission rate for the hour, please correct the problem and resubmit the file before the submission deadline.

Error Code 258 **REPORTED HOURLY AVERAGE NO_x EMISSION RATE EXCEEDS MAXIMUM** (*Status Code 5 error*)

The Hourly Average NO_x Emission Rate value reported in RT 320 (column 42) or RT 323 (column 22), or RT 324 (column 25) exceeds 6.0 lb/mmBtu, which exceeds the maximum value expected for any source. The Date and Time of the first occurrence of this problem is displayed below, along with the associated Unit/Stack ID. If the value is not correct, review and correct the data as necessary and resubmit the report before the submission deadline. On the other hand, if the reported Hourly Average NO_x Emission Rate value is correct, please contact your EPA Analyst identified in this letter for further guidance.

Error Code 259 **NEGATIVE VALUE REPORTED IN HOURLY RECORD** (*Status Code 5 error*)

A negative value was reported in the hourly record type identified above, for the date and time displayed below. Correct the problem record and review all other 200-level and 300-level records reported for the same hour and correct them if necessary. The corrected report must be resubmitted before the submission deadline.

Error Code 260 **NO_x COMPONENT/SYSTEM ID IN RT 201 NOT FOUND IN RT 510** (*Status Code 5 error*)

The NO_x component ID and system ID reported in RT 201, columns 10 through 15 were not found in columns 10 through 15 in a RT 510 in the monitoring plan. For the Unit/Stack ID displayed below, ensure that the NO_x system and its components are correctly reported in the monitoring plan RT 510s, and that the correct NO_x component/system IDs are used in RT 201. The report must be corrected and resubmitted before the submission deadline.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 261 **RT 510 COMPONENT TYPE CODE IS INVALID FOR NOX COMPONENT ID** (Status Code 5 error)

The Component Type Code reported in RT 510, column 23, for the NOx Component ID reported in RT 201, column 10, is invalid. The valid NOx component type codes are: NOX, NOXA, NOXH, and NOXL (the reported code MUST be upper-case). Ensure the correct Component ID is reported in both RT 201 and RT 510, and ensure the reported RT 510 Component Type Code is valid for the NOx Component. The report must be corrected and resubmitted before the submission deadline.

Error Code 262 **VALID VALID SPAN RECORD (RT 530) NOT FOUND FOR HIGH-SCALE NOX SPAN** (Status Code 5 error)

The NOx Concentration value reported in RT 201 was measured by a dual, or high-scale NOx CEMS component, however the monitoring plan does not contain a matching, and active, high-scale NOx span record (RT 530). Ensure that an RT 530 is reported for the high-scale NOx Component. If the span was changed, ensure the new span effective date/hour and the old span inactivation date/hour are correctly reported. Also, review the RT 530 to ensure that the Parameter Monitored code "NOX" is reported in column 10, and "H" is reported for the Scale in column 14. The report must be corrected and resubmitted before the submission deadline.

Error Code 265 **INCONSISTENT NOX CONCENTRATION FOR DEFAULT HIGH-RANGE** (Status Code 9 error)

The NOx concentration value reported for an hour in which the default high-range was used does not match the default high-range value reported in the active NOx high-scale span record (RT530). When reporting MODC 19 in RT 201, column 30 ensure that the reported NOx concentration in RT 201, column 24 matches the NOx default high-range value defined in RT 530, column 85.

Error Code 268 **SO2 EMISSIONS (RT 310) REPORTED FOR A NON ACID RAIN PROGRAM SOURCE** (Status Code 5 error)

According to EPA's records this source is NOT affected by the Acid Rain Program, and therefore no hourly SO2 mass emission rate records (RT 310) should be submitted. If this is the case, revise the report to remove RT 310 and resubmit the file before the submission deadline. On the other hand, if this source is now subject to the Acid Rain Program, or if you believe this message is in error, please contact your EPA Analyst listed in this feedback letter.

Error Code 269 **SO2 EMISSIONS (RT 313) REPORTED FOR A NON ACID RAIN PROGRAM SOURCE** (Status Code 5 error)

According to EPA's records this source is NOT affected by the Acid Rain Program, and therefore no hourly SO2 mass emission rate records (RT 313) should be submitted. If this is the case, revise the report to remove RT 313 and resubmit the file before the submission deadline. On the other hand, if this source is now subject to the Acid Rain Program, or if you believe this message is in error, please contact your EPA Analyst listed in this feedback letter.

Error Code 270 **ZERO OR BLANK OIL HEAT CONTENT (GCV) VALUE REPORTED** (Status Code 5 error)

While recalculating the hourly Heat Input Rate from Oil value reported in RT 302, column 45, EPA found that the Oil Heat Content (GCV) value reported in RT 302, column 34 was blank or zero. Review the Unit/Pipe operation and oil fuel consumption data for the hour. If oil was combusted during the hour, report the correct GCV value in column 34 and ensure the correct values for Heat Input Rate (column 45) and Oil flow Rate (Mass flow in column 21 or Volumetric flow in column 59) are reported. If oil was not combusted during the hour, do not report RT 302 for that hour. The report must be corrected and resubmitted before the submission deadline.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 271 REPORTED HOURLY HEAT INPUT FROM GAS IS BLANK OR ZERO
(Status Code 9 error)

While recalculating the hourly Heat Input Rate from Gas value reported in RT 303, column 45, EPA found that the reported Heat Input value was blank or zero. Review the Unit/Pipe operation and gas fuel consumption data for the hour. If gas was combusted during the hour, ensure the RT 303 contains the correct values for Gas Flow Rate (column 21), Gas Heat Content (column 34), and Heat Input Rate (column 45). If gas was not combusted during the hour, do not report RT 303 for that hour.

Error Code 272 ZERO OR BLANK GAS FUEL USAGE TIME REPORTED IN RT 303 (Status Code 5 error)

The Fuel Usage Time reported in RT 303, column 52, was 0.00 or blank for one or more hours. The first occurrence of this problem is displayed below. If Gas was combusted during the hour, correct the fuel usage time. If Gas was not combusted during the hour do not report RT 303 for the hour. The report must be corrected and resubmitted before the submission deadline.

Error Code 273 MONITORING SYSTEM ID NOT FOUND IN MONITORING PLAN RT 510
(Status Code 5 error)

The GAS fuel flow System ID reported in RT 303, column 10 was not found in an RT 510 of the monitoring plan for this unit/pipe ID. Ensure the RT 303 contains the correct System ID and that the gas fuel flow system components are correctly identified in RT 510s (including the correct system ID reported in RT 510, column 13). The report must be corrected and resubmitted before the submission deadline.

Error Code 274 INVALID MONITORING SYSTEM PARAMETER CODE FOR GAS SYSTEM
(Status Code 5 error)

The Monitoring System Parameter Code reported in RT 510, column 17 for the GAS Fuel Flow System ID reported in RT 303, column 10 is not appropriate for the Source of Data Code reported in RT 303, column 31. Ensure the correct Gas System ID and Source of Data Code are reported in RT 303, and that the correct Parameter Code is reported in RT 510 for the Gas System ID. The report must be corrected and resubmitted before the submission deadline.

Error Code 275 ZERO OR BLANK FUEL FLOW RATE REPORTED FOR GAS COMBUSTION HOUR (Status Code 9 error)

While recalculating the hourly Heat Input Rate from Gas reported in RT 303, column 45, EPA found that the corresponding Flow Rate of Gas value reported in RT 303, column 21 was blank or zero. Review the Unit/Pipe operation and fuel consumption data for the hour. If gas was combusted during the hour, ensure the correct Gas Flow Rate and Heat Input Rate values are reported in RT 303 for the hour. If gas was not combusted during the hour do not report RT 303 for that hour.

Error Code 276 ZERO OR BLANK GAS HEAT CONTENT (GCV) VALUE REPORTED
(Status Code 5 error)

While recalculating the hourly Heat Input Rate from Gas value reported in RT 303, column 45, EPA found that the Gas Heat Content (GCV) value reported in RT 303, column 34 was blank or zero. Review the Unit/Pipe operation and gas fuel consumption data for the hour. If gas was combusted during the hour, report the correct GCV value in column 34 and ensure the correct values for Gas Flow Rate (column 21),

Active Error codes in the Summary, Sequence, Formula, and LME Program

and Heat Input Rate (column 45) are reported. If gas was not combusted during the hour, do not report RT 303 for that hour. The report must be corrected and resubmitted before the submission deadline.

Error Code 277 **NO MATCHING RT 303 FOUND FOR RT 314 SO2 EMISSIONS FROM GAS** (Status Code 5 error)

While recalculating the hourly SO₂ mass emissions rate from GAS in RT 314, ETS did not locate a matching RT 303 (Gas Fuel Flow) for the same Unit/Pipe ID, fuel flow System ID, and date/time. Ensure that each RT 314 has a corresponding RT 303 that has the same Unit/Pipe ID, system ID, and date/time. If SUBSTITUTE data are reported for this hour either report the Primary system ID in both RT 303 and RT 314, or leave the system ID blank in both records. Correct the affected records and resubmit the report before the submission deadline.

Error Code 278 **NO RT 300 REPORTED FOR HOUR WHERE RT 320 WAS REPORTED** (Status Code 5 error)

RT 320 (NO_x Emission Rate Data) was reported for the Stack/Unit ID displayed below, however no corresponding RT 300 (Unit Operating Parameters) was reported for the same Stack/Unit ID for the hour. The Date and Time of the first occurrence of the problem is also displayed below. Correct the report and resubmit the file before the submission deadline.

Error Code 279 **SO2 EMISSIONS (RT 314) REPORTED FOR A NON ACID RAIN PROGRAM SOURCE** (Status Code 5 error)

According to EPA's records this source is NOT affected by the Acid Rain Program, and therefore no hourly SO₂ mass emission rate records (RT 314) should be submitted. If this is the case, revise the report to remove RT 314 and resubmit the file before the submission deadline. On the other hand, if this source is now subject to the Acid Rain Program, or if you believe this message is in error, please contact your EPA Analyst listed in this feedback letter.

Error Code 280 **SO2 EMISSIONS NOT REPORTED FOR MODC 52** (Status Code 9 error)

SO₂ mass emissions were not reported in RT 310, column 42 for an hour when the MODC in RT200, column 41 is 52. The use of MODC 52 indicates that 200 percent of the span value is being used to calculate SO₂ mass emissions for the hour. If the use of MODC 52 is correct, ensure that emissions are reported in RT 310, column 42 and that RT 310, column 25 is blank. If MODC 52 was reported incorrectly, then ensure that the proper MODC is entered in RT 200, column 41.

Error Code 281 **DIFFERENCE IN THE RECALCULATED VS REPORTED SO2 MASS EMISSIONS** (Status Code 5 error)

The difference between the SO₂ Mass Emissions value reported in RT 310 (column 25) and the EPA-recalculated value is greater than or equal to the maximum tolerance for hourly bias-adjusted SO₂ mass emissions. The first occurrence of this problem is displayed below, along with the calculated difference between the reported and recalculated values. Review the hour identified below, as well as any other data necessary to resolve the problem. Correct the report and resubmit the file before the submission deadline. The maximum difference tolerance is: 200.0 lb/hr SO₂.

Error Code 282 **DIFFERENCE IN THE RECALCULATED VS REPORTED NOX MASS EMISSIONS** (Status Code 5 error)

The difference between the NO_x Mass Emissions value reported in RT 328 (column 32) and the EPA-recalculated value is greater than or equal to the maximum tolerance for hourly NO_x mass emissions values. The first occurrence of this problem is displayed below, along with the calculated difference

Active Error codes in the Summary, Sequence, Formula, and LME Program

between the reported and recalculated values. Review the hour identified below, as well as any other data necessary to resolve the problem. Correct the report and resubmit the file before the submission deadline. The maximum difference tolerance is: 200.0 lbs NOx.

Error Code 283 **BLANK OPERATING TIME REPORTED IN RT 300** (*Status Code 5 error*)

The operating time reported in RT 300, column 18, was BLANK for one or more hours for the Unit/Stack/Pipe ID identified below. The time/date of the first occurrence of this problem is also displayed. The operating time cannot be left blank. If the Unit/Stack/Pipe did not operate during the hour, report 0.00 for the operating time. If the Unit/Stack/Pipe operated during the hour, report the fraction of the clock hour during which operation occurred. Review and correct all occurrences of this problem and resubmit the report before the submission deadline.

Error Code 284 **ACID RAIN PROGRAM CERTIFICATION RECORD(S) NOT FOUND** (*Status Code 9 error*)

The report does not contain one or both of the following certification record types: RT 900 and RT 901, for a source EPA has identified as being affected by the Acid Rain Program. If you intend to electronically submit the Acid Rain Program certification statements, ensure the report contains RT 900 (Part 75 Certification Statement and Designated Representative Signature) AND RT 901s (Part 72 Certification Statement).

Error Code 285 **ACID INCOMPLETE OR INVALID ACID RAIN PROGRAM CERTIFICATION RECORD(S)** (*Status Code 9 error*)

The Acid Rain Program certification records (RT 900 and RT 901s) were reviewed, and one or more records were either incomplete or contained invalid information. For RT 900, ensure the Part 75 Certification Code is valid, the DR/ADR Last Name is present, the Signature Date is after the last day of the calendar quarter for which the report is for, and that the DR/ADR Title code is valid and left-justified. For RT 901s ensure that at least 12 RT 901s are present in order to provide the complete verbatim Part 72 Certification Statement.

Error Code 286 **NOX BUDGET PROGRAM CERTIFICATION RECORD(S) NOT FOUND** (*Status Code 5 error*)

The report does not contain one or both of the following certification record types: RT 940 and RT 941, for a source EPA has identified as being affected by the NOx Budget Trading Program. Ensure the report contains RT 940 (Subpart H Certification Statement and NOx Authorized Account Representative Signature) AND RT 941s (Subpart H General Certification Statement) and resubmit the report before the submission deadline.

Error Code 287 **NOX INCOMPLETE OR INVALID NOX BUDGET PROGRAM CERTIFICATION RECORD(S)** (*Status Code 9 error*)

The NOx Budget Program certification records (RT 940 and RT 941s) were reviewed, and one or more records were either incomplete or contained invalid information. For RT 940, ensure the NOx Budget Certification Code is valid, the AAR/AAAR Last Name is present, the Signature Date is after the last day of the calendar quarter for which the report is for, and that the AAR/AAAR Title code is valid and left-justified. For RT 941 ensure that enough RT 941s are present in order to provide the complete verbatim Subpart H General Certification Statement.

Error Code 288 **DIFFERENCE IN THE RECALCULATED VS REPORTED CO2 MASS EMISSIONS** (*Status Code 5 error*)

The difference between the CO2 Mass Emissions value reported in RT 330 (column 18) and the EPA-recalculated value is greater than or equal to the maximum tolerance for hourly CO2 mass emissions

Active Error codes in the Summary, Sequence, Formula, and LME Program

values. The first occurrence of this problem is displayed below, along with the calculated difference between the reported and recalculated values. Review the hour identified below, as well as any other data necessary to resolve the problem. Correct the report and resubmit the file before the submission deadline. The maximum difference tolerance is: 100.0 ton/hr CO₂.

Error Code 289 **DIFFERENCE IN THE RECALCULATED VS REPORTED NOX EMISSION RATE** (*Status Code 5 error*)

The difference between the average NO_x Emission Rate value reported in RT 320 (column 36) and the EPA-recalculated value is greater than or equal to the maximum tolerance for hourly NO_x emission rate values. The first occurrence of this problem is displayed below, along with the calculated difference between the reported and recalculated values. Review the hour identified below, as well as any other data necessary to resolve the problem. Correct the report and resubmit the file before the submission deadline. The maximum difference tolerance is: 0.3 lb/mmBtu NO_x.

Error Code 290 **DIFFERENCE IN THE RECALCULATED VS REPORTED HOURLY HEAT INPUT** (*Status Code 5 error*)

The difference between the Heat Input value reported in RT 300 (column 36) and the EPA-recalculated value is greater than or equal to the maximum tolerance for hourly Heat Input rate values. The first occurrence of this problem is displayed below, along with the calculated difference between the reported and recalculated values. Review the hour identified below, as well as any other data necessary to resolve the problem. Correct the report and resubmit the file before the submission deadline. The maximum difference tolerance is: 1000.0 mmBtu/hr Heat Input.

Error Code 291 **DIFFERENCE IN THE RECALCULATED VS REPORTED SO₂ MASS EMISSIONS** (*Status Code 5 error*)

The difference between the SO₂ Mass Emissions value reported in RT 313 (column 30) and the EPA-recalculated value is greater than or equal to the maximum tolerance for hourly SO₂ mass emission rate from Oil. The first occurrence of this problem is displayed below, along with the calculated difference between the reported and recalculated values. Review the hour identified below, as well as any other data necessary to resolve the problem. Correct the report and resubmit the file before the submission deadline. The maximum difference tolerance is: 100.0 lb/hr SO₂.

Error Code 292 **DIFFERENCE IN THE RECALCULATED VS REPORTED SO₂ MASS EMISSIONS** (*Status Code 5 error*)

The difference between the SO₂ Mass Emissions value reported in RT 314 (column 37) and the EPA-recalculated value is greater than or equal to the maximum tolerance for hourly SO₂ mass emission rate from Gas. The first occurrence of this problem is displayed below, along with the calculated difference between the reported and recalculated values. Review the hour identified below, as well as any other data necessary to resolve the problem. Correct the report and resubmit the file before the submission deadline. The maximum difference tolerance is: 1.0 lb/hr SO₂.

Error Code 293 **DIFFERENCE IN THE RECALCULATED VS REPORTED HOURLY HEAT INPUT** (*Status Code 5 error*)

The difference between the Heat Input value reported in RT 302 (column 45) and the EPA-recalculated value is greater than or equal to the maximum tolerance for hourly Heat Input rate values. The first occurrence of this problem is displayed below, along with the calculated difference between the reported and recalculated values. Review the hour identified below, as well as any other data necessary to resolve the problem. Correct the report and resubmit the file before the submission deadline. The maximum difference tolerance is: 500.0 mmBtu/hr Heat Input.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 294 **COMPONENT AND/OR MONITORING SYSTEM ID NOT FOUND IN RT 202** (Status Code 5 error)

The difference between the Heat Input value reported in RT 303 (column 45) and the EPA-recalculated value is greater than or equal to the maximum tolerance for hourly Heat Input rate values. The first occurrence of this problem is displayed below, along with the calculated difference between the reported and recalculated values. Review the hour identified below, as well as any other data necessary to resolve the problem. Correct the report and resubmit the file before the submission deadline.

The maximum difference tolerance is: 500.0 mmBtu/hr Heat Input.

Error Code 295 **UNADJUSTED AVERAGE SO2 CONCENTRATION MISSING FOR THE HOUR** (Status Code 5 error)

The average SO2 concentration for the hour was blank or not found in RT 200, column 29. According to the MODC reported in RT 200 (column 41) for the hour, the average unadjusted SO2 concentration must be reported. Report the unadjusted average SO2 concentration for each hour in which quality-assured SO2 concentration was measured. Leave this field blank for hours in which you use substitute data and report the appropriate MODC in RT 200, column 41. Correct the report and resubmit the file before the submission deadline.

Error Code 296 **UNADJUSTED AVERAGE VOLUMETRIC FLOW RATE MISSING FOR THE HOUR** (Status Code 5 error)

The average volumetric flow rate for the hour was blank or not found in RT 220, column 29. According to the MODC reported in RT 220 (column 56) for the hour, the average unadjusted volumetric flow rate must be reported. Report the unadjusted volumetric flow rate for each hour in which quality-assured flow rate was measured. Leave this field blank for hours in which you use substitute data and report the appropriate MODC in RT 220, column 56. Correct the report and resubmit the file before the submission deadline.

Error Code 297 **COMPONENT ID AND/OR MONITORING SYSTEM ID NOT FOUND IN RT 202** (Status Code 5 error)

The Component ID and/or Monitoring System ID are missing for an hour where the reported Method of Determination Code in RT 202, column 30 is 01, 02, 03, 04, 17, 20, or 54. For each hour of quality-assured CO2 data, report the IDs for the monitoring system and component used during the hour. On the other hand, for missing data hours, ensure the correct MODC is reported, and leave the Component/System IDs blank. Correct the report and resubmit the file before the submission deadline.

Error Code 298 **RT 202 CO2 COMPONENT/SYSTEM NOT FOUND IN A MATCHING RT 510** (Status Code 5 error)

The CO2 Component ID and System ID reported in RT 202, columns 10 and 13 were not found in a matching RT 510 where the System Parameter Monitored Code reported in column 17 is "CO2". Ensure the correct Component and System IDs are reported in RT 202, and that the CO2 system is correctly identified in the monitoring plan RT 510s. Correct the report and resubmit the file before the submission deadline.

Error Code 299 **INAPPROPRIATE USE OF DILUENT CAP VALUE FOR A BOILER** (Status Code 9)

For the hour displayed below, the Diluent Cap Indicator flag reported in RT 330, column 43 was "Y", indicating use of the 5.0% CO2 Diluent Cap value in calculating the CO2 Mass emissions for the hour, however the measured CO2 concentration reported in RT 202, column 24 for the same hour exceeded 5.0%. Review the data for the hour, either correct the Diluent Cap Indicator flag in RT 330, or ensure the correct CO2 Diluent Cap value is reported in RT 202, column 24.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 300 **NOX METHODOLOGY CODE NOT REPORTED IN RECORD TYPE 328** (Status Code 5 error)

No NOx Methodology code was reported in RT 328, column 45. The valid NOx Methodology codes are: AE-GAS, AE-MIX, AE-MUL, AE-OIL, NOXM-AMS, NOXM-CEMS, NOXR-AMS, NOXR-CEMS, and NOXR-BYS. Correct the code and resubmit the report before the submission deadline.

Error Code 301 **INVALID NOX METHODOLOGY CODE REPORTED IN RECORD TYPE 328** (Status Code 5 error)

An invalid NOx Methodology Code was reported in RT 328, column 45. The valid NOx Methodology Codes are: AE-GAS, AE-MIX, AE-MUL, AE-OIL, NOXM-AMS, NOXM-CEMS, NOXR-AMS, NOXR-CEMS, NOXR-BYS, and NOXR-PEMS. Correct the code and resubmit the report before the submission deadline.

Error Code 302 **RT 328 HEAT INPUT METHODOLOGY CODE IS BLANK** (Status Code 9 error)

No Heat Input Methodology code was reported in RT 328, column 55, for an hour where the operating time was greater than zero. The valid methodology codes are: CEMS, AMS, FF-GAS, FF-MIX, and FF-OIL. Review the operating time, fuel consumption, and heat input data for the hour and make any necessary corrections.

Error Code 303 **INVALID HEAT INPUT METHODOLOGY REPORTED IN RECORD TYPE 328** (Status Code 5 error)

An invalid Heat Input Methodology code was reported in RT 328, column 55. The valid methodology codes are: CEMS, AMS, FF-GAS, FF-MIX, and FF-OIL. Correct the code and resubmit the report before the submission deadline.

Error Code 304 **NO FORMULA ID REPORTED IN RT 328 FOR AN OPERATING HOUR** (Status Code 5 error)

The formula ID for Total NOx Mass Emissions was left blank in RT 328, column 42, for an hour where the operating time reported in column 18 was greater than zero. Do not leave this field blank, report the formula ID from RT 520, column 11, which is used to calculate the total NOx mass emissions for the hour. The report must be corrected and resubmitted before the submission deadline.

Error Code 305 **RT 324 MISSING FOR NOX METHODOLOGY CODE "AE-GAS" or "AE-OIL"** (Status Code 5 error)

No RT 324 (Appendix E NOx Emission Rate) was reported for an hour where the NOx Mass Methodology Code reported in RT 328, column 45, indicates that an Appendix E methodology (AE-GAS or AE-OIL) is used to calculate the NOx mass emissions for the hour. The report must be corrected and resubmitted before the submission deadline.

Error Code 306 **ZERO NOX EMISSION RATE REPORTED IN RT 324 (APPENDIX E METHOD)** (Status Code 5 error)

The NOx emission rate reported in RT 324, column 25 was blank or zero for an hour in which the NOx Mass Methodology code in RT 328, column 45, indicates the use of Appendix E (AE-GAS or AE-OIL). If the unit operated during the hour, correct the NOx rate reported in RT 324 and ensure the NOx mass emission value in RT 324 is also correct. If the unit did not operate during the hour, do not report RT 324. Correct the report and resubmit it before the submission deadline.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 307 **INCONSISTENT FUEL TYPES CODE FOR SINGLE/MULTIPLE FUEL HOUR** (Status Code 5 error)

The NOx Mass Methodology code "AE-GAS" or "AE-OIL" was reported in RT 328, column 45, indicating a single fuel was combusted during the hour. However this does not agree with the "Single/Multiple Fuel Types Combusted" code reported in RT 324, column 45 for the same hour. If a single fuel was combusted during the hour, ensure "S" is reported in RT 324, column 45. If multiple fuels were combusted during the hour, ensure the correct NOx Mass Methodology code is reported in RT 328, and "M" is reported in RT 324, column 45. Correct the problem and resubmit the quarterly report before the submission deadline.

Error Code 308 **RT 300 MISSING FOR HOUR WHERE RT 328 IS REPORTED** (Status Code 5 error)

No RT 300 was reported for an hour where the NOx Mass Methodology code reported in RT 328, column 45 was "AE-GAS" or "AE-OIL". Ensure that all required RT 300s are reported in the file, and that the RT 328 reported for the hour is correct. The report must be corrected and resubmitted before the submission deadline.

Error Code 309 **ZERO HEAT INPUT RATE REPORTED IN RT 300** (Status Code 9 error)

The Heat Input Rate reported in RT 300, column 36, was blank or zero for an hour where the NOx Mass Methodology code in RT 328, column 45, indicates the use of Appendix E (AE-GAS or AE-OIL) to determine the NOx Mass Emissions for the hour. Review the reported hourly fuel flow record(s) for Gas (RT 303) and Oil (RT 302) and make any necessary corrections to the fuel data, including heat input rate. If no gas or oil was combusted during the hour, and the unit did not operate during the hour, do not report RT 302/303 and RT 328 for the hour.

Error Code 310 **ZERO UNIT OPERATING TIME IN RT 300** (Status Code 5 error)

The Unit Operating Time reported in RT 300, column 18 was blank or zero for an hour where the NOx Mass Methodology code in RT 328, column 45, indicates the use of Appendix E (AE-GAS or AE-OIL) to determine the NOx Mass Emissions for the hour. If the unit/pipe did not operate during the hour, do not report RT 328, otherwise correct the operating time in RT 300. Correct and resubmit the report before the submission deadline.

Error Code 311 **OPERATING TIMES IN RT 300 AND RT 328 DO NOT MATCH** (Status Code 5 error)

The Operating Time reported in RT 328, column 18 does not match the Operating Time reported in RT 300, column 18 for the same hour for this Stack/Unit ID. Determine the correct operating time for the hour, correct the affected records, and ensure the NOx Mass emissions value reported in RT 328 is correct. The report must be corrected and resubmitted before the submission deadline.

Error Code 312 **REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS** (Status Code 9 error)

The NOx Mass Methodology code "AE-GAS" or "AE-OIL" was reported in RT 328, column 45, indicating a single fuel was combusted during the hour. The Total Hourly NOx Mass Emissions value calculated by EPA does not match the value reported in RT 328, column 32. EPA recalculated the Total NOx Mass Emissions using Equation F-24, the reported NOx Emission Rate (RT 324, column 25), the reported Heat Input Rate (RT 300, column 36), and the reported Operating Time (RT 300, column 18)

Error Code 313 **RT 324s MISSING FOR NOX MASS METHODOLOGY CODE "AE-MUL"**

Active Error codes in the Summary, Sequence, Formula, and LME Program

(Status Code 5 error)

No RT 324s (Appendix E NOx Emission Rate) were reported for an hour where the NOx Mass Methodology Code reported in RT 328, column 45, indicates that an Appendix E methodology (AE-MUL) is used to calculate the NOx mass emissions for an hour where multiple fuels were combusted. Ensure that an RT 324 is reported for each fuel type combusted. The report must be corrected and resubmitted before the submission deadline.

Error Code 314 ONLY ONE RT 324 REPORTED FOR MULTIPLE-FUEL HOUR

(Status Code 5 error)

The NOx Mass Methodology code "AE-MUL" was reported in RT 328, column 4 indicating multiple fuels were combusted during the hour. However only one RT 324 (Appendix E NOx Emission Rate) was reported for the hour. If multiple fuels were combusted during the hour, ensure an RT 324 is reported for each fuel type and ensure the Total NOx Mass Emissions value reported in RT 328 is correct. If only one fuel was combusted in the hour, ensure the NOx Mass Methodology code reported in RT 328 is correct. The report must be corrected and resubmitted before the submission deadline.

Error Code 315 ZERO NOX EMISSION RATE REPORTED IN RT 324 (APPENDIX E METHOD)

(Status Code 5 error)

The NOx emission rate reported in RT 324, column 25, was blank or zero for an hour where the NOx Mass Methodology code in RT 328, column 45, indicates the use of Appendix E when multiple fuel types were combusted (AE-MUL). If the unit operated during the hour, and multiple fuels were combusted, review the RT 324s reported for the hour and correct the NOx emission rate and the NOx mass emission value, if necessary. Correct the report and resubmit it before the submission deadline.

Error Code 316 INCONSISTENT FUEL TYPES CODE FOR SINGLE/MULTIPLE FUEL HOUR

(Status Code 5 error)

The NOx Mass Methodology code "AE-MUL" was reported in RT 328, column 45 indicating multiple fuels were combusted during the hour. However this does not agree with the "Single/Multiple Fuel Types Combusted" code reported in RT 324, column 45 for the same hour. If multiple fuels were combusted during the hour, ensure "M" is reported in RT 324, column 45. If a single fuel was combusted during the hour, ensure the correct NOx Mass Methodology code is reported in RT 328, and "S" is reported in RT 324, column 45. Correct the problem and resubmit the quarterly report before the submission deadline.

Error Code 317 RT 324s FOR MULTIPLE FUEL HOUR CONTAIN IDENTICAL FUEL

SYSTEM ID (Status Code 5 error)

The NOx Mass Methodology code "AE-MUL" was reported in RT 328, column 45 indicating multiple fuels were combusted during the hour. For this hour a separate RT 324 (NOx Emission Rate, Appendix E Methodology) must be reported for each fuel type, and each RT 324 must have a unique Fuel Flow Monitoring System ID reported in column 13. For the date and hour displayed below, two or more RT 324s were reported that had the same Fuel Flow System ID in column 13. If the fuel flow system was in missing data for one type of fuel, and you reported a blank Fuel Flow System ID in RT 302 or RT 303 for the hour, then also report a blank Fuel Flow System ID in the corresponding RT 324 for that fuel type. However, if fuel flow is missing for more than one type of fuel, it is not permissible to report a blank Fuel Flow System ID in more than one RT 324 and the companion RT 302/303 fuel flow records. Review the RT 324s reported for the hour, make any necessary corrections, and resubmit the quarterly report before the submission deadline.

Error Code 318 RT 324 FUEL FLOW SYSTEM ID DOES NOT MATCH ID IN RT 302/303

(Status Code 5 error)

Active Error codes in the Summary, Sequence, Formula, and LME Program

The NOx Mass Methodology code "AE-MUL" was reported in RT 328, column 45 indicating multiple fuels were combusted during the hour. However, the Fuel Flow Monitoring System ID reported in RT 324, column 13, does not match the Fuel Flow Monitoring System ID reported in column 10 of the corresponding RT 302 (if OIL) or RT 303 (if GAS). The Date/Time of the first occurrence of this problem is displayed below. For an hour where multiple fuels are combusted, ensure that each RT 324 and RT 302/303 contain the correct Fuel Flow System IDs. The report must be corrected and resubmitted before the submission deadline.

Error Code 319 **ZERO HEAT INPUT RATE REPORTED IN RT 302 OR RT 303**

(Status Code 9 error)

The Multiple/Single Fuel flag reported in RT 324 for the hour indicates that multiple fuels were combusted during the hour, however the Heat Input Rate value reported in column 45 of the corresponding RT 302 (if OIL) or RT 303 (if GAS) was zero. Review each RT 302/RT 303 reported for the hour and ensure the correct Heat Input Rate value is reported in each record.

Error Code 320 **ZERO FUEL USAGE TIME REPORTED IN RT 302 OR RT 303**

(Status Code 9 error)

The Multiple/Single Fuel flag reported in RT 324 for the hour indicates that multiple fuels were combusted during the hour, however the Fuel Usage Time value reported in column 52 of the corresponding RT 302 (if OIL) or RT 303 (if GAS) was zero. Review each RT 302/RT 303 reported for the hour and ensure the correct Fuel Usage Time value is reported in each record.

Error Code 321 **RT 324 NOX MASS RATE FROM GAS NOT EQUAL TO RECALCULATED VALUE** *(Status Code 9 error)*

Sources that report hourly Total NOx Mass Emissions in RT 328 using Appendix E (NOx Mass Methodology codes AE-MUL, AE-GAS, or AE-OIL) are also required to report the fuel-specific hourly NOx Mass Emission Rate value (lb/hr) in RT 324, column 31. For one or more hours, the NOx Mass Emission Rate for the Hour for the Fuel Type (Gas) reported in RT 324, column 31, does not equal the recalculated value for that fuel. The Date/Time of the first occurrence of the problem is displayed below, as well as the NOx System ID reported in RT 324, column 10 for the hour. The fuel-specific NOx Mass Emission Rate (lb/hr) value was recalculated by multiplying the Average NOx Emission Rate value reported in RT 324, column 25, by the Heat Input Rate from Gas value reported in RT 303, column 45.

Error Code 322 **REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS** *(Status Code 9 error)*

The NOx Mass Methodology code "AE-MUL" was reported in RT 328, column 45, indicating multiple fuels were combusted during the hour. The Total Hourly NOx Mass Emissions value calculated by EPA does not match the value reported in RT 328, column 32. EPA recalculated the hourly NOx Mass Emissions for each fuel separately using Equation F-24, and then summed the resulting values to calculate Total Hourly NOx Mass Emissions value. Each fuel's NOx Mass Emissions value was recalculated using the fuel's NOx Emission Rate (RT 324, column 25), the fuel's Heat Input Rate (RT 302:45 for OIL, RT 303:45 for GAS), and the Fuel Usage Time (RT 302:52 for OIL, RT 303:52 for GAS).

Error Code 323 **MISSING RT 531 FOR GENERIC DEFAULT RATE FOR GAS** *(Status Code 9 error)*

A NOx methodology of "GDEF-GAS" in RT 328, column 45 was reported but there was no effective RT 531 containing a generic default NOx emission rate for gas in EPA's monitoring plan database.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 324 **VALID RT 531 NOT FOUND FOR MAXIMUM HOURLY HEAT INPUT VALUE** (Status Code 9 error)

A heat input methodology of "MHHI" in RT 328, column 55 was reported but there was no effective RT 531 containing a maximum heat input rate for gas or a non-specific fuel in EPA's monitoring plan database.

Error Code 325 **REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS** (Status Code 9 error)

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value from RT 328 was recalculated from the gas default NOx emission rate in RT 531 and maximum heat input in RT 531 weighted by unit operating time reported in RT 328.

Error Code 326 **MISSING RT 300 FOR HOUR IN WHICH RT 328 IS REPORTED** (Status Code 9 error)

There were no RTs 300 for hours in which the NOx methodology of "GDEF-GAS" was reported in RT 328. Please submit your next file with all required RTs 300.

Error Code 327 **MISSING HEAT INPUT RATE IN RT 300** (Status Code 9 error)

Heat input rate was not reported in RT 300 for hours for which the NOx methodology of "GDEF-GAS" was reported in RT 328. Please submit your next file with heat input rate in all RTs 300 for operating hours.

Error Code 328 **ZERO UNIT OPERATING TIME IN RT 300** (Status Code 9 error)

The unit operating time reported in RT 300, column 18 indicated that the unit/pipe did not operate for an hour in which the RT 328 indicates a NOx methodology of "GDEF-GAS". Please submit consistent NOx mass emissions and unit operating time information in your next file.

Error Code 329 **INCONSISTENT UNIT OPERATING TIME IN RT 300 AND RT 328** (Status Code 9 error)

The unit operating time reported in RT 328, column 18 is inconsistent with the unit operating time reported in RT 300, column 18. Please submit consistent unit operating time information in your next file.

Error Code 330 **REPORTED HOURLY NOX MASS NOT TO EQUAL RECALCULATED NOX MASS** (Status Code 9 error)

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value from RT 328 was recalculated using the unit operating time in RT 300, the gas default NOx emission rate in RT 531 and the hourly heat input in RT 300.

Error Code 331 **VALID RT 531 NOT FOUND FOR GENERIC DEFAULT NOx RATE FOR OIL** (Status Code 9 error)

A NOx methodology of "GDEF-OIL" in RT 328, column 45 was reported but there was no effective RT 531 containing a generic default NOx emission rate for oil in EPA's monitoring plan database.

Error Code 332 **VALID RT 531 NOT FOUND FOR MAXIMUM HOURLY HEAT INPUT VALUE** (Status Code 9 error)

A heat input methodology of "MHHI" in RT 328, column 55 was reported but there was no effective RT 531 containing a maximum heat input rate for oil or a non-specific fuel in EPA's monitoring plan database.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 333 **REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS** (*Status Code 9 error*)

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value from RT 328 was recalculated from the oil default NOx emission rate in RT 531 and maximum heat input in RT 531 weighted by unit operating time reported in RT 328.

Error Code 334 **MISSING RT 300 FOR HOUR IN WHICH RT 328 RECORD IS REPORTED** (*Status Code 9 error*)

There were no RTs 300 for hours in which the NOx methodology of "GDEF-OIL" was reported in RT 328. Please submit your next file with all required RTs 300.

Error Code 335 **MISSING HEAT INPUT RATE IN RT 300** (*Status Code 9 error*)

Heat input rate was not reported in RT 300 for hours for which the NOx methodology of "GDEF-OIL" was reported in RT 328. Please submit your next file with heat input rate in all RTs 300 for operating hours.

Error Code 336 **ZERO UNIT OPERATING TIME IN RT 300** (*Status Code 9 error*)

The unit operating time reported in RT 300, column 18 indicated that the unit/pipe did not operate for an hour in which the RT 328 indicates the use of the NOx methodology of "GDEF-OIL". Please submit consistent NOx mass emissions and unit operating time information in your next file.

Error Code 337 **INCONSISTENT UNIT OPERATING TIME IN RT 300 AND RT 328** (*Status Code 9 error*)

The unit operating time reported in RT 328, column 18 is inconsistent with the unit operating time reported in RT 300, column 18. Please submit consistent unit operating time information in your next file.

Error Code 338 **REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS** (*Status Code 9 error*)

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value from RT 328 was recalculated using the unit operating time in RT 300, the oil default NOx emission rate in RT 531 and the hourly heat input in RT 300.

Error Code 339 **VALID RT 531 NOT FOUND FOR UNIT-SPECIFIC NOx RATE FOR OIL** (*Status Code 9 error*)

The NOx methodology code "UDEF-OIL" was reported in RT 328, column 45, indicating that a Unit-Specific Default NOx emission rate, which must be defined in RT 531, is being used to determine NOx mass emissions from OIL combustion. However, either the RT 531 is missing or it contains an invalid time/date, fuel type code, parameter code, and/or control code. Ensure RT 328 contains the correct NOx methodology code for the hour and that the corresponding RT 531 is correctly reported.

Error Code 340 **VALID RT 531 NOT FOUND FOR UNIT-SPECIFIC NOx RATE FOR OIL** (*Status Code 9 error*)

The NOx methodology code "UDEF-OIL-C" was reported in RT 328, column 45, indicating that a Unit-Specific Default "Controlled" NOx emission rate, which must be defined in RT 531, is being used to determine NOx mass emissions from OIL combustion. However, either the RT 531 is missing, or it contains an invalid time/date, fuel type code, parameter code, and/or control code. Ensure RT 328 contains the correct NOx methodology code for the hour and that the corresponding RT 531 is correctly reported.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 341 **VALID RT 531 NOT FOUND FOR MAXIMUM HOURLY HEAT INPUT VALUE** (Status Code 9 error)

The heat input methodology code "MHHI" was reported in RT 328, column 55 indicating that a default Maximum Hourly Heat Input value, which must be defined in RT 531, is being used to determine NOx mass emissions. However, either the RT 531 is missing, or it contains an invalid time/date, fuel type code, and/or parameter code. Ensure RT 328 contains the correct Heat Input Methodology code for the hour and that the corresponding RT 531 is correctly reported.

Error Code 342 **REPORTED AND RECALCULATED HOURLY NOX MASS EMISSIONS NOT EQUAL** (Status Code 9 error)

The Total NOx Mass Emissions for the hour reported in RT 328, column 32, does not equal EPA's recalculated value. The value was recalculated from the default OIL NOx Emission Rate defined in RT 531 and the default Maximum Hourly Heat Input rate defined in RT 531, and weighed by the operating time reported in RT 328.

Error Code 343 **MISSING RT 300 FOR HOUR IN WHICH RT 328 IS REPORTED** (Status Code 5 error)

No RT 300 was reported for an hour where the corresponding RT 328 indicates the NOx Mass Methodology is either "UDEF-OIL" or "UDEF-OIL-C" and the indicated Heat Input Methodology requires a RT 300 for the same hour in order to calculate the NOx mass emissions. Correct the file so that it contains all required RT 300s and ensure each RT 300 contains the correct operating time and heat input values. The quarterly report must be resubmitted to correct this problem.

Error Code 344 **HEAT INPUT RATE IN RT 300 IS ZERO OR BLANK** (Status Code 9 error)

Heat input rate was not reported in RT 300 for an hour where the NOx methodology code reported in RT 328 was "UDEF-OIL" or "UDEF-OIL-C" and where a heat input value from RT 300 is required to calculate the NOx mass emissions. If the Stack/Unit operated during the hour, ensure the heat input is correctly reported in RT 300. If the Stack/Unit did not operate during the hour, do not report RT 328 for that hour.

Error Code 345 **ZERO OPERATING TIME REPORTED FOR HOUR WHERE RT 328 IS REPORTED** (Status Code 5 error)

Zero operating time was reported in RT 300, column 18 for an hour where the corresponding RT 328 indicates NOx mass emissions were calculated using the "UDEF-OIL" or "UDEF-OIL-C" unit-default methodology for oil. If the Unit/Pipe did not operate during the hour, do not report RT 328. Otherwise, correct the operating time value reported in RT 300, and ensure that the corresponding RT 302 Oil consumption and RT 328 NOx mass emissions values are correct. The quarterly report must be resubmitted to correct this problem.

Error Code 346 **INCONSISTENT UNIT OPERATING TIME IN RT 300 AND RT 328** (Status Code 9 error)

The unit operating time reported in RT 328, column 18 is inconsistent with the unit operating time reported in RT 300, column 18. Please submit consistent unit operating time information in your next file.

Error Code 347 **REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS** (Status Code 9 error)

Active Error codes in the Summary, Sequence, Formula, and LME Program

The Total NO_x mass emissions for the hour in RT 328, column 32 do not equal the recalculated NO_x mass emissions. Each hourly value from RT 328 was weighted by the unit operating time in RT 300 and recalculated from the oil default NO_x emission rate in RT 531 and the hourly heat input in RT 300.

Error Code 348 **VALID RT 531 NOT FOUND FOR UNIT-SPECIFIC NO_x RATE FOR GAS** (*Status Code 9 error*)

The NO_x methodology code "UDEF-GAS" was reported in RT 328, column 45, indicating that a Unit-Specific Default NO_x emission rate, which must be defined in RT 531, is being used to determine NO_x mass emissions from GAS combustion. However, either the RT 531 is missing or it contains an invalid time/date, fuel type code, parameter code, and/or control code. Ensure RT 328 contains the correct NO_x methodology code for the hour and that the corresponding RT 531 is correctly reported.

Error Code 349 **VALID RT 531 NOT FOUND FOR UNIT-SPECIFIC NO_x RATE FOR GAS** (*Status Code 9 error*)

The NO_x methodology code "UDEF-GAS-C" was reported in RT 328, column 45, indicating that a Unit-Specific Default "Controlled" NO_x emission rate, which must be defined in RT 531, is being used to determine NO_x mass emissions from GAS combustion. However, either the RT 531 is missing, or it contains an invalid time/date, fuel type code, parameter code, and/or control code. Ensure RT 328 contains the correct NO_x methodology code for the hour and that the corresponding RT 531 is correctly reported.

Error Code 350 **VALID RT 531 NOT FOUND FOR MAXIMUM HOURLY HEAT INPUT VALUE** (*Status Code 9 error*)

The heat input methodology code "MHHI" was reported in RT 328, column 55 indicating that a default Maximum Hourly Heat Input value, which must be defined in RT 531, is being used to determine NO_x mass emissions. However, either the RT 531 is missing, or it contains an invalid time/date, fuel type code, and/or parameter code. Ensure RT 328 contains the correct Heat Input Methodology code for the hour and that the corresponding RT 531 is correctly reported.

Error Code 351 **REPORTED AND RECALCULATED HOURLY NO_x MASS EMISSIONS NOT EQUAL** (*Status Code 9 error*)

The Total NO_x Mass Emissions for the hour reported in RT 328, column 32, does not equal EPA's recalculated value. The value was recalculated from the default GAS NO_x Emission Rate defined in RT 531 and the default Maximum Hourly Heat Input rate defined in RT 531, and weighed by the operating time reported in RT 328.

Error Code 352 **MISSING RT 300 FOR HOUR IN WHICH RT 328 IS REPORTED** (*Status Code 9 error*)

No RT 300 was reported for an hour where the NO_x mass emissions methodology code reported in RT 328 was "UDEF-GAS" or "UDEF-GAS-C" and where the heat input methodology requires RT 300 for calculating the NO_x mass emissions. Ensure that all required RT 300s are included in the quarterly report.

Error Code 353 **HEAT INPUT RATE IN RT 300 IS ZERO OR BLANK** (*Status Code 9 error*)

Heat input rate was not reported in RT 300 for an hour where the NO_x methodology code reported in RT 328 was "UDEF-GAS" or "UDEF-GAS-C" and where a heat input value from RT 300 is required to calculate the NO_x mass emissions. If the Stack/Unit operated during the hour, ensure the heat input is correctly reported in RT 300. If the Stack/Unit did not operate during the hour, do not report RT 328 for that hour.

Error Code 354 **ZERO UNIT OPERATING TIME IN RT 300** (*Status Code 9 error*)

Active Error codes in the Summary, Sequence, Formula, and LME Program

The unit operating time reported in RT 300, column 18 indicated that the unit/pipe did not operate for an hour in which the RT 328 indicates the use of the NOx methodology of "UDEF-GAS" or "UDEF-GAS-C". Please submit consistent NOx mass emissions and unit operating time information in your next file.

Error Code 355 INCONSISTENT UNIT OPERATING TIME IN RT 300 AND RT 328 (*Status Code 9 error*)

The unit operating time reported in RT 328, column 18 is inconsistent with the unit operating time reported in RT 300, column 18. Please submit consistent unit operating time information in your next file.

Error Code 356 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS (*Status Code 9 error*)

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value from RT 328 was weighted by the unit operating time in RT 300 and recalculated from the gas default NOx emission rate in RT 531 and the hourly heat input in RT 300.

Error Code 357 RT 530 NOT FOUND FOR MAXIMUM NOX EMISSION RATE (*Status Code 9 error*)

A NOx Mass Methodology code of "NOXR-BYS" was reported in RT 328, column 45 indicating that the NOx Mass Emissions value for the hour was calculated for an unmonitored bypass stack. However no matching RT 530 was found to provide the Maximum NOx Emission Rate (MER) value needed to recalculate the hourly Total NOx Mass Emissions from the bypass stack (using Formula F-24). Ensure the correct NOx Mass Methodology code is reported in RT 328 for the hour, and ensure that an RT 530 is correctly reported to provide the NOx MER for the bypass stack.

Error Code 358 MISSING RT 531 FOR MAXIMUM HEAT INPUT (*Status Code 9 error*)

A heat input methodology of "MHHI" in RT 328, column 55 was reported but there was no effective RT 531 containing a maximum heat input rate for oil or a non-specific fuel in EPA's monitoring plan database.

Error Code 359 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS (*Status Code 9 error*)

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value from RT 328 was recalculated from the default NOx emission rate and maximum heat input weighted by unit operating time reported in RT 328.

Error Code 360 MISSING RT 300 FOR HOUR IN WHICH RT 328 IS REPORTED (*Status Code 9 error*)

There were no RTs 300 for hours in which the NOx methodology of "NOXR-BYS" was reported in RT 328. Please submit your next file with all required RTs 300.

Error Code 361 MISSING HEAT INPUT RATE IN RT 300 (*Status Code 9 error*)

Heat input rate was not reported in RT 300 for hours in which the NOx methodology of "NOXR-BYS" was reported in RT 328. Please submit your next file with heat input rate in all RTs 300 for operating hours.

Error Code 362 ZERO UNIT OPERATING TIME IN RT 300 (*Status Code 9 error*)

The unit operating time reported in RT 300, column 18 indicated that the unit/pipe did not operate for an hour in which the RT 328 indicates the use of the NOx methodology of "NOXR-BYS". Please submit consistent NOx mass emissions and unit operating time information in your next file.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 363 INCONSISTENT UNIT OPERATING TIME IN RT 300 AND RT 328 (*Status Code 9 error*)

The unit operating time reported in RT 328, column 18 is inconsistent with the unit operating time reported in RT 300, column 18. Please submit consistent unit operating time information in your next file.

Error Code 364 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS (*Status Code 9 error*)

A NOx Mass Methodology code of "NOXR-BYS" was reported in RT 328, column 45 indicating that the NOx Mass Emissions value for the hour was calculated for an unmonitored bypass stack. However the Total NOx Mass Emissions value reported in RT 328, column 32 does not equal the recalculated NOx Mass Emissions value. For the "NOXR-BYS" methodology the hourly NOx Mass Emissions value is recalculated by multiplying the Maximum NOx Emission Rate (MER) from RT 530, column 30 by the hourly Heat Input Rate from RT 300, column 36 and the Operating Time from RT 300, column 18 (Formula F-24). Ensure that the correct NOx Emission Rate is used an hour where an unmonitored bypass stack is used and correct the hourly NOx Mass Emissions value if it is incorrect.

Error Code 365 RT 320 MISSING FOR HOUR WHERE RT 328 NOX METHODOLOGY IS CEMS (*Status Code 5 error*)

The NOx Mass methodology reported in RT 328, column 45, was "NOXR-CEMS" but no corresponding RT 320 containing the NOx CEMS emission rate was reported for the same hour. If "NOXR-CEMS" is the correct methodology for this Stack/Unit, and the operating time for the hour is greater than zero, then report both RT 320 and RT 328. If the operating time is zero, do not report RT 320/RT 328 for the hour. If a NOx CEMS is not used to measure the NOx mass at this Stack/Unit, revise the NOx methodology code in RT 328, do not report "NOXR-CEMS". The report must be corrected and resubmitted before the submission deadline.

Error Code 366 BLANK OR ZERO NOx EMISSION RATE REPORTED IN RT 320 (*Status Code 9 error*)

The NOx Mass Methodology code "NOXR-CEMS" was reported in RT 328, column 45, but the Adjusted NOx Emission Rate value reported in RT 320, column 42 for this hour is blank or zero. Review the data for the hour to ensure the correct NOx Emission Rate value is reported in RT 320 and the correct Total NOx Mass Emissions value is reported in RT 328.

Error Code 367 RT 300 MISSING FOR HOUR WHERE RT 328 NOX METHODOLOGY IS CEMS (*Status Code 5 error*)

The NOx Mass methodology reported in RT 328, column 45, was "NOXR-CEMS" but no corresponding RT 300 was reported for the same hour. If "NOXR-CEMS" is the correct methodology for this Stack/Unit, then RT 300 must be reported to provide the Heat Input value for the NOx Mass calculation. If a NOx CEMS is not used to measure the NOx mass at this Stack/Unit, revise the NOx methodology code in RT 328, do not report "NOXR-CEMS". The report must be corrected and resubmitted before the submission deadline.

Error Code 368 ZERO OR BLANK HEAT INPUT RATE REPORTED IN RT 300 (*Status Code 9 error*)

While recalculating the hourly Total NOx Mass Emission Rate reported in RT 328, column 32 for an hour where the NOx Mass Methodology reported in RT 328, column 45 was "NOXR-CEMS", EPA found that the corresponding hourly Heat Input Rate reported in RT 300, column 36 was blank or zero. If the

Active Error codes in the Summary, Sequence, Formula, and LME Program

Unit/Stack operated during the hour, review the operation and fuel consumption data and correct any errors. If the Stack/Unit did not operate during the hour, do not report RT 328.

Error Code 369 **ZERO OR BLANK OPERATING TIME REPORTED IN RT 300** (*Status Code 5 error*)

The Operating Time in RT 300, column 18, was zero or blank for an hour where the NOx Mass Methodology code reported in RT 328 was "NOXR-CEMS". If the Stack/Unit did not operate during the hour, do not report RT 328. If the Stack/Unit did operate during the hour, correct the Operating Time in RT 300 and ensure the corresponding RT 328 contains the correct hourly NOx Mass emissions value. The report must be corrected and resubmitted before the submission deadline.

Error Code 370 **OPERATING TIMES IN RT 300 AND RT 328 DO NOT MATCH** (*Status Code 5 error*)

The operating time reported in RT 328, column 18 does not match the operating time reported in RT 300, column 18 for the same hour for this Stack/Unit ID. Determine the correct operating time for the hour, correct the affected records, and ensure the NOx Mass emissions value reported in RT 328 is correct. The report must be corrected and resubmitted before the submission deadline.

Error Code 371 **REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS** (*Status Code 9 error*)

The Total Hourly NOx Mass Emissions value reported in RT 328, column 32, does not equal EPA's recalculated value. The Date/Time of the first occurrence of this problem is displayed below. The value was recalculated using Formula F-24, the reported NOx Emission Rate (RT 320, column 42), the reported Heat Input Rate (RT 300, column 36), and the reported Operating Time (RT 300, column 18).

Error Code 372 **NO NOX CONCENTRATION RECORD (RT 201) REPORTED FOR NOX MASS CALC** (*Status Code 9 error*)

For the hour displayed below, the NOx Mass Methodology code "NOXM-CEMS" was reported in RT 328, column 45, but no corresponding RT 201 was reported to provide the Adjusted NOx Concentration value for the hour. Review the data for the hour, do not report RT 328 for the hour if the Stack/Unit did not operate, otherwise ensure RT 201 is reported for the hour, and that the NOx Mass Emissions are correctly reported in RT 328.

Error Code 373 **ZERO OR BLANK NOX CONCENTRATION REPORTED IN RT 201** (*Status Code 9 error*)

For the hour displayed below, the NOx Mass Methodology code "NOXM-CEMS" was reported in RT 328, column 45, but the Adjusted NOx Concentration value reported in RT 201, column 32 was blank or zero. If a negative measured NOx Concentration value was replaced with zero for this hour, ensure the Method of Determination Code reported in RT 201, column 30 is "21".

Error Code 374 **NO VOLUMETRIC FLOW RECORD (RT 220) REPORTED FOR NOX MASS VALUE** (*Status Code 5 error*)

For the hour displayed below, the NOx Mass Methodology code "NOXM-CEMS" was reported in RT 328, column 45, but no corresponding RT 220 was reported to provide the Adjusted Volumetric Flow Rate for the hour. Review the data for the hour, do not report RT 328 for the hour if the Stack/Unit did not operate, otherwise ensure RT 220 is reported for the hour, and that the NOx Mass Emissions are correctly reported in RT 328. Correct and resubmit the report before the submission deadline.

Error Code 375 **ZERO STACK FLOW RATE REPORTED FOR NOX MASS EMISSIONS HOUR** (*Status Code 9 error*)

Active Error codes in the Summary, Sequence, Formula, and LME Program

The Adjusted Volumetric Flow Rate value reported in RT 220, column 39, was blank or zero for an hour where the NOx Mass Methodology code "NOXM-CEMS" was reported in RT 328, column 45, for the Stack/Unit ID displayed below. The Time/Date of the first occurrence of this problem is also displayed. Note: if start-up or shut-down conditions result in a stack flow rate that is too low to be registered by the stack flow monitor, you may report a default minimum stack flow rate of 1000 scfh (use Method of Determination Code "55" in RT 220, column 56). Review the operating data for the hour to determine that the correct stack flow value has been reported for the hour and that the hourly NOx Mass Emissions value is also correct.

Error Code 376 NOX MASS FORMULA ID IN RT 328 NOT FOUND IN RT 520 (Status Code 5 error)

The NOx Mass Emissions Formula ID reported in RT 328, column 42 does not match a NOx Mass Emissions Formula ID reported in RT 520, column 11. Determine the correct Formula ID and ensure that both RT 328 and RT 520 contain matching Formula IDs for calculating the hourly NOx Mass Emissions. Do not leave the Formula ID blank in either record type. Correct and resubmit the report before the submission deadline.

Error Code 377 FORMULA CODE IN RT 520 NOT APPROPRIATE FOR TOTAL NOX MASS (Status Code 5 error)

The hourly Total NOx Mass Formula ID reported in RT 328, column 42, matches a Formula ID in RT 520, column 11, but the Formula Code in column 18 of the RT 520 is not appropriate for hourly Total NOx Mass calculations based on the "NOXM-CEMS" methodology. The allowable Formula Codes for this methodology are: "N-1" and "N-2". Ensure that the correct Formula ID is reported in both RT 328 and RT 520 and that the corresponding RT 520 Formula Code is appropriate for Total NOx Mass calculations. Correct and resubmit the report before the submission deadline.

Error Code 378 NO MOISTURE VALUE FOUND FOR NOX MASS CALCULATIONS (Status Code 9 error)

For the Date and Time listed below, the NOx Mass Emissions value reported in RT 328 is calculated using Formula "N-2" (based on the NOx Mass Formula ID reported in RT 328 column 42 and in RT 520, column 11). Formula "N-2" requires a moisture value in order to calculate the NOx Mass Emissions for the hour, however no moisture value was found for the hour. If a Default Moisture Value is used, ensure that an RT 531 is correctly reported to provide the value. If a Moisture Monitoring System is used, ensure that RT 212 is reported for the hour.

Error Code 379 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS (Status Code 9 error)

The Total Hourly NOx Mass Emissions value reported in RT 328, column 32, does not equal EPA's recalculated value. The Date/Time of the first occurrence of this problem is displayed below. The value was recalculated using Formula N-1 or N-2 (as identified in the Monitoring Plan), the Bias-Adjusted Hourly NOx Concentration (RT 201, column 32), the Bias-Adjusted Hourly Volumetric Stack Flow Rate (RT 220, column 39) and the RT 328 Operating Time (RT 328, column 18). For Formula N-2, the hourly Moisture value (from RT 212, column 24 or a default value from RT 531, if applicable) was also used.

Error Code 380 MISSING NOX EMISSION RATE RECORD (RT 323) FOR MIXED-FUEL HOUR (Status Code 5 error)

A NOx Mass Methodology code of "AE-MIX" was reported in RT 328, column 45, however no RT 323 (Appendix E NOx Emission Rate) was reported for the hour. The time and date of the first occurrence of

Active Error codes in the Summary, Sequence, Formula, and LME Program

this problem are displayed below. Correct the problem and resubmit the quarterly report before the submission deadline.

Error Code 381 **ZERO NOX EMISSION RATE REPORTED IN RT 323 FOR MIXED-FUEL HOUR** (Status Code 5 error)

A NOx Mass Methodology code of "AE-MIX" was reported in RT 328, column 45, however the Adjusted NOx Emission Rate reported in RT 323, column 22, for the hour is blank or zero. The time and date of the first occurrence of this problem are displayed below. Correct the problem and resubmit the quarterly report before the submission deadline.

Error Code 382 **RT 300 MISSING FOR HOUR WHERE RT 328 IS REPORTED** (Status Code 5 error)

No RT 300 was reported for an hour where the NOx Mass Methodology code reported in RT 328, column 45 was "AE-MIX". Ensure that all required RT 300s are reported in the file, and that the RT 328 reported for the hour is correct. The report must be corrected and resubmitted before the submission deadline.

Error Code 383 **MISSING HEAT INPUT RATE IN RT 300 RECORD FOR HOUR** (Status Code 9 error)

Heat input rate was not reported in RT 300 for hours in which the NOx methodology of "AE-MIX" was reported in RT 328. Please submit your next file with heat input rate in all RTs 300 for operating hours.

Error Code 384 **ZERO UNIT OPERATING TIME IN RT 300** (Status Code 9 error)

The unit operating time reported in RT 300, column 18 indicated that the unit/pipe did not operate for an hour in which the RT 328 indicates the use of the NOx methodology of "AE-MIX". Please submit consistent NOx mass emissions and unit operating time information in your next file.

Error Code 385 **OPERATING TIMES IN RT 300 AND RT 328 DO NOT MATCH** (Status Code 5 error)

The Operating Time reported in RT 328, column 18 does not match the Operating Time reported in RT 300, column 18 for the same hour for this Stack/Unit ID. Determine the correct operating time for the hour, correct the affected records, and ensure the NOx Mass emissions value reported in RT 328 is correct. The report must be corrected and resubmitted before the submission deadline.

Error Code 386 **REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS** (Status Code 9 error)

The NOx Mass Methodology code "AE-MIX" was reported in RT 328, column 45 indicating that mixed fuels were combusted during the hour. The Total Hourly NOx Mass Emissions value calculated by EPA does not match the value reported in RT 328, column 32. EPA recalculated the Total NOx Mass Emissions using Equation F-24, the reported NOx Emission Rate (RT 323, column 22), the reported Heat Input Rate (RT 300, column 36), and the reported Operating Time (RT 300, column 18).

Error Code 387 **MISSING RT 531 FOR GENERIC DEFAULT RATE FOR OIL** (Status Code 9 error)

A NOx methodology of "GDEF-MUL" in RT 328, column 45 was reported but there was no effective RT 531 containing a generic default NOx emission rate for oil in EPA's monitoring plan database.

Error Code 388 **MISSING RT 531 FOR GENERIC DEFAULT RATE FOR GAS** (Status Code 9 error)

Active Error codes in the Summary, Sequence, Formula, and LME Program

A NOx methodology of "GDEF-MUL" in RT 328, column 45 was reported but there was no RT 531 containing a generic default NOx emission rate for gas in EPA's monitoring plan database.

Error Code 389 **MISSING RT 302 OR 303 FOR UNIT-SPECIFIC DEFAULTS FOR MULTIPLE FUELS** (Status Code 9 error)

There were no RTs 302 or 303 for hours in which unit-specific defaults for multiple fuels were used to report NOx mass emissions in RT 328. Please submit your next file with all required hourly fuel flow records.

Error Code 390 **MISSING HEAT INPUT RATE IN RT 302 OR RT 303** (Status Code 9 error)

Heat input rate was not reported in RT 302 or 303 for hours in which unit-specific defaults for multiple fuels were used to report NOx mass emissions in RT 328. Please submit your next file with complete heat input data in RTs 302 and 303.

Error Code 391 **MISSING FUEL USAGE TIME IN RT 302 OR RT 303** (Status Code 9 error)

Fuel usage time was not reported in RT 302 or 303 for hours in which unit-specific defaults for multiple fuels were used to report NOx mass emissions in RT 328. Please submit your next file with complete fuel usage and information RTs 302 and 303.

Error Code 392 **REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS** (Status Code 9 error)

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value was calculated by summing the NOx mass values calculated from the heat input and fuel usage time in RTs 302 and 303 and the applicable unit-specific default NOx emission rate.

Error Code 393 **MISSING RT 531 FOR UNIT-SPECIFIC DEFAULT RATE FOR OIL** (Status Code 9 error)

A NOx methodology of "UDEF-MUL" in RT 328, column 45 was reported but there was no effective RT 531 containing a unit-specific default NOx emission rate for oil in EPA's monitoring plan database.

Error Code 394 **MISSING RT 531 FOR UNIT-SPECIFIC DEFAULT RATE FOR GAS** (Status Code 9 error)

A NOx methodology of "UDEF-MUL" in RT 328, column 45 was reported but there was no effective RT 531 containing a unit-specific default NOx emission rate for gas in EPA's monitoring plan database.

Error Code 395 **MISSING RT 302 OR RT 303 FOR HOUR FOR UNIT-SPECIFIC DEFAULTS** (Status Code 9 error)

There were no RTs 302 or 303 for hours in which unit-specific defaults for multiple fuels were used to report NOx mass emissions in RT 328. Please submit your next file with all required hourly fuel flow records.

Error Code 396 **MISSING HEAT INPUT RATE IN RT 302 OR RT 303** (Status Code 9 error)

Heat input rate was not reported in RT 302 or 303 for hours in which unit-specific defaults for multiple fuels were used to report NOx mass emissions in RT 328. Please submit your next file with complete heat input data in RTs 302 and 303.

Error Code 397 **MISSING FUEL USAGE TIME IN RT 302 OR RT 303** (Status Code 9 error)

Active Error codes in the Summary, Sequence, Formula, and LME Program

Fuel usage time was not reported in RT 302 or 303 for hours in which unit-specific defaults for multiple fuels were used to report NOx mass emissions in RT 328. Please submit your next file with complete fuel usage and information RTs 302 and 303.

Error Code 398 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS (*Status Code 9 error*)

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value was calculated by summing the NOx mass values calculated from the heat input and fuel usage time in RTs 302 and 303 and the applicable unit-specific default NOx emission rate.

Error Code 399 MISSING RT 531 FOR UNIT-SPECIFIC DEFAULT RATE FOR OIL (*Status Code 9 error*)

A NOx methodology of "UDEF-MUL-C" in RT 328, column 45 was reported but there was no effective RT 531 containing a unit-specific default NOx emission rate for oil in EPA's monitoring plan database.

Error Code 400 MISSING RT 531 FOR UNIT-SPECIFIC DEFAULT RATE FOR GAS (*Status Code 9 error*)

A NOx methodology of "UDEF-MUL-C" in RT 328, column 45 was reported but there was no effective RT 531 containing a unit-specific default NOx emission rate for gas in EPA's monitoring plan database.

Error Code 401 MISSING RT 302 OR RT 303 FOR UNIT-SPECIFIC DEFAULTS FOR MULTIPLE FUELS (*Status Code 9 error*)

There were no RTs 302 or 303 for hours in which unit-specific defaults for multiple fuels during controlled hours were used to report NOx mass emissions in RT 328. Please submit your next file with all required hourly fuel flow records.

Error Code 402 MISSING HEAT INPUT RATE IN RT 302 OR RT 303 (*Status Code 9 error*)

Heat input rate was not reported in RT 302 or 303 for hours in which unit-specific defaults for multiple fuels during controlled hours were used to report NOx mass emissions in RT 328. Please submit your next file with complete heat input data in RTs 302 and 303.

Error Code 403 MISSING FUEL USAGE TIME IN RT 302 OR RT 303 (*Status Code 9 error*)

Fuel usage time was not reported in RT 302 or 303 for hours in which unit-specific defaults for multiple fuels during controlled hours were used to report NOx mass emissions in RT 328. Please submit your next file with complete fuel usage and information RTs 302 and 303.

Error Code 404 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS (*Status Code 9 error*)

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value was calculated by summing the NOx mass values calculated from the heat input and fuel usage time in RTs 302 and 303 and the applicable unit-specific default NOx emission rate.

Error Code 405 MISSING RT 531 FOR NOX EMISSION RATE FOR CONTROLLED HOURS (*Status Code 9 error*)

A NOx methodology of "NOXR-BYS-C" in RT 328, column 45 was reported but there was no effective RT 531 containing a default NOx emission rate in EPA's monitoring plan database.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 406 **MISSING RT 531 FOR MAXIMUM HEAT INPUT** (*Status Code 9 error*)

A heat input methodology of "MHHI" in RT 328, column 55 was reported but there was no effective RT 531 containing a maximum heat input rate for oil or a non-specific fuel in EPA's monitoring plan database.

Error Code 407 **REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS** (*Status Code 9 error*)

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value from RT 328 was recalculated from the default NOx emission rate and maximum heat input weighted by unit operating time reported in RT 328.

Error Code 408 **MISSING RT 300 FOR HOUR IN WHICH RT 328 IS REPORTED** (*Status Code 9 error*)

There were no RTs 300 for hours in which the NOx methodology of "NOXR-BYS-C" was reported in RT 328.

Error Code 409 **MISSING HEAT INPUT RATE IN RT 300** (*Status Code 9 error*)

Heat input rate was not reported in RT 300 for hours in which the NOx methodology of "NOXR-BYS-C" was reported in RT 328. Please submit your next file with heat input rate in all RTs 300 for operating hours.

Error Code 410 **ZERO UNIT OPERATING TIME IN RT 300** (*Status Code 9 error*)

The unit operating time reported in RT 300, column 18 indicated that the unit/pipe did not operate for an hour in which the RT 328 indicates the use of the NOx methodology of "NOXR-BYS-C". Please submit consistent NOx mass emissions and unit operating time information in your next file.

Error Code 411 **INCONSISTENT UNIT OPERATING TIME IN RT 300 AND RT 328** (*Status Code 9 error*)

The unit operating time reported in RT 328, column 18 is inconsistent with the unit operating time reported in RT 300, column 18. Please submit consistent unit operating time information in your next file.

Error Code 412 **REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS** (*Status Code 9 error*)

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value from RT 328 was weighted by the unit operating time in RT 300 and recalculated from the oil default NOx emission rate in RT 531 and the hourly heat input in RT 300.

Error Code 413 **NO MULTIPLE STACKS IDENTIFIED IN RT 503 FOR UNIT REPORTING "NOXM-SUM"** (*Status Code 9 error*)

A NOx methodology of "NOXM-SUM" was reported in RT 328 for this unit which indicates that the unit value is the sum of the multiple stack NOx mass emissions for the hour. However, there are no active multiple stacks associated with this unit in EPA's monitoring plan database.

Error Code 414 **MISSING MULTIPLE STACK TYPE 328 RECORDS FOR HOUR** (*Status Code 9 error*)

A NOx methodology of "NOXM-SUM" was reported in RT 328 for this unit which indicates that the unit value is the sum of the multiple stack NOx mass emissions for the hour. However, there were no RTs 328

Active Error codes in the Summary, Sequence, Formula, and LME Program

present in the file for any associated multiple stacks. Please submit NOx mass emissions data for multiple stacks in your next file.

Error Code 415 **REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS** (Status Code 9 error)

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. When column 32 of RT 328 for the unit is summed and compared with the sum of column 32 of RT 328 of all multiple stacks the values do not equal.

Error Code 416 **NOx MASS (RT 328) REPORTED FOR AN ACID RAIN PROGRAM SOURCE** (Status Code 5 error)

According to EPA's records this source is ONLY affected by the Acid Rain Program, and therefore no hourly NOx mass emissions records (RT 328) should be submitted. If this is the case, revise the report to remove RT 328 and resubmit it before the submission deadline. On the other hand, if this source is no longer only subject to the Acid Rain Program, or if you believe this message is in error, please contact your EPA Analyst listed in this feedback letter.

Error Code 417 **RT 300 NOT FOUND FOR RT 328 NOX MASS EMISSIONS** (Status Code 5 error)

No RT 300 was found for an hour in which RT 328 was reported for NOx mass emissions. Report RT 300 for each clock hour (including non-operating hours) in every unit operating quarter. Report RT 300 for each affected Unit, irrespective of the location(s) at which the emissions are measured and for each common or multiple Stack/Pipe ID at which emissions are measured. The report must be corrected and resubmitted before the submission deadline.

Error Code 418 **NOX MASS EMISSIONS REPORTED FOR NON-OPERATING HOUR** (Status Code 5 error)

A NOx mass emissions record (RT328) was reported for an hour where the operating time reported in RT 300 was 0.00. Investigate and correct this problem. If the correct operating time is 0.00 then do not report RT 328 for the hour. Otherwise, correct the operating time in RT 300 and ensure the NOx mass emissions value reported in RT 328 is correct.

Error Code 419 **INVALID NOX METHODOLOGY CODE REPORTED IN RT 328** (Status Code 5 error)

The NOx Mass Methodology Code reported in RT 328, column 45 is not a valid EDR V2.1 or V2.2 code. The valid codes are: AE-GAS, AE-MIX, AE-MUL, AE-OIL, NOXM-AMS, NOXM-CEMS, NOXR-AMS, NOXR-CEMS, NOXR-BYS, and NOXR-PEMS. Correct the code and resubmit the report before the submission deadline.

Error Code 420 **NO SO2 EMISSION MONITORING METHODOLOGY DEFINED FOR AN ACID RAIN UNIT** (Status Code 5 error)

Acid Rain Program units must report a RT 585 to define the SO2 emission methodology used. This quarterly report did not contain a valid RT 585 to provide the SO2 monitoring methodology. If a RT 585 was reported for SO2 monitoring methodology, ensure that the parameter code reported in column 10 is "SO2". The quarterly report must be resubmitted to correct this problem.

Error Code 421 **NO CO2 EMISSION MONITORING METHODOLOGY DEFINED FOR AN ACID RAIN UNIT** (Status Code 5 error)

Acid Rain Program units must report a RT 585 to define the CO2 emission methodology used. This quarterly report did not contain a valid RT 585 to provide the CO2 monitoring methodology. If a RT 585

Active Error codes in the Summary, Sequence, Formula, and LME Program

was reported for CO2 monitoring methodology, ensure that the parameter code reported in column 10 is "CO2". The quarterly report must be resubmitted to correct this problem.

Error Code 422 **NO HEAT INPUT RATE METHODOLOGY DEFINED FOR AN ACID RAIN UNIT** *(Status Code 5 error)*

Acid Rain Program units must report a RT 585 to define the heat input rate methodology used. This quarterly report did not contain a valid RT 585 to provide the heat input methodology. If a RT 585 was reported for heat input methodology, ensure that the parameter code reported in column 10 is "HI". The quarterly report must be resubmitted to correct this problem.

Error Code 423 **NO NOX EMISSION RATE MONITORING METHODOLOGY DEFINED FOR AN ACID RAIN UNIT** *(Status Code 5 error)*

Acid Rain Program units must report a RT 585 to define the NOx emission rate methodology used. This quarterly report did not contain a valid RT 585 to provide the NOx rate methodology. If a RT 585 was reported for NOx rate methodology, ensure that the parameter code reported in column 10 is "NOXR". The quarterly report must be resubmitted to correct this problem.

Error Code 424 **INVALID INVALID SO2 MONITORING METHODOLOGY CODE REPORTED** *(Status Code 5 error)*

An invalid SO2 methodology code was reported in RT 585, column 14. The allowable codes are "CEM", "F23", "AMS", "GFF", "BYMAX", "BYMAXFS" and "OFF". This field cannot be blank. Correct the RT 585 and resubmit the report before the submission deadline.

Error Code 425 **MORE THAN ONE RT 504 REPORTED FOR A UNIT** *(Status Code 5 error)*

More than one RT 504 was reported for the Unit ID displayed below. Provide only one RT 504 for each Unit ID in the file. Review the RT 504s reported for the Unit ID, delete the invalid or duplicate RT 504(s), and resubmit the file before the submission deadline.

Error Code 426 **PRIMARY FLOW MONITOR NOT FOUND FOR UNIT REPORTING USE OF SO2 CEMS** *(Status Code 9 error)*

RT 585 indicates the use of an SO2 CEM system at this unit. The RT 510 data for this unit, however, does not contain a primary flow monitoring system. For each unit using SO2 CEMS methodology there must be at least one primary flow CEM system reported in the monitoring plan RT 510s.

Error Code 427 **FLOW MONITOR NOT FOUND FOR UNIT REPORTING USE OF SO2 CEMS** *(Status Code 9 error)*

RT 585 indicates the use of an SO2 CEM system at this unit. The RT 510 data for this unit, however, does not contain any flow monitoring system(s) for the unit. For each unit or associated stack using SO2 CEMS there must be at least one primary flow CEM system in the quarterly data file 510 records.

Error Code 428 **PRIMARY FLOW MONITOR NOT FOUND FOR STACK REPORTING USE OF SO2 CEMS** *(Status Code 9 error)*

The monitoring plan indicates the use of an SO2 CEM system at this stack. The RT 510 data for this stack, however, does not contain a primary flow monitoring system. For each stack using SO2 CEMS there must be at least one primary flow CEM system in the quarterly data file 510 records.

Error Code 429 **FLOW MONITOR NOT FOUND FOR STACK REPORTING USE OF SO2 CEMS** *(Status Code 9 error)*

Active Error codes in the Summary, Sequence, Formula, and LME Program

The Monitoring Methodology Information (RT 585) indicates that CEMS monitoring methodology is used to report SO₂ emissions for the Stack ID and associated Unit ID displayed below. However the monitoring systems identified in RT 510s for the Stack ID do not include an active Flow CEM system for the calendar quarter. If an Flow CEM system was used in the quarter, ensure that at least one primary Flow CEM system is defined in RT 510s, and that the system Status code reported in RT 510, column 16, is not 'D' (to indicate the system was active during the quarter).

Error Code 430 **INSUFFICIENT DAILY CALIBRATION ERROR TESTS REPORTED** (*Status Code 9 error*)

For one or more of the following pollutants or parameters: SO₂, NO_x, CO₂, O₂, or flow rate, the number of passed daily calibration error tests reported was significantly less than the number of days on which hourly data were reported for the pollutant or parameter, as indicated in the DAILY CALIBRATION SUMMARY Table(s) printed below. A passed calibration error test validates the data from a monitor prospectively for 26 clock hours. In some cases, following a unit outage, an 8-hour startup grace period is allowed before a calibration error test must be passed. Please review your data and, if necessary invalidate any hours that are not "covered" by a valid calibration error test or a startup grace period and resubmit the file. You may disregard this message if the disparity between the number of passed calibration error tests and the number of operating days is the result of using one or more start-up grace periods, as allowed under section 2.1.5.2 in Appendix B of Part 75.

Error Code 431 **INSUFFICIENT FLOW MONITOR INTERFERENCE CHECKS (RT 231) REPORTED** (*Status Code 9 error*)

The reported number of passed daily flow monitor interference checks was significantly less than the number of days on which hourly flow rate data were reported. A passed interference check validates the data from a flow monitor prospectively for 26 clock hours. In some cases, following a unit outage, an 8-hour startup grace period is allowed before an interference check must be passed. Please review your data and, if necessary invalidate any hours that are not "covered" by a valid flow monitor interference check or a startup grace period. Resubmit the file, if necessary.

Error Code 432 **NO NOX CONCENTRATION SYSTEM ID DEFINED IN MONITORING PLAN** (*Status Code 9 error*)

The Hourly Total NO_x Mass Emissions value reported in RT 328 is measured using a NO_x Concentration Monitoring System for the Stack/Unit ID. More than one NO_x Concentration record (RT 201) was reported in the same hour for the Stack/Unit ID, and the System IDs reported in RT 201 column 13 are different. However, neither System ID is identified in the monitoring plan as a NO_x Concentration System (where "NOXC" is the System Parameter Monitored code reported in RT 510, column 17). Ensure the NO_x Concentration System is correctly identified in the monitoring plan, and that the correct System ID is reported in RT 201 for the hour.

Error Code 433 **RT 510 PRIMARY/BACKUP CODE IS INVALID** (*Status Code 5 error*)

The Primary/Backup Designation code reported in RT 510, column 21 is not correct for all components of the Monitoring System ID identified below. Check the RT 510 for each system component to ensure the Designation Code is valid. All codes must be upper-case. The valid codes are "P", "B", "DB", "RB", "CI", "RM", and "PE". All components within the same System ID must have the same Primary/Backup Designation code. The report must be corrected and resubmitted before the submission deadline.

Error Code 434 **MAXIMUM POTENTIAL FLOW VALUE NOT FOUND IN RT 530** (*Status Code 5 error*)

Active Error codes in the Summary, Sequence, Formula, and LME Program

A RT 530 with a parameter monitored in column 17 of FLOW was found, however the maximum potential flow value in column 36 was blank. If you use a CEMS methodology for the parameter FLOW you must, in column 17, the maximum potential flow (MPF) rate in units of standard cubic feet per hour (scfh) on a wet basis. Ensure the necessary RT 530 for FLOW contains a MPF value and resubmit the file before the submission deadline.

Error Code 435 **SPAN VALUE IN RT 530 NOT FOUND** (*Status Code 5 error*)

A RT 530 with a parameter monitored in column 17 of FLOW was found, however the span value in column 36 was blank. For flow rate, the span value in column 36 is the calibration span value and must be reported in the units used for daily calibrations. Ensure the necessary RT 530 for FLOW contains a span value and resubmit the file before the submission deadline.

Error Code 436 **FLOW RATE SPAN VALUE NOT FOUND IN RT 530** (*Status Code 5 error*)

A RT 530 with a parameter monitored in column 17 of FLOW was found, however the flow rate span value in column 90 was blank. For the parameter FLOW, report the flow rate span value, which is the product of the MPF (from column 17) and a factor no less than 1.00 and no greater than 1.25. This factor must be the same one that was used to determine the calibration span value. Ensure the necessary RT 530 for FLOW contains a flow rate span value and resubmit the file before the submission deadline.

Error Code 437 **FLOW RATE FULL SCALE VALUE NOT FOUND IN RT 530** (*Status Code 5 error*)

A RT 530 with a parameter monitored in column 17 of FLOW was found, however the flow rate full scale value in column 99 was blank. For the parameter FLOW, report the actual full-scale range value expressed units of scfh. The flow rate full-scale range value must be greater than or equal to the flow rate span value. Ensure the necessary RT 530 for FLOW contains a flow rate full-scale value and resubmit the file before the submission deadline.

Error Code 438 **INVALID OIL SULFUR SAMPLING CODE REPORTED IN RT 313** (*Status Code 9 error*)

The Type of Oil Sulfur Sampling code reported in RT 313, column 44 was either zero or blank. Ensure the correct sampling type code is reported for the Oil that was combusted during the hour, do not leave this field blank.

Error Code 439 **BLANK MONITORING SYSTEM ID REPORTED FOR OIL SYSTEM** (*Status Code 5 error*)

While recalculating the hourly SO₂ Mass Emissions from Oil, EPA found the Oil Fuel Flow Monitoring System ID in RT 302, column 10 was blank for an hour in which the Source of Data Code for Mass Oil Flow Rate (RT 302, column 31) indicates that a measured Mass Oil Flow value was reported in RT 302, column 21 instead of a substitute value. Review the oil consumption data and ensure the System ID and Source of Data Code reported in RT 302 are correct for the hour, and resubmit the file before the submission deadline.

Error Code 440 **INVALID HEAT INPUT RATE METHODOLOGY CODE REPORTED IN RT 328** (*Status Code 5 error*)

The Heat Input Rate Methodology Code reported in RT 328, column 55 is not a valid EDR V2.1 or V2.2 code. The valid codes are: CEMS, AMS, FF-GAS, FF-MIX, and FF-OIL. Correct the code and resubmit the report before the submission deadline.

Error Code 441 **BLANK UNIT TYPE CODE REPORTED** (*Status Code 5 error*)

Active Error codes in the Summary, Sequence, Formula, and LME Program

The Unit Type code reported in RT 504, column 10 is blank for the Unit ID(s) displayed below. Determine the correct Unit Type code, correct the RT 504, and resubmit the quarterly report before the submission deadline.

Error Code 442 **INVALID MAXIMUM HOURLY HEAT INPUT CAPACITY VALUE REPORTED** (Status Code 5 error)

The Maximum Hourly Heat Input Capacity value reported in RT 504, column 13, was either blank or zero for the Unit ID(s) displayed below. Determine the correct value, correct the RT 504, and resubmit the quarterly report before the submission deadline.

Error Code 443 **INVALID DATE FOR FIRST COMMERCIAL OPERATION REPORTED** (Status Code 5 error)

The Date of First Commercial Operation reported in RT 504, columns 20 - 27, was either blank or zero for the Unit ID(s) displayed below. Determine the date on which the Unit first operated for commercial purposes. For new electric generating units this is the date on which the unit first generated electricity for sale, including test generation. Correct the date in RT 504 and resubmit the quarterly report before the submission deadline.

Error Code 444 **PEAKING UNIT QUALIFICATION NOT REPORTED FOR APPENDIX E UNIT** (Status Code 5 error)

An RT 585 was reported for this unit that indicated that Appendix E Monitoring Methodology is used to determine the hourly NO_x Emission Rate for this unit. However no RT 507 was found that reported a Qualification Code of "PK" (Annual Peaking Unit) or "SK" (Ozone Season Peaking Unit) in column 49 to provide the capacity factor data needed to qualify this unit as a Peaking Unit. The quarterly report must be corrected and resubmitted before the submission deadline.

Error Code 445 **NO PARTICULATE CONTROLS REPORTED IN RT 586 FOR COAL-FIRED UNIT** (Status Code 5 error)

According to a Unit Fuel Type record (RT 587) reported for the Unit ID displayed below, the Unit combusts Coal and/or Coal Refuse (the Fuel Type Combusted code "C" or "CRF" was reported in RT 587, column 10). One or more RT 586 (Emission Control Equipment Identification) were also reported for the Unit, but no RT 586 was reported for Particulate Controls (parameter code "PART" reported in RT 586, column 10). At a minimum, units that combust Coal and/or Coal Refuse must report at least one RT 586 to identify the installed Particulate Emission Controls. Ensure that a RT 586 is reported for the Particulate Controls that are in place for this unit and resubmit the report before the submission deadline.

Error Code 446 **NO CONTROL EQUIPMENT INFORMATION (RT 586) REPORTED** (Status Code 5 error)

According to a Unit Fuel Type record (RT 587) reported for the Unit ID displayed below, the Unit combusts Coal and/or Coal Refuse (the Fuel Type Combusted code "C" or "CRF" was reported in RT 587, column 10). However, no Emission Control Equipment Identification (RT 586) was reported for the Unit ID. At a minimum, units that combust Coal and/or Coal Refuse must report at least one RT 586 to identify the installed Particulate Emission Controls. Ensure that a RT 586 is reported for each type of Particulate Controls and that additional RT 586s are reported for any SO₂ and/or NO_x controls that are in place for this Unit and resubmit the report before the submission deadline.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 447 **BLANK MONITORING SYSTEM ID REPORTED FOR GAS SYSTEM**

(Status Code 5 error)

While recalculating the hourly Heat Input Rate from Gas, EPA found the Gas Fuel Flow Monitoring System ID in RT 303, column 10 was blank for an hour in which the Source of Data Code for Gas Flow Rate (RT 303, column 31) indicates that a measured hourly Gas Flow Rate value was reported in RT 303, column 21 instead of a substitute value. Review the gas consumption data and ensure the System ID and Source of Data Code reported in RT 303 are correct for the hour, and resubmit the file before the submission deadline.

Error Code 448 **BLANK MONITORING SYSTEM ID REPORTED FOR GAS SYSTEM**

(Status Code 5 error)

While recalculating the hourly SO₂ Mass Emissions from Gas, EPA found the Gas Fuel Flow Monitoring System ID in RT 303, column 10 was blank for an hour in which the Source of Data Code for Gas Flow Rate (RT 303, column 31) indicates that a measured Gas Fuel Flow value was reported in RT 303, column 21 instead of a substitute value. Review the gas consumption data and ensure the System ID and Source of Data Code reported in RT 303 are correct for the hour, and resubmit the file before the submission deadline.

Error Code 449 **SO₂ MASS EMISSIONS FORMULA ID NOT FOUND IN RT 520**

(Status Code 5)

The SO₂ Mass Emissions Formula ID reported in RT 310, column 32, was not found in an active monitoring plan Formula Record (RT 520, column 11) for the same Unit/Stack ID. The Date and Hour of the first occurrence of this problem is displayed below. Review the RT 310 and the corresponding RT 520 for the same Unit/Stack ID to ensure the Formula IDs match. Check for missing RT 520(s), and ensure the correct Status Code is reported in column 10 (U, A, or C) to indicate the RT 520 is active. The report must be corrected and resubmitted before the submission deadline.

Error Code 450 **BLANK FORMULA ID REPORTED FOR HOURLY SO₂ MASS EMISSIONS**

(Status Code 5)

The SO₂ Mass Emissions Formula ID reported in RT 310, column 32, was blank. The Date and Hour of the first occurrence of this problem is displayed below. The Formula ID cannot be blank, report the Formula ID from RT 520, column 11 that represents the equation used to calculate the SO₂ Mass Emissions Rate for the hour. The report must be corrected and resubmitted before the submission deadline.

Error Code 451 **NO_x EMISSION RATE FORMULA ID NOT FOUND IN RT 520** *(status Code 5)*

The NO_x Emission Rate Formula ID reported in RT 320, column 50, was not found in an active monitoring plan Formula Record (RT 520, column 11) for the same Unit/Stack ID. The Date and Hour of the first occurrence of this problem is displayed below. Review the RT 320 and the corresponding RT 520 for the same Unit/Stack ID to ensure the Formula IDs match. Check for missing RT 520(s), and ensure the correct Status Code is reported in column 10 (U, A, or C) to indicate the RT 520 is active. The report must be corrected and resubmitted before the submission deadline.

Error Code 452 **BLANK FORMULA ID REPORTED FOR HOURLY NO_x EMISSION RATE**

(status Code 5)

The NO_x Emission Rate Formula ID reported in RT 320, column 50, was blank. The Date and Hour of the first occurrence of this problem is displayed below. The Formula ID cannot be blank, report the Formula ID from RT 520, column 11 that represents the equation used to calculate the NO_x Emission Rate for the hour. The report must be corrected and resubmitted before the submission deadline.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 453 **INVALID OIL FUEL TYPE CODE REPORTED** (*Status Code 5 error*)

An invalid Type of Oil code was reported in RT 302, column 56, for the Date and Time displayed below. The code cannot be blank and must be one of the following values: DSL, OIL, OOL, LPG, KER, ATF, WMO, G1, G2, G4L, G4H, G5L, G5H, G6, 1D, 2D, 4D, 0GT, 1GT, 2GT, 3GT, or 4GT. Consult the EDR Reporting Instructions for descriptions of these codes. Identify the type of Oil that was combusted during the hour for the Oil Fuel Flow System ID reported in RT 302, column 10 and report the correct code in RT 302, column 56. The report must be corrected and resubmitted before the submission deadline.

Error Code 454 **MULTIPLE OIL SO2 RECORDS REPORTED FOR SAME HOUR AND SYSTEM ID** (*Status Code 5 error*)

More than one RT 313 (SO2 Mass Emissions from Oil) was reported in an hour for the same Oil Fuel Flow Monitoring System ID. The Date and Hour of the first occurrence of this problem is displayed below. Review the System ID reported in column 10 of each RT 313 reported for the hour and check if multiple types of oil were combusted during the hour or if substitute data were reported for one or more Oil Fuel System IDs. Make any necessary corrections and resubmit the report before the submission deadline.

Error Code 455 **MULTIPLE OIL FLOW RECORDS REPORTED FOR SAME HOUR AND SYSTEM ID** (*Status Code 5 error*)

More than one RT 302 (Oil Fuel Flow) was reported in an hour for the same Oil Fuel Flow Monitoring System ID. The Date and Hour of the first occurrence of this problem is displayed below. Review the System ID reported in column 10 of each RT 302 reported for the hour and check if multiple types of oil were combusted during the hour or if substitute data were reported for one or more Oil Fuel System IDs. Make any necessary corrections and resubmit the report before the submission deadline.

Error Code 456 **MULTIPLE GAS SO2 RECORDS REPORTED FOR SAME HOUR AND SYSTEM ID** (*Status Code 5 error*)

More than one RT 314 (SO2 Mass Emissions from Gas) was reported in an hour for the same Gas Fuel Flow Monitoring System ID. The Date and Hour of the first occurrence of this problem is displayed below. Review the System ID reported in column 10 of each RT 314 reported for the hour and check if multiple types of Gas were combusted during the hour or if substitute data were reported for one or more Gas Fuel System IDs. Make any necessary corrections and resubmit the report before the submission deadline.

Error Code 457 **INVALID PARAMETER TYPE REPORTED IN RT 520 FOR SO2 FORMULA** (*Status Code 5 error*)

The hourly SO2 Mass Emission Rate Formula ID reported in RT 310, column 32, was found in an RT 520 (Formula Record), however the Parameter Monitored code reported in RT 520, column 14 is not 'SO2'. The Date and Hour of the first occurrence of this problem is displayed below, along with the reported RT 310 Formula ID, RT 520 Formula Code, and the RT 520 Parameter Code. Ensure that the correct SO2 Formula ID is reported in RT 310 and that it matches the Formula ID in an RT 520 that defines the hourly SO2 Mass Emission Rate Formula. The report must be corrected and resubmitted before the submission deadline.

Error Code 458 **INVALID PARAMETER TYPE REPORTED IN RT 520 FOR NOX FORMULA** (*Status Code 5 error*)

The hourly NOx Emission Rate Formula ID reported in RT 320, column 50 was found in an RT 520 (Formula Record), however the Parameter Monitored code reported in RT 520, column 14 is not 'NOX'. The Date and Hour of the first occurrence of this problem is displayed below, along with the reported RT 320 Formula ID, RT 520 Formula Code, and the RT 520 Parameter Code. Ensure that the correct NOx Formula ID is reported in RT 320 and that it matches the Formula ID in an RT 520 that defines the hourly

Active Error codes in the Summary, Sequence, Formula, and LME Program

NOx Emission Rate Formula. The report must be corrected and resubmitted before the submission deadline.

Error Code 459 **INVALID PARAMETER TYPE REPORTED IN RT 520 FOR HEAT INPUT** (Status Code 5 error)

The hourly Heat Input Rate Formula ID reported in RT 300, column 43 was found in an RT 520 (Formula Record), however the Parameter Monitored code reported in RT 520, column 14 is not 'HI'. The Date and Hour of the first occurrence of this problem is displayed below, along with the reported RT 300 Formula ID, RT 520 Formula Code, and the RT 520 Parameter Code. Ensure that the correct Heat Input Formula ID is reported in RT 300 and that it matches the Formula ID in an RT 520 that defines the hourly Heat Input Rate Formula. The report must be corrected and resubmitted before the submission deadline.

Error Code 460 **BLANK FORMULA ID REPORTED FOR HOURLY HEAT INPUT RATE** (Status Code 5 error)

The Heat Input Rate Formula ID reported in RT 300, column 43, was blank. The Date and Hour of the first occurrence of this problem is displayed below. The Formula ID cannot be blank, report the Formula ID from RT 520, column 11 that represents the equation used to calculate the NOx Emission Rate for the hour. The report must be corrected and resubmitted before the submission deadline.

Error Code 461 **INVALID GAS FUEL TYPE CODE REPORTED** (Status Code 5 error)

An invalid Type of Gas code was reported in RT 303, column 56, for the Date and Time displayed below. The code cannot be blank and must be one of the following values: PNG, NNG, PRG, OGS, RFG, LFG, BFG, LPG, CDG, COG, PDG, SRG, DGG, BUT, or PRP. Consult the EDR Reporting Instructions for descriptions of these codes. Identify the type of Gas that was combusted during the hour for the Gas Fuel Flow System ID reported in RT 303, column 10 and report the correct code in RT 303, column 56. The report must be corrected and resubmitted before the submission deadline.

Error Code 462 **OIL FUEL USAGE TIME GREATER THAN 1.00 REPORTED IN RT 302** (Status Code 5 error)

The Fuel Usage Time reported in RT 302, column 52, was greater than 1.00 for one or more hours for the Unit/Pipe ID identified below. The Date/Time of the first occurrence of this problem is also displayed. If Oil was combusted during the hour, correct the fuel usage time. If Oil was not combusted during the hour do not report RT 302 for the hour. The report must be corrected and resubmitted before the submission deadline.

Error Code 463 **GAS FUEL USAGE TIME GREATER THAN 1.00 REPORTED IN RT 303** (Status Code 5 error)

The Fuel Usage Time reported in RT 303, column 52, was greater than 1.00 for one or more hours for the Unit/Pipe ID identified below. The Date/Time of the first occurrence of this problem is also displayed. If Gas was combusted during the hour, correct the fuel usage time. If Gas was not combusted during the hour do not report RT 303 for the hour. The report must be corrected and resubmitted before the submission deadline.

Error Code 464 **REPORTED RT 323 HOURLY NOX EMISSION RATE IS ZERO** (Status Code 5 error)

The Hourly Average NOx Emission Rate value reported in RT 323, column 22 was zero for one or more hours. The Date/Time of the first occurrence of this problem is displayed below, along with the associated

Active Error codes in the Summary, Sequence, Formula, and LME Program

Unit ID. Review the Unit Operation data and the Appendix E NO_x curves to determine the correct NO_x Emission Rate value for the hour. If the Unit did not operate during the hour, do not report RT 323 for the hour. Correct and resubmit the report before the submission deadline.

Error Code 465 REPORTED RT 324 HOURLY NO_x EMISSION RATE IS ZERO
(Status Code 5 error)

The Hourly Average NO_x Emission Rate value reported in RT 324, column 25 was zero for one or more hours. The Date/Time of the first occurrence of this problem is displayed below, along with the associated Unit ID. Review the Unit Operation data and the Appendix E NO_x curves to determine the correct NO_x Emission Rate value for the hour. If the Unit did not operate during the hour, do not report RT 324 for the hour. Correct and resubmit the report before the submission deadline.

Error Code 466 MULTIPLE NO_x EMISSION RATE RECORDS (RT 323 AND RT 324) REPORTED (Status Code 5 error)

The Hourly Average NO_x Emission Rate for this Unit is determined using an Appendix E methodology (either RT 323 or RT 324). However, both RT 323 and RT 324 were reported in the same clock hour for the Unit ID identified below. The Date/Time of the first occurrence of this problem is also displayed. Only one Appendix E method can be used for the hour. Determine the correct Appendix E method for the Unit and only report the corresponding hourly NO_x Emission Rate record (RT 323 or RT 324) for each operating hour. Correct and resubmit the report before the submission deadline.

Error Code 467 REPORTED MULTIPLE/SINGLE FUEL TYPES FLAG IS BLANK
(Status Code 5 error)

The Multiple/Single Fuel Types Combusted flag reported in RT 324, column 45 was blank for one or more hours. The Date/Time of the first occurrence of this problem is displayed below, along with the associated Unit ID. This flag cannot be blank. Review the fuel consumption data for the hour. If only one fuel was combusted, report "S". On the other hand, if more than one fuel type was combusted during the hour, report "M". Correct and resubmit the report before the submission deadline.

Error Code 468 RT 324 NO_x MASS RATE FROM OIL NOT EQUAL TO RECALCULATED VALUE (Status Code 9 error)

Sources that report hourly Total NO_x Mass Emissions in RT 328 using Appendix E (NO_x Mass Methodology codes AE-MUL, AE-GAS, or AE-OIL) are also required to report the fuel-specific hourly NO_x Mass Emission Rate value (lb/hr) in RT 324, column 31. For one or more hours, the NO_x Mass Emission Rate for the Hour for the Fuel Type (Oil) reported in RT 324, column 31, does not equal the recalculated value for that fuel. The Date/Time of the first occurrence of the problem is displayed below, as well as the NO_x System ID reported in RT 324, column 10 for the hour. The fuel-specific NO_x Mass Emission Rate (lb/hr) value was recalculated by multiplying the Average NO_x Emission Rate value reported in RT 324, column 25, by the Heat Input Rate from Oil value reported in RT 302, column 45.

Error Code 500 FILE IS UNREADABLE BASED ON EDR FORMAT REQUIREMENTS (Status Code 6 error)

Active Error codes in the Summary, Sequence, Formula, and LME Program

ETS could not process the quarterly report file due to a serious file or data format problem. Possible causes include a corrupted or blank data file, an invalid file type, or unreadable data present at the beginning of a data record. Check your file, correct it if necessary, and resubmit the report to EPA. If the problem persists contact EPA, especially if you are attempting to electronically submit the file to the EPA mainframe.

Error Code 501 ORISPL IN FILENAME IS DIFFERENT FROM ORISPL IN RT 100 (*Status Code 6 error*)

This file may contain information for the wrong plant. The ORISPL contained in the mainframe filename assigned to your file and the ORISPL reported in Record Type 100 in the file do not match. Correct the filename and/or RT 100 as appropriate and resubmit this file before the file submission deadline.

Error Code 502 ORIS CODE REPORTED IN RT 100 NOT FOUND IN EPA'S DATABASE (*Status Code 6 error*)

The ORIS Code reported in Record Type 100, columns 4 - 9, is not contained in the list of valid ORIS Codes currently in EPA's database. The reported ORIS code is displayed below. Correct the ORIS Code and resubmit the report before the submission deadline.

NOTE: If this quarterly report is for a new source that is reporting for the first time, ensure that the ORIS Code matches the one identified in the Certificate of Representation Form and the Monitoring Plan previously submitted to EPA (or ensure that this information is submitted to EPA as soon as possible so that it can be processed and EPA's database updated accordingly).

If necessary, contact your EPA Analyst identified in this letter for assistance in resolving this problem.

Error Code 503 REPORTED STACK/UNIT/PIPE ID IS INVALID FOR THIS FACILITY (*Status Code 6 error*)

One or more records were found that contain a Unit ID, Stack ID, or Pipe ID that is not contained in the list of valid IDs currently in EPA's database. The invalid ID(s) are displayed below. You can use the ORISPL/UNIT ID column in the FILE SUMMARY presented below to help identify the problem record(s) where an invalid ID was found. Correct any records that contain an invalid ID and resubmit the report.

NOTE: If this quarterly report is for a new source that is reporting for the first time, ensure that all Stack/Unit/Pipe IDs match those identified in the Certificate of Representation Form and the Monitoring Plan previously submitted to EPA (or ensure that this information is submitted to EPA as soon as possible so that it can be processed and EPA's database updated accordingly).

If necessary, contact your EPA Analyst identified in this letter for assistance in resolving this problem.

Error Code 504 YEAR OR QUARTER IN FILENAME IS DIFFERENT FROM RT 100 (*Status Code 6 error*)

This file may contain information for the wrong year and/or quarter. The quarter and/or year in the mainframe filename assigned to your file (by you or EPA) and the quarter and/or year reported in RT100 in the file do not match.

Correct the filename and/or RT 100 as appropriate and resubmit the file before the file submission deadline.

Error Code 505 FILE DOES NOT CONTAIN MINIMUM REQUIRED MONITORING PLAN DATA (*Status Code 6 error*)

Active Error codes in the Summary, Sequence, Formula, and LME Program

This quarterly report does not contain the minimum required monitoring plan data records. One or more of the following record types were not found: RT 504, RT 505, RT 520, RT 585, and RT 587. Resubmit this file with all required monitoring plan record types before the submission deadline.

Error Code 506 UNREADABLE DATA FOUND IN ONE OR MORE RECORDS (*Status Code 6 error*)

ETS encountered unreadable information in one or more records. The line number of the record where this problem first occurs is displayed below. The most likely cause of this problem is the presence of non-ASCII characters that have corrupted the file format. Carefully examine the affected record for invalid characters and correct the data. The corrected report must be resubmitted before the submission deadline.

Error Code 507 FILE CONTAINS INVALID RECORD TYPES (*Status Code 6 error*)

One or more records did not contain a valid EDR record type code in columns 1 through 3. Check the RECORD TYPE column in the FILE SUMMARY section of this feedback report, where "???" indicates the location(s) where invalid records were found. The location (line number) of the first invalid record and the total number of invalid records is displayed at the end of this message. Invalid records may be caused by line-wrap of long record types (i.e., RT 301) or by corrupted records. Also ensure the report does not contain obsolete record types (RT 930/931, for example). Correct the affected record(s) and resubmit the report before the submission deadline.

Error Code 508 FILE CONTAINS MULTIPLE RECORD TYPE 100s (*Status Code 6 error*)

Each quarterly report must contain only one Record Type 100. Correct the report so that it only contains one Record Type 100, and resubmit it before the submission deadline. If multiple RT 100s are present because two or more unrelated units (or stacks) are reported in the file, separate them into individual reports with an appropriate RT 100 and submit the corrected reports before the submission deadline.

Error Code 509 FIRST RECORD IN FILE IS NOT RECORD TYPE 100 (*Status Code 6 error*)

The first record in this file does not contain facility identification data (Record Type 100). Correct the file so that the first record is RT 100 and resubmit it before the submission deadline.

Error Code 510 FILE DOES NOT CONTAIN A RECORD TYPE 100 (*Status Code 6 error*)

This file must contain one facility identification record (Record Type 100). Correct the file and resubmit it before the submission deadline.

Error Code 511 NO RT 301 REPORTED FOR AN ACID RAIN PROGRAM STACK/UNIT/PIPE ID (*Status Code 6 error*)

According to EPA's records, the Stack/Unit/Pipe ID displayed below is affected by the Acid Rain Program, however no RT 301 (Quarterly and Cumulative Annual Emissions Data) was reported for the Stack/Unit/Pipe ID. If this Stack/Unit/Pipe ID is affected by the Acid Rain Program, revise the report to include RT 301 for the Stack/Unit/Pipe ID and resubmit before the submission deadline. On the other hand, if this Stack/Unit/Pipe ID is not affected by the Acid Rain Program, please contact your EPA Analyst listed in this feedback letter.

Error Code 512 FILE CONTAINS ONE OR MORE BLANK LINES (*Status Code 9 error*)

This file contains blank lines. Please submit your next file without blank lines.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 513 **NO LINEARITY TEST RESULTS REPORTED IN A "QA OPERATING QUARTER"** (*Status Code 9 error*)

This file contains CEMS data for gas monitors (Record Type 200, 201, 202, 210 and/or 211) with no associated linearity test data and results (Record Types 601 and 602). Based on the number of quarterly operating hours in RT 301, column 114, this quarter was a QA operating quarter (a calendar quarter with greater than or equal to 168 unit or stack operating hours) and linearity checks of your gas monitors were required. You may disregard this message if you qualify for and intend to use a 168 unit operating hour grace period to complete the required tests. Also, for SO₂ and NO_x monitors with span values of 30 ppm or less (which are exempted from Part 75 linearity check requirements), you may disregard this message.

Error Code 514 **RT 301 QUARTERLY OPERATING HOURS VALUE IS BLANK OR ZERO** (*Status Code 5 error*)

Hourly CEMS data were reported (Record Types 200, 201, 202, 210 and/or 211) for one or more operating hours, however the Quarterly Operating Hours value reported in RT 301, column 114 was blank or zero. For a Stack or Unit where CEMS are used this value is required in order to determine if the calendar quarter is a QA operating quarter (a calendar quarter in which the Unit or Stack operating hours are greater than or equal to 168). Ensure that the correct Quarterly Operating Hours value is reported in RT 301 for the Unit/Stack ID(s) displayed below and resubmit the report before the submission deadline.

Error Code 517 **NUMBER OF TYPE 302 AND 313 RECORDS IS NOT EQUAL** (*Status Code 5 error*)

This file contains an unequal number of Oil Fuel Flow records (Record Type 302) and Oil SO₂ Mass Emissions records (Record Type 313). Acid Rain Program sources that use Appendix D procedures for determining SO₂ emissions from oil must report RT 302 and RT 313 for each hour in which oil was combusted. If no oil was combusted during an hour, do not report RT 302/RT 313 for that hour. Correct the EDR and resubmit the report before the submission deadline.

Error Code 518 **NUMBER OF TYPE 303 AND 314 RECORDS IS NOT EQUAL** (*Status Code 5 error*)

This file contains an unequal number of Gas Fuel Flow records (Record Type 303) and Gas SO₂ Mass Emissions records (Record Type 314). Acid Rain Program sources that use Appendix D procedures for determining SO₂ emissions from gas must report RT 303 and RT 314 for each hour in which gas was combusted. If no gas was combusted during an hour, do not report RT 303/RT 314 for that hour. Correct the EDR and resubmit the report before the submission deadline.

Error Code 522 **FILE CONTENTS INDICATE UNIT DID NOT OPERATE DURING QUARTER** (*Status Code 7 error*)

This file contains only Facility Data (RT 100), Quarterly Cumulative Emissions Data (RT 301) and/or Reporting Period and Cumulative Ozone Season Data (RT 307), and possibly the following records: RT 101, Facility Location and Identification Data (RT 102), Monitoring Plan Data (RT 5xx), or Signature and Certification Statement Records (RTs 900/901 and/or 940/941 and/or 910/920). The file does not contain hourly emissions or operation data. Based on this file content, the EPA believes this file represents a non-operating unit, stack or pipe. If this is not the case, review your data and revise and resubmit your report.

Error Code 523 **Unit/stack ID IN FILENAME NOT FOUND IN DATA FILE** (*Status Code 6 error*)

This file may contain information for the wrong unit/stack ID. The unit/stack ID in the mainframe filename assigned to your file (by you or EPA) does not match any unit/stack ID reported in the file. Please correct the filename and/or unit/stack ID as appropriate and resubmit this file before the submission deadline.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 524 **DATA REPORTED FOR UNIT/STACK/PIPE ID NOT DEFINED IN RT 503-504** (Status Code 6 error)

One or more records contain a Unit/Stack/Pipe ID that is not identified in the monitoring plan (RTs 503 or 504). The problem ID is displayed below. Check the ORISPL/UNIT column in the EDR FILE SUMMARY to identify the record(s) where problem ID was reported. If the ID is valid for this facility, check for missing RT 503 or RT 504. If the ID is not valid for this facility, correct the ID in the problem record(s) or delete them if they were erroneously included in the report. Also ensure that all IDs are left-justified (no leading blanks). Correct and resubmit the report before the submission deadline.

Error Code 525 **NO DATA REPORTED FOR STACK/UNIT/PIPE ID DEFINED IN RT 503 OR 504** (Status Code 6 error)

This report contains no emissions or periodic QA data records for a Stack/Unit/Pipe ID that is defined in the monitoring plan RTs 503/504. Ensure that all IDs reported in the file are correct, as an invalid ID reported in RT 503 or RT 504 will cause this problem (review the IDs listed in the ORISPL/UNIT ID column in the EDR FILE SUMMARY, below, to check for this problem.) Otherwise, ensure that all required records are reported for each Stack/Unit/Pipe ID that is represented in the file. Correct and resubmit the report before the submission deadline.

Error Code 526 **FILE DOES NOT CONTAIN A RECORD TYPE 102 (FACILITY INFORMATION)** (Status Code 5 error)

The file must contain one RT 102 to provide Facility Location and Identification Information. Correct the file so it includes a complete RT 102 and resubmit the report before the submission deadline.

Error Code 527 **FILE DOES NOT CONTAIN A RECORD TYPE 505** (Status Code 5 error)

No RT 505 (Program Indicator) was reported for a unit ID reported in RT 504. One or more RT 505s must be reported for each unit identified in RT 504 to ensure that the unit is properly categorized and that ETS performs the proper data checks for the unit. Correct the report to ensure that all required RT 505s are included and resubmit the report before the submission deadline.

Error Code 528 **RT 520 DOES NOT INDICATE NOXM OR NOXR AS PARAMETER MONITORED** (Status Code 5 error)

Each NOx Budget Program source must provide an RT 520 that indicates NOXM or NOXR in column 14 as the parameter monitored. Review the formula table (RT 520s) contained in the report and either include the appropriate RT 520 if it was missing, or correct the existing RT 520. The report must be corrected and resubmitted before the submission deadline.

Error Code 529 **FILE DOES NOT CONTAIN RT 930 And/or RT 931s** (Status Code 5 error)

A NOx Budget Program Certification Statement and Authorized Account Representative Signature and General Certification Statement (RTs 930 and 931) must be present in the file. OTC NOx Budget Sources reporting files formatted in EDR version 2.0 must include both RTs 930 and 931 in their file. Ensure that the appropriate Certification Statement and Authorized Account Representative Signature (RT930) and General Certification Statement (RT 931s) are added to your file and resubmit the file before the submission deadline.

Error Code 530 **INVALID OR BLANK EDR VERSION REPORTED IN RECORD TYPE 100** (Status Code 5 error)

The EDR version code reported in RT 100, column 15 is not one of the following valid codes: V2.1 or V2.2 (upper-case characters must be used, and the code must not contain any blank spaces). Correct the

Active Error codes in the Summary, Sequence, Formula, and LME Program

code and ensure that the EDR is formatted according to EDR V2.1 or V2.2, whichever applies to this source. Resubmit the report before the submission deadline.

Error Code 531 **HOURLY NOX MASS (RT 328) NOT REPORTED FOR NOX BUDGET PROGRAM** (Status Code 5 error)

According to EPA's records this source is affected by the NOx Budget Trading Program, and hourly NOx Mass Emissions (RT 328) are required to be reported for each operating hour. Ensure that the required RT 328s are included in the report and resubmit the report before the submission deadline. On the other hand, if this source did NOT operate during the calendar quarter, ensure the report is correctly formatted for a non-operating source (do not report 600-level records or RT 230/231 daily QA tests if the source did not operate during the entire quarter) and resubmit before the submission deadline.

Error Code 532 **FILE CONTENTS INDICATE UNIT DID NOT OPERATE DURING QUARTER** (Status Code 7 error)

This file contains only Facility Data (RT 100), Operating Data (RT 300 or RT 360) that indicate no operation for all hours, Quarterly Cumulative Emissions Data (RT 301) and/or Reporting Period and Cumulative Ozone Season Data (RT 307), and possibly the following records: RT 101, Facility Location and Identification Data (RT 102), Monitoring Plan Data (RT 5xx), or Signature and Certification Statement Records (RTs 900/901 and/or 940/941 and/or 910/920).

Based on this file content, the EPA believes this file represents a non-operating unit, stack or pipe. If this is not the case, review your data and revise and resubmit the report.

Error Code 533 **REPORTED EMISSIONS DATA FALL OUTSIDE OF THE QUARTER** (Status Code 5 error)

Hourly/daily emissions were reported in your quarterly report that fall outside of the quarter specified in RT 100, column 10. The proper date ranges for each quarter are as follows: First Quarter, January 1st through March 31st; Second Quarter, April 1st through June 30th; Third Quarter, July 1st through September 30th; and Fourth Quarter, October 1st through December 31st. Please review the date(s) in question, correct the problem, and resubmit the file before the resubmission deadline.

Error Code 535 **NO RT 307 REPORTED FOR NOX BUDGET PROGRAM STACK/UNIT/PIPE ID** (Status Code 6 error)

According to EPA's records, the Stack/Unit/Pipe ID displayed below is affected by the NOx Budget Trading Program, however no RT 307 (Cumulative Ozone Season and Reporting Period NOx Mass Emissions and Heat Input) was reported for the Stack/Unit/Pipe ID. If this Stack/Unit/Pipe ID is affected by the NOx Budget Trading Program, revise the report to include RT 307 for the Stack/Unit/Pipe ID and resubmit before the submission deadline. On the other hand, if this Stack/Unit/Pipe ID is not affected by the NOx Budget Trading Program, please contact your EPA Analyst listed in this feedback letter.

Error Code 537 **INVALID PROGRAM INDICATOR CODE REPORTED IN RECORD TYPE 505** (Status Code 6 error)

The Program Indicator Code in column 10 of an RT 505 is either invalid or missing. The valid codes are ARP, OTC-SUBH, and SUBH. Review each RT 505 reported in the file and correct the Program Indicator code where necessary. Also check for obsolete or additional RT 505s that have been included by mistake. Do not leave this field blank. Correct the report and resubmit it before the quarterly report submission deadline.

Active Error codes in the Summary, Sequence, Formula, and LME Program

Error Code 539 **IMPROPER USE OF RT 508 TO INDICATE REPORTING FREQUENCY CHANGE** *(Status Code 5 error)*

Only report RT 508 in a 3rd quarter or 4th quarter EDR to indicate an upcoming change in the reporting frequency for the Unit/Stack/Pipe ID. Do not report RT 508 in a 1st quarter or 2nd quarter EDR. If you are changing from year-round (quarterly) reporting to ozone-season reporting, include RT 508 in the 4th quarter EDR. On the other hand, if you are changing from ozone-season reporting to year-round (quarterly) reporting, include RT 508 in the 3rd quarter EDR. In either case, submit one RT 508 for EACH Unit/Stack/Pipe ID in the EDR, and ensure the reporting frequency reported in column 10 is the same for each Unit/Stack/Pipe ID. Please contact your EPA-assigned analyst if you have any questions. The report must be corrected and resubmitted before the submission deadline.

Error Code 541 **RT 505 REPORTING FREQUENCY "Q" DOES NOT MATCH EXPECTED "OS"** *(Status Code 5 error)*

The Reporting Frequency code in an RT 505, column 22, does not match the frequency code in EPA's mainframe database for the Unit ID(s) listed below. The reported code is "Q" (Quarterly) while the EPA value is "OS" (Ozone Season). If the Reporting Frequency has changed for the Unit, or if this message is in error, please contact your EPA analyst. Otherwise, review each RT 505 for the Unit ID, correct the Reporting Frequency code and resubmit the file before the submission deadline.

Error Code 543 **FILE CONTAINS MORE THAN ONE RT 102 (FACILITY INFORMATION)** *(Status Code 5 error)*

The quarterly report must contain only one Record Type 102 to provide Facility Location and Identification Information. Review the reported RT 102s, delete the invalid or duplicate RT 102(s) and resubmit the report before the submission deadline. If multiple RT 102 are present because two or more unrelated units or stacks are contained in this file, separate them into individual files with their corresponding RT 102 and submit the separated files before the submission deadline.

Error Code 545 **INVALID RT 505 PROGRAM INDICATOR CODE BASED ON EDR V2.1 OR V2.2** *(Status Code 5 error)*

The Program Indicator Code reported in a Record Type 505, column 10, is invalid based on the EDR version "V2.1" or "V2.2" reported in RT 100. The valid Program Indicator codes for EDR V2.1 and V2.2 are: ARP, OTC-SUBH, and SUBH. Review each RT 505 in the file and correct the Program Indicator code where necessary. Do not leave this field blank. Resubmit the report before the quarterly report submission deadline.

Error Code 546 **INVALID PROGRAM INDICATOR CODE REPORTED IN RT 505 BASED ON EDR VERSION 2.0** *(Status Code 5 error)*

The Program Indicator Code reported in Record Type 505, column 10, is invalid based on the EDR version "V2.0" reported in RT 100. The only valid program indicator code for sources using EDR V2.0 is "NBP". Do not leave this field blank. Correct the RT 505 and resubmit the report before the quarterly report submission deadline.

Error Code 547 **MORE THAN TWO RT 505s REPORTED FOR A UNIT** *(Status Code 5 error)*

The quarterly report contains more than two RT 505s for the unit ID displayed below. Check each RT 505 to determine if it is correct for the unit ID. Delete any duplicate RT 505s. Correct the problem and resubmit the report before the quarterly report submission deadline.

Error Code 548 **MORE THAN ONE RT 505 REPORTED FOR A NOX BUDGET UNIT USING EDR V2.0** *(Status Code 5 error)*

Active Error codes in the Summary, Sequence, Formula, and LME Program

The quarterly report contains more than one RT 505 for the unit ID displayed below. For sources only affected by the NOx Budget Program, and using EDR v2.0, report only one RT 505 for each unit ID. Check each RT 505 to determine if it is correct for the unit ID. Delete any duplicate RT 505s. Correct the problem and resubmit the report before the quarterly report submission deadline.

Error Code 549 **INVALID RECORD TYPE(S) REPORTED FOR AN LME SOURCE** (*Status Code 5 error*)

The EDR contains RT 360, which should only be reported for an LME source, however it also contains one or more record types that are inappropriate for an LME source. If this source qualifies for LME, ensure that RT 360 is the only hourly record type that is reported, and delete all other inappropriate 200-level and/or 300-level record types. On the other hand, if this source does not qualify for LME, do not report RT 360, and ensure the EDR contains all appropriate record types. Revise and resubmit the report before the submission deadline.

Error Code 550 **FILE CONTAINS RT 307 FOR A UNIT ONLY AFFECTED BY THE ACID RAIN** (*Status Code 5 error*)

According to EPA's records this source is ONLY affected by the Acid Rain Program, and therefore RT 307 (cumulative NOX Mass Emissions Data) should not be reported. If this source is only subject to the Acid Rain Program, revise the report and resubmit before the submission deadline. On the other hand, if this source is no longer only subject to the Acid Rain Program, or if you believe this message is in error, please contact your EPA Analyst listed in this feedback letter.

Error Code 551 **RT 301 REPORTED FOR A NON ACID RAIN PROGRAM STACK/UNIT/PIPE ID** (*Status Code 5 error*)

According to EPA's records the Stack/Unit/Pipe ID(s) displayed below are NOT affected by the Acid Rain Program. However, a RT 301 (Acid Rain Program Quarterly and Cumulative Annual Emissions Data) was reported for the Stack/Unit/Pipe ID(s). If the Stack/Unit/Pipe ID(s) are not affected by the Acid Rain Program, remove the RT 301(s) from the report and resubmit before the submission deadline. On the other hand, if the Stack/Unit/Pipe ID(s) are affected by the Acid Rain Program, please contact your EPA Analyst identified in this feedback letter for further guidance.

Error Code 552 **RT 505 REPORTING FREQUENCY "OS" DOES NOT MATCH EXPECTED "Q"** (*Status Code 5*)

The Reporting Frequency code in an RT 505, column 22, does not match the frequency code in EPA's mainframe database for the Unit ID(s) listed below. The reported code is "OS" (Ozone Season) while the EPA value is "Q" (Quarterly). If the Reporting Frequency has changed for the Unit, or if this message is in error, please contact your EPA analyst. Otherwise, review each RT 505 for the Unit ID, correct the Reporting Frequency code and resubmit the file before the submission deadline.

Error Code 553 **RT 505 REPORTING FREQUENCY CODE IS BLANK** (*Status Code 5 error*)

The Reporting Frequency code in an RT 505, column 22, was blank for the Unit ID(s) listed below. If the source reports every calendar quarter, report "Q". If the source only reports for the Ozone Season (2nd and 3rd quarters only), then report "OS". Determine the correct Reporting Frequency for the Unit ID, correct the RT 505(s), and resubmit the file before the submission deadline.

Error Code 600 **NEGATIVE VALUE REPORTED IN RECORD TYPE 360** (*Status Code 5 error*)

Active Error codes in the Summary, Sequence, Formula, and LME Program

A negative value was reported in one or more hourly RT 360. The date and time of the first occurrence of this error is displayed below, along with the associated Unit/Stack/Pipe ID. Review and correct the data for each hour where negative values were reported and ensure the resulting cumulative values are also revised to reflect the correction(s). The quarterly report must be resubmitted before the submission deadline.

Error Code 601 LOW MASS EMISSION UNIT(S) EXCEEDED OZONE SEASON NOX MASS LIMIT *(Status Code 9 error)*

The Ozone Season NOx Mass value calculated from the hourly records (RT 360) exceeds the allowable limit for the Unit ID displayed below. NOTE: there may be more than one occurrence of this error if this report contains data for more than one Unit. Units qualifying to use the Low Mass Emission (LME) monitoring methodology may NOT emit more than 50 tons of NOx during the Ozone Season. Therefore, according to 75.19 (b)(2)(ii), this unit is disqualified as an LME unit, and you have until December 31 of the calendar year following the year in which the LME NOx Mass limit was exceeded to install and certify Part 75 Continuous Emission Monitoring systems (or their allowable alternatives) for SO2 (Acid Rain Program units, only), NOx (i.e., NOx emission rate and/or NOx mass emissions, as applicable), CO2 (Acid Rain units, only), and Heat Input. Contact your EPA analyst if you have any questions.

Error Code 602 LOW MASS EMISSION UNIT(S) EXCEEDED ANNUAL NOX MASS LIMIT *(Status Code 9 error)*

The Annual NOx Mass value calculated from the hourly records (RT 360) exceeds the allowable limit for the Unit ID displayed below. NOTE: there may be more than one occurrence of this error if this report contains data for more than one Unit. Units qualifying to use the Low Mass Emission (LME) monitoring methodology may NOT emit more than 100 tons of NOx during the calendar year. Therefore, according to 75.19 (b)(2)(ii), this unit is disqualified as an LME unit, and you have until December 31 of the calendar year following the year in which the LME NOx Mass limit was exceeded to install and certify Part 75 Continuous Emission Monitoring systems (or their allowable alternatives) for SO2 (Acid Rain Program units, only), NOx (i.e., NOx emission rate and/or NOx mass emissions, as applicable), CO2 (Acid Rain units, only), and Heat Input. Contact your EPA analyst if you have any questions.

Error Code 603 LOW MASS EMISSION UNIT(S) EXCEEDED ANNUAL SO2 MASS LIMIT *(Status Code 9 error)*

The Annual SO2 Mass value calculated from the hourly records (RT 360) exceeds the allowable limit for the Unit ID displayed below. NOTE: there may be more than one occurrence of this error if this report contains data for more than one Unit. Acid Rain Program units qualifying to use the Low Mass Emission (LME) monitoring methodology may NOT emit more than 25 tons of SO2 during the calendar year. Therefore, according to 75.19(b)(2)(ii), you have two calendar quarters to install and certify SO2 monitoring systems (or their allowable alternatives) that meet the requirements of 75.19. Contact your assigned EPA analyst if you have any questions.

Error Code 604 LOW MASS EMISSION UNIT(S) EXCEEDED ANNUAL NOX MASS LIMIT *(Status Code 9 error)*

The Annual NOx Mass value calculated from the hourly records (RT 360) exceeds the allowable limit for the Unit ID displayed below. NOTE: there may be more than one occurrence of this error if this report contains data for more than one Unit. Acid Rain Program units qualifying to use the Low Mass Emission (LME) monitoring methodology must emit less than 100 tons of NOx during the calendar year. Therefore, according to 75.19(b)(2)(ii), this unit is disqualified as an LME unit, and you have until December 31 of the calendar year following the year in which the LME NOx Mass limit was exceeded to install and certify Part 75 continuous emission monitoring systems (or their allowable alternatives) for SO2, NOx (i.e., NOx emission rate and/or NOx mass emissions, as applicable), CO2, and Heat Input. Contact your assigned EPA analyst if you have any questions.

Error Code 605 IMPROPER FUEL TYPE REPORTED IN RT585 *(Status Code 5 error)*

Active Error codes in the Summary, Sequence, Formula, and LME Program

Based on the reported monitoring methodology, an incorrect fuel type was reported in RT585, column 24. The only fuel types allowed for qualifying Low Mass Emission units are "NFS", "DSL", "NNG", "OIL", "OGS", "OOL", "PNG", and "PRG". Please resubmit your file with the correct fuel code reported in RT585.

Error Code 606 **HOURLY CO2 EMISSIONS NOT REPORTED FOR OPERATING HOUR** (*Status Code 9 error*)

For an hour where the reported Operating Time in RT 300 is greater than 0.25 AND the reported Load Range is "02" or greater, either RT 330 (CO2 mass emissions) was not reported, or RT 330 was reported but the CO2 emissions value reported in column 18 was zero or blank. Ensure the operating time/load data reported in RT 300 are correct and that RT 330 is also correctly reported if the Unit/Stack operated during the hour.

Error Code 607 **HOURLY NOx EMISSION RATE RECORD NOT FOUND FOR OPERATING HOUR** (*Status Code 5 error*)

A NOx emission rate record (RT 320, 323, or 324) was not found for an hour where the reported operating time was greater than 0.25. A NOx emission rate record must be present for each hour where the operating time exceeds 0.25 hour. Correct all occurrences of this problem and resubmit the report before the submission deadline.

Error Code 609 **MULTIPLE FUEL HOURS REPORTED INCORRECTLY FOR NOX EMISSION RATE** (*Status Code 5 error*)

The Multiple Fuel Combusted code reported in RT 324, column 45 was "M", indicating more than one type of fuel was combusted during the hour. This requires more than one RT 324 to be reported for the same date and hour, one for each fuel type combusted, however only one RT 324 was reported. Review the fuel data to determine if the code was reported in error. If only a single fuel type was combusted, report "S" instead of "M". If the code "M" was reported correctly, ensure that a RT 324 is reported for the same date and hour for each fuel type, and resubmit the file before the submission deadline.

Error Code 610 **MINIMUM REQUIRED MONITORING PLAN DATA NOT FOUND FOR LME SOURCE** (*Status Code 6 error*)

The quarterly report does not contain one or more of the following required record types: RT 504, 505, 506, 531, 585, and 587. A source qualifying for Low Mass Emissions (LME) methodology must report these monitoring plan records for each Unit ID reported in the file. The report must be corrected and resubmitted before the submission deadline.

Error Code 611 **ACID RAIN PROGRAM CERTIFICATION RECORD(S) NOT FOUND** (*Status Code 9 error*)

The report does not contain one or both of the following certification record types: RT 900 and RT 901, for a source EPA has identified as being affected by the Acid Rain Program. If you intend to electronically submit the Acid Rain Program certification statements, ensure the report contains RT 900 (Part 75 Certification Statement and Designated Representative Signature) AND RT 901s (Part 72 Certification Statement).

Error Code 612 **INCOMPLETE OR INVALID ACID RAIN PROGRAM CERTIFICATION RECORD(S)** (*Status Code 9 error*)

The Acid Rain Program certification records (RT 900 and RT 901s) were reviewed, and one or more records were either incomplete or contained invalid information. For RT 900, ensure the Part 75 Certification Code is valid, the DR/ADR Last Name is present, the Signature Date is after the last day of

Active Error codes in the Summary, Sequence, Formula, and LME Program

the calendar quarter for which the report is for, and that the DR/ADR Title code is valid and left-justified. For RT 901 ensure that at least 12 RT 901s are present in order to provide the complete verbatim Part 72 Certification Statement.

Error Code 613 NOX BUDGET PROGRAM CERTIFICATION RECORD(S) NOT FOUND (*Status Code 5 error*)

The report does not contain one or both of the following certification record types: RT 940 and RT 941, for a source EPA has identified as being affected by the NOx Budget Trading Program. Ensure the report contains RT 940 (Subpart H Certification Statement and NOx Authorized Account Representative Signature) AND RT 941s (Subpart H General Certification Statement) and resubmit the report before the submission deadline.

Error Code 614 INCOMPLETE OR INVALID NOX BUDGET PROGRAM CERTIFICATION RECORD(S) (*Status Code 9 error*)

The NOx Budget Program certification records (RT 940 and RT 941s) were reviewed, and one or more records were either incomplete or contained invalid information. For RT 940, ensure the NOx Budget Certification Code is valid, the AAR/AAAR Last Name is present, the Signature Date is after the last day of the calendar quarter for which the report is for, and that the AAR/AAAR Title code is valid and left-justified. For RT 941 ensure that enough RT 941s are present in order to provide the complete verbatim Subpart H General Certification Statement.

Error Code 615 EPA-ACCEPTED AND CUMULATIVE ANNUAL VALUES NOT EQUAL (*Status Code 5 error*)

Based on the values displayed in the Cumulative Data Summary Table at the beginning of this letter, the EPA-Accepted value does not equal the Cumulative Annual value reported in RT 301 and/or RT 307 for one or more pollutants and/or Heat Input. Listed below are the pollutants and/or Heat Input values for which this problem was found. Review and correct the hourly and/or cumulative values and resubmit the report before the submission deadline.

Error Code 616 EPA-ACCEPTED AND CUMULATIVE OZONE SEASON VALUES NOT EQUAL (*Status code 5 error*)

Based on the values displayed in the Cumulative Data Summary Table at the beginning of this letter, the EPA-Accepted value does not equal the Cumulative Ozone Season value reported in RT 307 for NOx Mass and/or Heat Input. Listed below are the NOx Mass and/or Heat Input values for which this problem was found. Review and correct the hourly and/or cumulative values and resubmit the report before the submission deadline.

Error Code 617 NUMERIC FIELD IN RT 360 CONTAINS NON-NUMERIC DATA (*Status code 5 error*)

An invalid value was reported in RT 360 (Hourly Emissions Data for LME Unit) for one or more hours. The first occurrence of the problem is displayed below. Check each numeric field in the record to determine the presence of non-numeric data and ensure all data items are reported in the correct column locations according to the EDR Specifications. Correct the problem record(s) and resubmit the revised report before the submission deadline.

Error Code 618 NEGATIVE VALUE REPORTED IN CUMULATIVE EMISSIONS RECORD (*Status code 5 error*)

Active Error codes in the Summary, Sequence, Formula, and LME Program

A negative value was reported in the Cumulative Emissions Record Type identified above, for the LME Stack/Unit/Pipe ID displayed below. Review the record to identify the invalid value(s) and review the associated hourly records (RT 360). Correct the problem record(s) and resubmit the revised report before the submission deadline.

Error Code 619 **NUMERIC FIELD IN CUMULATIVE RECORD CONTAINS NON-NUMERIC DATA** *(Status code 5 error)*

An invalid value was reported in the Cumulative Emissions Record Type identified above, for the LME Stack/Unit/Pipe ID displayed below. Check each numeric field in the record to determine the presence of non-numeric data and ensure all data items are reported in the correct column locations according to the EDR Specifications. Correct the problem record(s) and resubmit the revised report before the submission deadline.

Error Code 620 **BLANK OPERATING TIME REPORTED IN RT 360** *(Status Code 5 error)*

The Operating Time reported in RT 360, column 18, was BLANK for one or ore hours for the Unit/Pipe ID identified below. The Date/Time of the first occurrence of this problem is also displayed. The reported Operating Time cannot be blank. If the Unit/Pipe did not operate during the hour, report 0.00 for the Operating Time. If the Unit/Pipe operated during the hour, report the fraction of the clock hour during which operation occurred. Review and correct all occurrences of this problem and resubmit the report before the submission deadline.

Error Code 621 **OPERATING TIME GREATER THAN 1.00 HOUR REPORTED IN RT 360** *(Status Code 5 error)*

The Operating Time reported in RT 360, column 18, was greater than 1.00 for one or more hours for the Unit/Pipe ID identified below. The Date/Time of the first occurrence of this problem is also displayed. The reported Operating Time cannot be greater than 1.00 hour. Review and correct the RT 360 to ensure that the correct Operating Time is reported for the hour. If the Unit/Pipe did not operate during the hour, report 0.00 for the Operating Time. If the Unit/Pipe operated during the hour, report the fraction of the clock hour during which operation occurred. Review and correct all occurrences of this problem and resubmit the report before the submission deadline.