

RULE 218.2

**CONTINUOUS EMISSION MONITORING
SYSTEM: GENERAL PROVISIONS**

(a) Purpose

The purpose of this rule is to specify requirements for Continuous Emission Monitoring Systems (CEMS), Alternative Continuous Emission Monitoring System (ACEMS), and Semi-Continuous Emission Monitoring System (SCEMS). This rule refers to Rule 218.3 for requirements for certifications and quality assurance of CEMS, ACEMS, and SCEMS. Unless otherwise specified, the owner or operator of the CEMS, ACEMS, or SCEMS is responsible for compliance with the requirements specified in this rule.

(b) Applicability

(1) This rule shall apply to the owner or operator of a CEMS, ACEMS, or SCEMS that is required by a South Coast AQMD rule, regulation or permit condition, except for a system that is to monitor:

(A) Performance of the basic or control equipment and not to determine compliance with any rule emission limit or emission standard; or

(B) NO_x or SO_x emissions subject to Regulation XX - Regional Clean Air Incentives Market (RECLAIM).

(2) All requirements specified for CEMS in this rule shall be applicable for ACEMS and SCEMS, unless otherwise specified.

(c) Definitions

(1) ALTERNATIVE CONTINUOUS EMISSION MONITORING SYSTEM (ACEMS) means a system that uses process or control device operating parameter measurements and a conversion equation, a graph, or computer program to produce results in units of the applicable emission limitation or standard on a continuous monitoring basis, which is demonstrated to the Executive Officer as having the same precision, reliability, accessibility, and timeliness as the data provided by a certified CEMS or certified CEMS component in accordance with Rule 218.2 and Rule 218.3.

(2) ANALYZER means the part of the continuous emission monitoring system (CEMS) that analyzes the appropriate gaseous constituents of the

- (c) conditioned gaseous sample or measures stack gas volumetric flow and fuel flow rates, as applicable.
 - (A) Contaminant Analyzer - the part of the CEMS that detects the air contaminant and represents those concentrations in a signal output.
 - (B) Diluent Analyzer - the part of the CEMS that detects oxygen, carbon dioxide or other diluent gas concentrations and represents those concentrations in a signal output.
 - (C) Fuel Flowmeter - the part of the CEMS that detects the parameters of all essential measurement sub-systems (e.g., temperature, pressure, differential pressure, frequency, gas density, gas composition, heating value) and generates signal outputs which are a function of the fuel flow rate and all essential measurement sub-system parameters.
 - (D) Stack Flowmeter - the part of the CEMS that detects the parameters from all essential measurement sub-systems (e.g., temperature, static and atmospheric pressure, gas density, gas composition, molecular weight, gas moisture content) and generates signal outputs which are a function of the stack gas volumetric flow rate and all essential measurement sub-system parameters.
- (3) CALIBRATION means a procedure performed to ensure that the CEMS accurately measures and records air contaminant or diluent gas concentration, flow rate and other parameters necessary to generate data.
- (4) CALIBRATION ERROR TEST means a procedure performed to determine CEMS response to a given gaseous compound concentration by means of injecting a certified calibration gas mixture into the CEMS as close to the probe tip as practical.
- (5) CEMS FAILURE means the CEMS or a component of the CEMS ceases normal operation, and thus is incapable of providing the required data to demonstrate compliance with the applicable limit or standard for which this CEMS is dedicated.
- (6) CEMS FINAL CERTIFICATION LETTER means the final approval of CEMS certification or recertification, which at a minimum includes:
 - (A) Unit (emission source) and control equipment (if applicable) description.
 - (B) Stack description.

- (c)
 - (C) Probe configuration and conditions.
 - (D) Instrument type, manufacturer, model number, and serial number for each of the contaminant analyzer (s), diluent analyzer, and fuel flowmeter (if applicable).
 - (E) Instrument type, manufacturer, and model number for:
 - (i) Sample conditioning system; and
 - (ii) Data acquisition and handling system and programmable logic controller.
 - (F) Certified span range(s) for each of the contaminant analyzer(s), diluent analyzer, and fuel or stack flowmeter (if applicable).
- (7) CEMS MODIFICATION means a modification to a CEMS component that is identified on the CEMS final certification letter, or a modification which may include, but not be limited to the CEMS sampling interface, gas conditioning system, analyzer, or data acquisition and handling system that has a potential for adversely affecting the ability of the CEMS to provide accurate, precise and timely data representative of emissions for the unit being monitored.
- (8) CERTIFIED CEMS means a CEMS certified and maintained to meet the performance specifications pursuant to the applicable requirements of Rules 218.2 and 218.3.
- (9) CONTINUOUS EMISSION MONITORING SYSTEM (CEMS) means the total combined equipment and systems, including the sampling interface, analyzers, and data acquisition and handling system, required to continuously determine air contaminants and diluent gas concentrations and/or mass emission rate of a source effluent (as applicable).
- (10) CONTINUOUS MONITORING means monitoring in which a minimum of one measurement (e.g., concentration, mass emission, flow rate) is taken and recorded each minute.
- (11) DATA ACQUISITION AND HANDLING SYSTEM (DAHS) means the part of the CEMS that processes data generated by the analyzer and records the results, thus creating a permanent record of the output signal in terms of concentration, flow rate, and/or any other applicable parameter necessary to generate the required data in units of applicable standard. The DAHS consist of all equipment such as a computer and the software

- (c) required to convert the original recorded values to any values required for reporting.
- (12) **DILUENT GAS** means a constituent of the flue gas that is measured by the CEMS in order to provide values to calculate emission levels.
- (13) **FORMER RECLAIM FACILITY** means a facility, or any of its successors, that was in the NO_x Regional Clean Air Incentives Market (RECLAIM) as of January 5, 2018, as established in Regulation XX, that has received a final determination notification, and is no longer in the NO_x RECLAIM program.
- (14) **LABORATORY APPROVAL PROGRAM (LAP)** means a program administered by the South Coast AQMD for granting test-method-specific approvals to independent testing laboratories or firms that perform tests to determine source compliance with the South Coast AQMD rules and regulations.
- (15) **MAINTENANCE** means preventive evaluation and adjustment (if necessary) of CEMS performed to preclude system failure. Maintenance may be performed as recommended by the manufacturer or a documented standard operating procedure determined through operating experience and approved by the Executive Officer. Repairs to a malfunctioning system are excluded from this definition.
- (16) **PUBLICLY OWNED SEWAGE-WATER-LANDFILL FACILITY** means a sewage treatment facility, water delivery facility, or landfill gas control or processing facility, that is owned and operated by a public agency.
- (17) **RECLAIM** means the REgional CLean Air Incentives Market program.
- (18) **RECLAIM FACILITY** – means a facility, or any of its successors, that was in the Regional Clean Air Incentives Market as of January 5, 2018, as established in Regulation XX.
- (19) **SAMPLING INTERFACE** means that part of the CEMS that performs sample acquisition using one or more of the following operations: extraction, physical/chemical separation, transportation, or conditioning of a representative sample from a designated source.
- (20) **SEMI-CONTINUOUS EMISSION MONITORING SYSTEM (SCEMS)** means an emission monitoring system that is different from a regular CEMS on response time and data acquisition frequency. SCEMS

- (c) continuously takes and records measurements (e.g. concentration, mass emission, flow rate) at a minimum of once in every fifteen (15) minutes. SCEMS includes but is not limited to gas chromatography, integrated sensitized tape analyzer, other sample integration based technologies, and time-shared CEMS.
- (21) TIME-SHARED CEMS means an emission monitoring system where the analyzer, and possibly the associated sample conditioning system, is used on more than one source. A time-shared CEMS is categorized as a type of SCEMS under Rules 218.2 and 218.3.
- (22) UNIT for the purposes of this rule means the combustion source for which the certified continuous emission monitoring system, or alternative continuous emission monitoring system, monitors the combustion source's emissions.
- (d) Implementation Schedule
 - (1) Prior to the implementation date specified in paragraphs (d)(2) through (d)(5), the owner or operator shall comply with:
 - (A) Rules 218 and 218.1 for a CEMS that is subject to paragraph (d)(2) or (d)(5); or
 - (B) Rule 2012 for a CEMS that is subject to paragraph (d)(3).
 - (2) For a CEMS certified to comply with Rules 218 and 218.1, the owner or operator of the CEMS shall meet the requirements of this rule no later than:
 - (A) The date an application is submitted to the Executive Officer between January 1, 2022 and January 1, 2025 for any CEMS certification or recertification pursuant to paragraph (f)(2) or (f)(3);
 - (B) January 1, 2025, for any CEMS that was certified prior to January 1, 2022 but without an application submitted to the Executive Officer between January 1, 2022 and January 1, 2025 for a CEMS recertification pursuant to paragraph (f)(2) or (f)(3); or
 - (C) The implementation date of a source-specific rule for which the CEMS shall be certified or recertified pursuant to paragraph (f)(2) or (f)(3) as part of the implementation.
 - (3) For a CEMS certified to comply with Rule 2012, the owner or operator of the CEMS shall meet the requirements of this rule no later than:

- (d)
 - (A) The date an application is submitted to the Executive Officer for any CEMS certification or recertification pursuant to paragraph (f)(2) or (f)(3) that is within twenty-four (24) months after the NO_x RECLAIM facility has been notified as a former RECLAIM facility;
 - (B) Twenty-four (24) months after the NO_x RECLAIM facility has been notified as a former RECLAIM facility, if there is no CEMS recertification pursuant to paragraph (f)(2) or (f)(3) during this 24-month period; or
 - (C) The implementation schedule of a source specific rule for which the CEMS shall be certified or recertified pursuant to paragraph (f)(2) or (f)(3) as part of the implementation.
- (4) If a CEMS that is subject to paragraph (d)(2) is sharing the sampling interface or other component(s) with another CEMS that is subject to paragraph (d)(3), the owner or operator of the CEMS shall meet the requirements of this rule based on the later implementation date specified in paragraphs (d)(2) and (d)(3).
- (5) The owner or operator of a publicly owned sewage-water-landfill facility that has a CEMS certified to comply with Rules 218 and 218.1, shall meet the requirements of this rule no later than January 1, 2025, or by the implementation date of a source-specific rule requiring the CEMS to be certified or recertified, whichever is later.
- (e) **Monitoring Requirements**
 - (1) The owner or operator of a CEMS shall install, maintain and operate the CEMS for continuous measurement according to all applicable requirements in Rules 218.2 and 218.3.
 - (2) If there is a CEMS failure, the owner or operator of a CEMS shall:
 - (A) Not be subject to the requirements of paragraph (e)(1) for up to 96 hours, provided that the CEMS is:
 - (i) Undergoing maintenance pursuant to the Quality Assurance and Quality Control Program for the CEMS; or
 - (ii) Damaged as a result of circumstances beyond the control of the owner or operator of the CEMS;
 - (B) Submit a notification pursuant to paragraph (i)(3), if the CEMS failure or shut down has occurred for more than 24 hours; and

- (e)
 - (C) Submit a notification to the Executive officer for time extension beyond the time period specified in subparagraph (e)(2)(A) for an additional 96 hours, if the unit is not operating and no emissions are generated, as demonstrated pursuant to paragraph (e)(4).
- (3) If a unit does not operate for a minimum of 168 consecutive hours, as demonstrated pursuant to paragraph (e)(4), the owner or operator of the CEMS is not subject to the requirements of paragraph (e)(1) after zero emissions have been recorded for a minimum of 4 hours after the unit shutdown, provided that the owner or operator of the CEMS:
 - (A) Maintains the CEMS operation pursuant to paragraph (e)(1) to record zero emissions for a minimum of 4 hours after the unit shutdown;
 - (B) Submits the notifications and report in accordance with paragraph (i)(4);
 - (C) Resumes CEMS operation and meet the requirements of paragraph (e)(1) for a minimum of 4 hours before the unit resumes operation or at which time any emissions are generated; and
 - (D) Conducts a calibration error test for each CEMS analyzer before any emissions are detected.
- (4) Demonstrating a unit is not operating and no emissions are generated
 - (A) For a unit in which fuel combustion is the only source for the CEMS monitored emissions, the owner or operator of the CEMS shall meet one or more of the following provisions for the entire duration:
 - (i) Disconnect the fuel line to the unit and place blind flange(s) to prevent fuel flow;
 - (ii) Demonstrate there is no fuel flow to the unit based on a dedicated fuel flow meter that is quality assured according to manufacturer's recommendation;
 - (iii) Provide one or more gas bills indicating zero fuel consumption for the unit or the fuel line associated with the unit that is not operating; or
 - (iv) Demonstrate the unit is not operational based on a stack flow monitoring system certified according to subdivision (f), or any other monitoring system approved by the

- (e) Executive Officer which shows the exhaust flow is less than the lowest quantifiable rate measurable by South Coast AQMD Methods 1-4.
- (B) For a unit in which fuel combustion is not the only source for the CEMS monitored emissions, the owner or operator of the CEMS shall:
 - (i) Request the Executive Officer's written approval of the method(s) to demonstrate that the unit is not operating and no emissions are generated; and
 - (ii) Include the above approved method(s) in the QA/QC plan.
- (f) Certification Requirements
 - (1) The owner or operator of a CEMS shall certify or recertify any CEMS that is:
 - (A) Installed after [*Date of Adoption*];
 - (B) Modified for any component that is either listed on the certification letter, Technical Guidance Document R-002, or Quality Assurance/Quality Control Plan, unless the Executive Officer determines that such certification or recertification is not necessary; or
 - (C) Determined by the Executive Officer that a CEMS recertification is required because the QA/QC or performance requirements for the CEMS cannot be achieved in accordance with Rule 218.3 subdivision (g).
 - (2) The owner or operator of the CEMS shall certify or recertify the CEMS, according to requirements set forth in Rule 218.3 subdivisions (e) and (f) and shall:
 - (A) Submit a CEMS application form pursuant to paragraph (f)(4);
 - (B) Obtain an initial approval of the application pursuant to paragraph (f)(5);
 - (C) Conduct the certification tests for the CEMS pursuant to paragraph (f)(6); and
 - (D) Obtain a final approval of the application for the CEMS final certification letter pursuant to paragraph (f)(7).
 - (3) For a CEMS modification required within 30 days due to CEMS failure, the owner or operator of the CEMS shall:

- (f)
 - (A) Submit a written notification to the Executive Officer prior to the modification that includes the date and description of the planned modification;
 - (B) Submit a CEMS application form pursuant to paragraph (f)(4) within 30 days of the CEMS modification and obtain an interim approval of the application pursuant to paragraph (f)(5), except that the owner or operator of the CEMS may commence the CEMS modification without receiving notification from the Executive Officer pursuant to subparagraph (f)(5)(D);
 - (C) Conduct the certification tests for the CEMS pursuant to subparagraphs (f)(6);
 - (D) Recertify and operate the CEMS pursuant to Rule 218.3 subdivisions (e) and (f); and
 - (E) Obtain a final approval of the application for the CEMS final certification letter pursuant to paragraph (f)(7).
- (4) The owner or operator of the CEMS shall submit an CEMS application form, FORM ST-220 or its updated version, and any other information specified in the form.
- (5) The owner or operator of the CEMS shall receive an initial approval of the CEMS application from the Executive Officer prior to the CEMS installation or modification.
 - (A) The initial approval of the CEMS application shall be based on the information submitted in the application form that is:
 - (i) Complete; and
 - (ii) Accurate in providing information that reflects the unit and CEMS.
 - (B) Executive Officer shall notify the applicant that the application is complete, in writing within 60 calendar days of receipt of an application for a new CEMS, or within 30 calendar days of receipt of an application for a modification to an existing CEMS.
 - (C) If the owner or operator of the CEMS receives notification from the Executive Officer that the application meets the requirements of subparagraph (f)(5)(A), the owner or operator of the CEMS may commence the CEMS installation or modification.

- (f)
 - (D) If the owner or operator of the CEMS receives notification from the Executive Officer that the application for initial certification does not meet the requirements of subparagraph (f)(5)(A), the owner or operator of the CEMS shall provide the Executive Officer the specific information needed to meet the requirements of subparagraph (f)(5)(A) within the time specified by the Executive Officer in the notification.
 - (E) Upon receipt of any complete resubmittal or additional information, plans or specifications after the application has been deemed incomplete, a new 30-day period shall begin during which the Executive Officer shall notify the applicant if the application is complete and grant the initial approval.
- (6) Certification Tests
 - (A) If the unit is operating at the time of completion of the CEMS installation, within 90 days of installation or modification of a CEMS, the owner or operator of a CEMS shall:
 - (i) Conduct the applicable certification tests specified in Rule 218.3 subdivision (f) for certification of any new CEMS or recertification of a modified CEMS; or
 - (ii) Meet the testing requirement for each type of CEMS modification in accordance with the latest South Coast AQMD Technical Guidance Documents R-002 and R-003 for recertification of a modified CEMS.
 - (B) If the unit is not operating at the time of completion of the CEMS installation, then the owner or operator of the CEMS shall conduct the certification tests of the CEMS within 90 days from the start-up and normal operation of the unit monitored by the CEMS in accordance with clause (f)(6)(A).
 - (C) The certification tests shall be performed by a testing laboratory approved under the South Coast AQMD Laboratory Approval Program.
 - (i) No later than 14 days before the certification test is conducted, the owner or operator of the CEMS shall notify the Executive Officer in writing the facility name, facility

- (f) identification number, the device identification number, the certification test date(s) and time(s).
 - (ii) No later than 45 days of completing a certification test, the owner or operator of the CEMS shall submit the test report to the Executive Officer.
- (7) Final Approval
 - (A) The Executive Officer will issue a CEMS final certification letter as the final approval, if the information in the application form and the certification test reports are determined to meet the requirements specified in Rule 218.3 subdivisions (e) and (f).
 - (B) The owner or operator of the CEMS shall be notified of the expected issuance date of the CEMS final certification letter by the Executive Officer within 60 days of receiving the certification test report(s) specified in paragraph (f)(6).
 - (C) The owner or operator of the CEMS shall be notified of a new issuance date of the CEMS final certification letter by the Executive Officer if additional data and/or test(s) are required prior to final approval. This new issuance data will be determined by the Executive officer within 60 days of receiving the additional data and/or test(s).
- (8) Modification of CEMS Component Listed in Guidance Document R-002
For a CEMS modification on a component that is not identified on the CEMS final certification letter but is listed on the South Coast AQMD Technical Guidance Document R-002, the owner or operator of the CEMS shall either meet the requirements specified in paragraph (f)(2), or (f)(3) or the alternative CEMS certification requirements. The owner or operator of the CEMS that elects to meet the alternative CEMS certification requirements shall:
 - (A) Provide a written notification to the Executive Officer prior to the modification that includes the date and description of the planned CEMS modification;
 - (B) Conduct the required quality assurance tests, in accordance with the South Coast AQMD Technical Guidance Document R-002, within 60 days following the CEMS modification; and

- (f)
 - (C) Submit the test reports to the Executive Office within 60 days after completing the tests.
 - (D) Subject to any further assessment instructed by the Executive Officer to validate the reliability, precision, or accuracy of the CEMS.
- (9) The owner or operator of the CEMS that receives written notification from the Executive Officer that an alternative CEMS recertification submitted pursuant to subparagraph (f)(8) is disapproved, shall meet the requirements specified in paragraph (f)(2) or (f)(3) for that specific CEMS modification.
- (10) **Modification of CEMS Component Listed in Quality Assurance/Quality Control Plan**

For a CEMS modification on a component that is not identified on the CEMS final certification letter or listed in the South Coast AQMD Technical Guidance Document R-002, but is listed in the Quality Assurance/Quality Control Plan, the owner or operator of the CEMS shall:

 - (A) Provide a written notification to the Executive Officer prior to the modification that includes the date and description of the planned CEMS modification;
 - (B) Submit a modified Quality Assurance/Quality Control Plan to the Executive officer within 30 days of notification; and
 - (C) Subject to any testing requirement and/or further assessment instructed by the Executive Officer if the modification is deemed to affect the reliability, precision, or accuracy of the CEMS.
- (11) **Emission Data During CEMS Certification or Recertification**
 - (A) Upon completion of a successful calibration error test pursuant to Rule 218.3 subparagraphs (f)(1)(B) and (f)(1)(C) and prior to the Executive Officer's approval of final CEMS certification or recertification, all the emission data measured and recorded by the CEMS shall be considered as valid quality assured data, beginning at the hour of passing the calibration error test. The calibration error test for this purpose must be passed before any of the required certification tests pursuant to paragraph (f)(6) is commenced but no more than 14 days prior to the completion of all the required certification tests.

- (f) (B) If the Executive Officer disapproves the final CEMS certification or recertification, the valid emission data pursuant to subparagraph (f)(11)(A) shall be retroactively considered invalid data and shall not be utilized for compliance demonstration or considered as available for CEMS data availability calculation, until the hour of the next time completing all the required certification tests pursuant to paragraph (f)(6).
- (12) Operation of CEMS During Certification Testing
CEMS shall be certified as configured for the normal operation of the CEMS with respect to sample acquisition, sample conditioning, pollutant/diluent detection, data requirements, and reporting.
- (13) SCEMS and ACEMS Certification and Recertification
 - (A) The owner or operator subject to this rule may elect to certify the following emission monitoring systems:
 - (i) A SCEMS, not including time-shared CEMS, provided that:
 - (I) Only commercially available SCEMS instrumentation is capable of accurately and precisely measuring the particular air contaminant concentration or other parameters used to calculate the emission concentration; and
 - (II) The concentrations and/or emissions required to be monitored would be equivalent to that monitored by a CEMS for the applicable averaging period.
 - (ii) A time-shared CEMS, provided that the units to be monitored by the time-shared CEMS are:
 - (I) Physically close to one another, and the proposed time-shared CEMS is approximately equidistant from all monitored units;
 - (II) Similarly sized and configured, and their gaseous emissions are of approximately the same compositions and concentrations; and
 - (III) Subject to a similar concentration limit.
 - (iii) An ACEMS, provided that the system, being designed to provide direct or indirect emission data, has the same

- (f) precision, reliability, accessibility, and timeliness as a certified CEMS.
 - (B) Owners or operators of the SCEMS or ACEMS shall comply with the requirements specified in paragraphs (f)(1) through (f)(12) for the SCEMS or ACEMS certification and recertification.
- (g) **Quality Assurance/Quality Control (QA/QC) Plan**

The purpose of a QA/QC plan is to ensure that the CEMS generates, collects and reports valid data that is precise, accurate, complete, and of a quality that meets the requirements, performance specifications, and standards of Rules 218.2 and 218.3.

 - (1) The owner or operator of the CEMS shall develop and store on site a QA/QC plan, which at a minimum shall include the step-by-step procedures and operations for the quality assurance tests, preventive maintenance, corrective action, recordkeeping, and reporting, in accordance with Guidelines for Continuous Emission Monitoring System Quality Assurance and Quality Control Plan.
 - (2) For a new CEMS QA/QC Plan, the owner or operator of the CEMS shall submit to the Executive Officer for approval a CEMS QA/QC Plan within 45 days of CEMS installation and no later than 30 days before the certification tests.
 - (3) For a revised CEMS QA/QC Plan, the owner or operator of CEMS shall submit to the Executive Officer for approval a CEMS QA/QC Plan within 30 days if:
 - (A) A CEMS modification was conducted and subject to the requirements specified in paragraphs (f)(2), (f)(3), (f)(8) or (f)(10);
or
 - (B) A QA/QC plan revision is required by a provision of Rules 218.2 and 218.3 or requested by the Executive Officer.
 - (4) **Alternative Quality Assurance Practices**

The owner or operator of a CEMS may develop alternative CEMS operational test requirements to be included in the CEMS QA/QC procedures that assure data of at least the equivalent quality. These alternative QA/QC procedures shall be submitted with the facility QA/QC Plan and are subject to the approval of the Executive Officer.

(h) Recordkeeping Requirements

- (1) The owner or operator of the CEMS, shall maintain records for any CEMS data measured and calculated:
 - (A) In accordance with Rule 218.3 paragraph (e)(4) and Rule 218.3 subdivision (i); and
 - (B) For the purpose of demonstrating compliance with any applicable, rule, regulation, or permit condition.
- (2) The owner or operator of the CEMS, shall:
 - (A) Maintain records for the date, time, and description of the occurrence of the CEMS non-operation pursuant to paragraphs (e)(2) and (e)(3);
 - (B) Maintain a copy of the reports specified in subdivision (i);
 - (C) Record the cause, date, time period, and corrective action taken for any CEMS out-of-control period;
 - (D) Record the date, time, and description of the occurrence of any repair, adjustment, or maintenance to the CEMS;
 - (E) Record the date, time, and emission data of any measurement or test conducted for CEMS certification or recertification; and
 - (F) Maintain on site all records of any activity conducted according to the QA/QC plan, including but not limited to logbook, measured data and data processing, test reports, and certificates of calibrations gases being used.
- (3) Records specified by paragraphs (h)(1) and (h)(2) shall be:
 - (A) Maintained for a minimum period of two years or a period specified in any rule or permit condition, whichever is longer; and
 - (B) Made available to the Executive Officer upon request.

(i) Reporting Requirements

- (1) Semi-Annual Reporting
 - (A) The owner or operator of the CEMS shall provide a summary of the concentration and/or emission rate data, as applicable, obtained from the CEMS, as well as any additional information specified by the Executive Officer, to evaluate the accuracy and precision of the measurements.
 - (B) Unless a more frequent reporting schedule is required in another South Coast AQMD rule or permit condition, the owner or

- (i) operator of the CEMS shall submit a summary of the information specified in subparagraph (i)(1)(A) to the Executive Officer for every six-month period, from January 1 to June 30 and from July 1 to December 31, respectively, no later than 60 days after the six-month period.
- (2) **Excess Emission Reporting**

The owner or operator of the CEMS shall notify the Executive Officer by calling 1-800-CUT-SMOG of the concentration level and/or emission rate, as applicable, in excess of the emission limit specified in the applicable rule within 24 hours or the next business day, whichever is later, after such occurrence that includes:

 - (A) Time intervals, date, and magnitude of the excess concentration level, nature and cause of the excess concentration (if known), corrective action(s) taken, preventive measure(s) adopted, specific location of CEMS, the equipment or CEMS involved and the facility contact person.
 - (B) The averaging period used for data reporting shall correspond to the averaging period specified in applicable rule or permit condition limiting the concentration and/or emission rate.
- (3) **CEMS Failure Reporting**
 - (A) If there is a CEMS failure pursuant to paragraph (e)(2) that lasts more than 24 hours, the owner or operator of the CEMS shall notify the Executive Officer by calling 1-800-CUT-SMOG within 24 hours or the next business day, whichever is later, after CEMS failure occurs.
 - (B) The notification shall include, at a minimum, the following information:
 - (i) The cause of the CEMS failure;
 - (ii) The time or estimated time when the monitoring device became non-operational;
 - (iii) The time or estimated time the monitoring device returned (or will return) to normal operation; and
 - (iv) The maintenance performed or corrective and preventative actions taken to prevent future non- operational conditions.

- (i) (4) CEMS Shutdown Reporting

In the event of a scheduled CEMS shutdown pursuant to paragraph (e)(3), the owner or operator of the CEMS shall submit:

 - (A) An initial notification by calling 1-800-CUT-SMOG, at least 96 hours prior to the scheduled CEMS shutdown, specifying the scheduled date and time for unit non-operation and CEMS shutdown;
 - (B) A written report, within 24 hours of CEMS shutdown that the unit is non-operational and there are no emissions during the period of unit shutdown pursuant to paragraph (e)(4); and
 - (C) A final notification by calling 1-800-CUT-SMOG, at least 8 hours prior to the scheduled CEMS restart, specifying the scheduled time for the CEMS restart and unit restart.
- (5) CEMS Relative Accuracy Test Audit (RATA) Reporting

The owner or operator of the CEMS shall submit the RATA report within 60 days upon completion of the test and shall include all measured data for each run, and relative accuracy or *de minimis* value being calculated.
- (j) Posting of Written Approval of CEMS Certification

The owner or operator of a certified CEMS shall affix a written notice of approval or copy thereof, upon the unit or within 26 feet of the unit as prescribed in Rule 206 – Posting of Permit to Operate, in a manner such that it is clearly visible, legible, and safely accessible. In the event that the unit is constructed or operated that the notice of approval or copy cannot be so placed, such notice or copy shall be mounted on a location approved by the Executive Officer.
- (k) Exemption
 - (1) If a rule or permit specify CEMS requirements that are different than requirements specified in Rule 218.3, the owner or operator shall adhere to CEMS requirements in the rule or permit, unless otherwise notified by the Executive Officer.