Requirements for Continuous Emission Monitoring Systems

Proposed Amended Rules (PAR) 218 and 218.1

Proposed Rules (PR) 218.2 and 218.3

Working Group Meeting #11
November 5, 2020 1:00 pm

Join Zoom Meeting
https://scaqmd.zoom.us/j/96156869364?pwd=Y3p3MFNmOEIrZW1hTGlIL2FVTmNUQT09

Meeting ID: 961 5686 9364
Password: 070075

Agenda

- Comments on PR 218.2 and 218.3 Preliminary Draft Rules
- PR 218.3 Rule Structure
- PR 218.3 Preliminary Draft Rule Overview for Subdivisions (h) Through (l) and Appendixes
  - Overview for Provisions (a) Through (g) Conducted at the Last Working Group Meeting
- PAR 218 phase out provision
- Next Steps

Comments and Responses

Comments on PR 218.2 (e)(4) – Demonstrate Unit Non-Operation

Draft Rule Language

218.2(e)(4)(A)(iv)

"Demonstrate the unit is not operational based on a stack flow monitoring system certified according to subdivision (f), or any other monitoring system that can be confirmed by a South Coast AQMD test method and is approved by the Executive Officer."

Concern

- Need clarification as to what test method and whether a test is needed

Response

Revised 218.2(e)(4)(A)(iv)

"Demonstrate the unit is not operational based on a stack flow monitoring system certified according to subdivision (f), or any other monitoring system ~~that can be confirmed by a South Coast AQMD test method and is~~ approved by the Executive Officer which shows the exhaust flow is less than the lowest quantifiable rate measurable by South Coast AQMD Methods 1-4."

Comments on PR 218.2 (e)(3) – Scheduled CEMS Shutdown

Draft Rule Language

218.2(e)(3)

"If there is a scheduled shutdown for the unit and no emissions will be generated 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)…"

Concern

- Clarification is needed for if the:
  - CEMS can be shut down immediately after the unit is shut down; or
  - CEMS needs to operate for a minimum of 168 hours after the unit is shut down

Response

See the revised rule language in next slide

PR 218.2 (e)(3) – Scheduled CEMS Shutdown

(3) If there is a scheduled shutdown for the unit ~~and no emissions will be generated for~~ 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~~being monitored becomes non-operational~~;

(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.

- The CEMS can be conditionally turned off 4 hours after the unit shutdown

Comments on PR 218.3 (f)(2) – Analyzer Enclosure

Draft Rule Language

218.3(f)(2)(A)

"The analyzer shall be contained in an environmentally controlled enclosure and equipped with an alarm and temperature recording device that provides an audible alert that the temperature drift for the analyzer exceeds the manufacturer's recommended specifications. The owner or operator of the CEMS shall make corrective actions within 4 hours of receiving the audible alert."

Concern

- More time may be needed to make corrective actions

Response

Revised 218218.3(f)(2)(A)

"…The owner or operator of the CEMS shall make corrective actions within ~~4 hours~~ 8 hours of receiving the audible alert."

Comments on PR 218.3 (f)(1) – Seven-Day Calibration Drift Test

Concerns

- Is the “seven-day period” consecutive seven calendar days?
- Is any adjustment allowed during the seven-day calibration drift test?

Clarifications

- The seven-day calibration drift test is required for seven consecutive CEMS operating days, regardless if the unit is on or off
- No adjustments allowed during calibration and prior to completing the high scale calibration
- No manual adjustment allowed during any part of this test

Comments on PR 218.3 (g)(3) - Cylinder Gas Audit

Suggestion

Add definitions for cylinder gas audit and linearity error check

Response

- PR 218.3 references 40 CFR 60 Appendix F for the specifications of cylinder gas audit
- PR 218.3 is revised to include the reference for the specifications of linearity error check
- Referenced specifications provide more details than a definition
  (See the revised rule language in next slide)

PR 218.3 (g)(3) - Cylinder Gas Audit

(3) Cylinder Gas Audit for Pollutant and Diluent Gas Analyzers

(A) The owner or operator of the CEMS shall conduct a cylinder gas audit:

(i) For every calendar quarter when relative accuracy test audit is not conducted, but in no more than three quarters in succession;

(ii) According to the provisions of 40 CFR 60, Appendix F; and

(iii) Using calibration gas as specified in subdivision (h).

(B) The owner or operator of the CEMS is not required to conduct the cylinder gas audit for a calendar quarter when it is due, provided that within that calendar quarter:

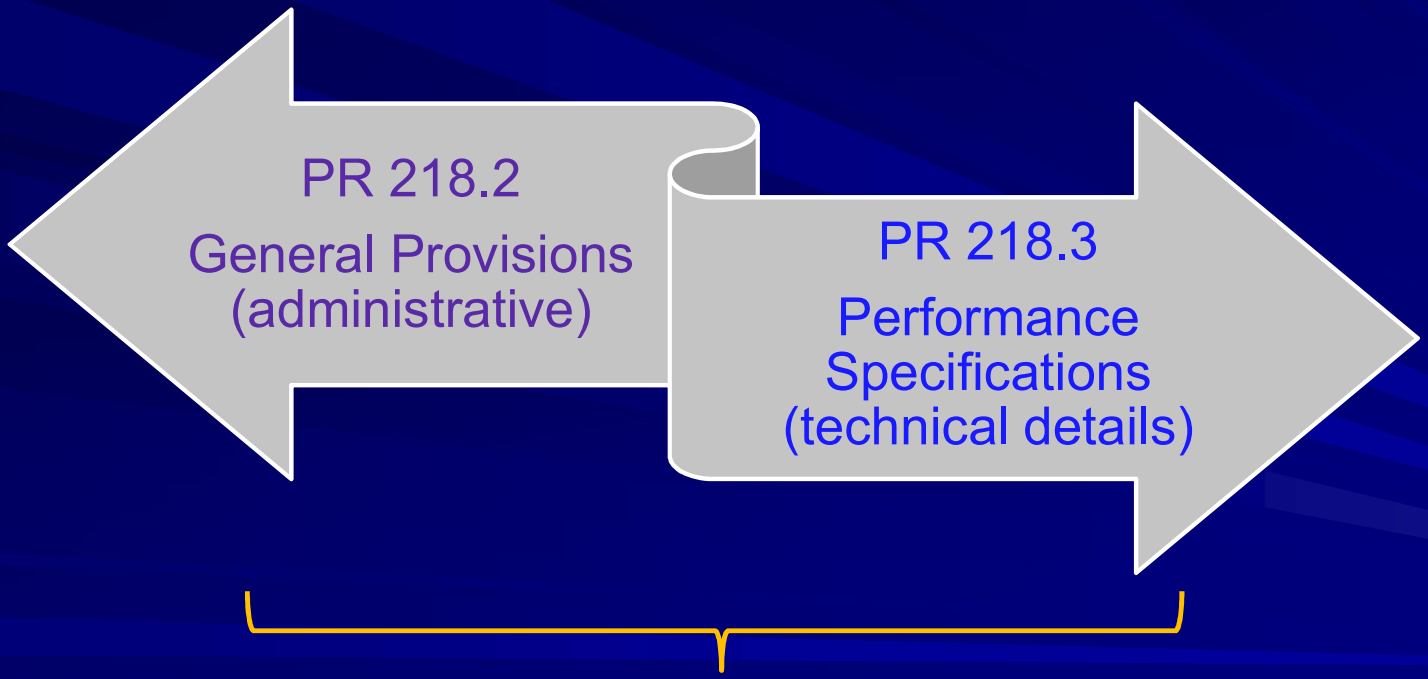
(i) The CEMS has passed a linearity error check according to subparagraph (f)(4)(F) or the provisions of 40 CFR 75, Appendix A; or

(ii) The accumulative unit operating hours are no more than 168 hours.

- The referenced specifications provide sufficient details for what those tests are

218.3 Rule Structures

How are PR 218.2 and PR 218.3 related?



Both rules reference each other

Rule Structure - PR 218.3

Presented at the last Working Group meeting (WG #10)

- (a) Purpose
- (b) Applicability
- (c) Definitions
- (d) Implementation Schedule
- (e) Pre-Certification Requirements
- (f) Certification Test Requirements and Specifications
- (g) Quality Assurance Testing Requirements and Specifications

Presenting today

- (h) Calibration Gas and Zero Gas
- (i) Data Handling
- (j) SCEMS Requirements
- (k) Moisture Correction
- (l) Exemption
- Tables and Attachments (e.g., Equations)

PR 218.3 (h) – (l)

Rule structure and language

PR 218.3 (h) - Calibration Gas and Zero Gas

- Calibration Gas is utilized for various tests and procedures, such as system bias, linearity error check, calibration error test, and cylinder gas audit
- Lower concentration calibration gas would be required for lower emission limit
- This subdivision provides more certification program options for calibration gas which would address the supply for lower concentration calibration gas

Calibration Gas Options and Zero Gas Criteria

218.1	218.3
(d)(1)	(h)(1)
(d)(2)	(h)(2)

PR 218.3 (h)

PR 218.3
(h)(1):
Calibration gas options

PR 218.3
(h)(2):
Zero gas criteria

More options provided referencing Part 75 requirements

No change from Rule 218.1 requirements

PR 218.3 (h)(1)
Options for Calibration Gas

PR 218.3 (h)(1)

- (A) EPA Protocol gases — Minor change
- (B) National Institute of Standards and Technology (NIST) standard reference materials — New provision
- (C) Standard reference material-equivalent compressed gas primary reference material — New provision
- (D) NIST traceable reference material — New provision
- (E) NIST/EPA-approved certified reference materials — New provision
- (F) Alternative proposals upon approval by the Executive Officer, If not covered by any of above programs — Revision incorporated
- (G) Compressed and/or filtered air — No change

PR 218.3 (h)(1)(A) – EPA Protocol Gas

PR 218.3

218.1 (d)(1)(A)	218.3 (h)(1)(A)	Changes
Calibration gas mixtures, as defined in Rule218.1 (a)(8), shall be manufactured, analyzed and certified in accordance with the "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards" - EPA-600/R97/121, September 1997 Revision (EPA Protocol). The certification period and recertification requirements, as applicable, shall be according to the EPA Protocol.	U.S. EPA Protocol Gas - Calibration gas mixtures shall be manufactured, analyzed and certified in accordance with the Section 2 "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards" - EPA-600/R-12/531, May 2012, or U.S. EPA's most recently published protocol for certification of gaseous certification standards.	✓ Updated the protocol to current version ✓ Added the most recent protocol published by U.S. EPA

PR 218.3 (h)(1)(B) through (h)(1)(E) New Options for Calibration Gas

(B) National Institute of Standards and Technology (NIST) Standard Reference Materials (SRM).

(C) NIST Standard Reference Material-Equivalent Compressed Gas Primary Reference Materials that are calibration gas mixtures listed in a declaration of equivalence in accordance with subparagraph (h)(1)(A).

(D) NIST Traceable Reference Materials that are calibration gas mixtures tested by and certified by NIST to have a certain specified concentration of gases. NIST Traceable Reference Materials may have different concentrations from those of standard reference materials.

(E) NIST/EPA-approved certified reference materials (CRM) that are calibration gas mixtures approved by U.S. EPA and NIST as having specific known chemical or physical property values certified by a technically valid procedure as evidenced by a certificate or other documentation issued by a certifying standard-setting body.

- ✓ Additional options for calibration gas that are included in Part 75 that were not included in Rule 218.1

PR 218.3 (h)(1)(F) – Alternative Options for Calibration Gas

(F) For gas calibration standards not covered by programs specified in subparagraphs (h)(1)(A) through (h)(1)(E), the owner or operator shall obtain the Executive Officer's approval for using any of the following alternatives:

(i) The Manufacturer of Calibration Gas' Intermediate Standard that is a compressed gas calibration standard assayed and certified by direct comparison to a calibration gas identified under subparagraph (h)(1)(B), (h)(1)(C), (h)(1)(D), or (h)(1)(E), in accordance with Section 2.1.3.1 of the "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards" - EPA-600/R-12/531, May 2012, or U.S. EPA's the most recently published protocol for certification of gaseous certification standards;

(ii) NIST Research Gas Mixture that is a calibration gas mixture developed by agreement of a requestor and NIST that NIST analyzes and certifies as "NIST traceable"; or

(iii) The manufacturer of calibration Gas' alternative certification protocol for the specific compound or compounds subject to the Executive Officer's approval.

(I) The procedures of the U.S. EPA Protocol shall be used for gas calibration standards, except that the

- ✓ Applicable if not covered by programs specified in (h)(1)(A) through (h)(1)(E)
- ✓ Added alternative options under (h)(1)(F)(i) & (ii)
- ✓ No change to gas manufacturer's alternative certification protocol under (h)(1)(F)(iii)

PR 218.3 (i) - Data Handling

- Both Rule 218.1 and PR 218.3 address:
  - Data handling for data falling below 10 percent of the upper span value; and
  - Data validity of data below 10 percent or above 95% of the upper span value
- In addition, PR 218.3 specifies emission data averaging method, CEMS data availability, CEMS out-of-control period as in other regulations for CEMS
- PR 218.3 also addresses the concern on data above 95% of the upper span value, when the data is considered invalid and discarded for emission calculation or compliance demonstration

Data Handling

PR 218.3

PR 218.3 (i)

218.1	218.3
(b)(1)(C)(v)	(i)(1)
(b)(1)(C)(vi)	(i)(2)
None	(i)(3)
None	(i)(4)
(b)(4)(E)	(i)(5)
Part of (b)(4)(A)	(i)(6)

PR 218.3 (i)(1): Data points below 10 percent of the FSR	PR 218.3 (i)(2): Data point above 95% of the FSR	PR 218.3 (i)(3): Validity for (i)(1) and (i)(2) data	PR 218.3 (i)(4): Emission data averaging	PR 218.3 (i)(5): CEMS data availability	PR 218.3 (i)(6): CEMS out-of-control period and alternative data acquisition
No change	New provision	New provision	New provision	New provision	New provision

PR (i)(2)
Data Points Above 95 Percent of the Span Range

PR 218.3 (i)(2):

How to handle data points above 95 percent of the span range (spiking data)

New provision

- (i)(2)(A): Spiking data for a CEMS analyzer with certified multiple span ranges
- (i)(2)(B): Spiking data for a CEMS analyzer with certified single span range
- (i)(2)(C): CEMS status code and spiking data percentage
- (i)(2)(D): Requirement when the percent of spiking data is over a threshold

PR 218.3 (i)(2)(A) & (i)(2)(B)
How to Handle Spiking Data for Analyzers With Multiple or Single Span Range

(2) Data Points Above 95 Percent of the Upper Span Value

If a data point is above 95 percent of the upper span value , the owner or operator of the CEMS shall record and report the data point according to the following:

(A) For a CEMS analyzer with certified single span range, the permit holder and operator of the CEMS shall record any data point that is above 95 percent of the upper span value, at the 95 percent of the upper span value.

(B) For a CEMS analyzer with certified multiple span ranges, the owner or operator of the CEMS shall report the data point at:

(i) Ten (10) percent of the upper span value of the higher span range if the data point:

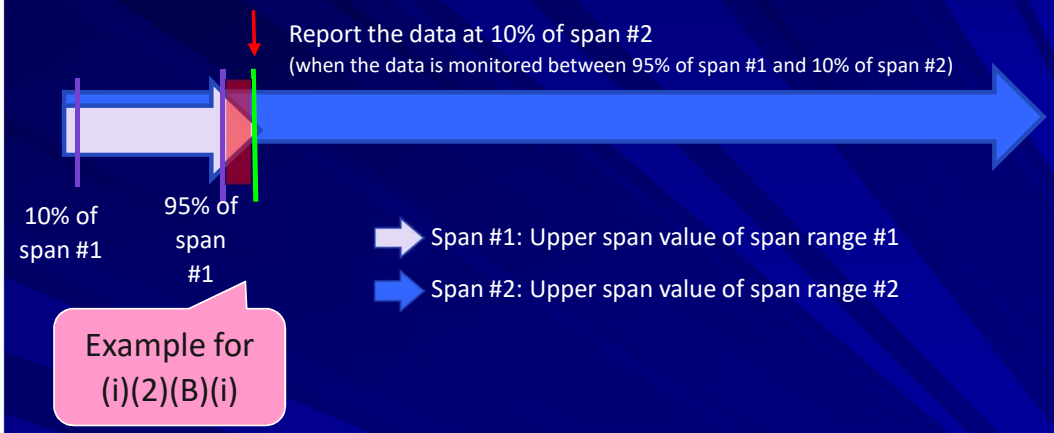
(I) Falls between the upper span values of two span ranges; and

(II) Is below 10 percent of the upper span value of the higher span range but above 95 percent of the upper span value of the lower span range.

(ii) Ninety-Five (95) percent of the upper span value of:

(I) The higher span range if it is above 95 percent of the upper span value of the higher span range for a dual range analyzer; or

(II) The highest span range if it is above 95 percent of the upper span value of the highest span range for an analyzer with more than two span ranges.



(i)(2)(A) & (i)(2)(B)(ii)

- ✓ Reporting spiking data at 95% of the upper span value (vs. treating them as invalid data according to Rule 218.1 and Rule 2012)
- ✓ This proposal is expected to:
  - ➢ Avoid data loss and under- estimating averaged emissions; and
  - ➢ Provide data in assessing excess emissions

PR 218.3 (i)(2)(C)
Flagging Spiking Data and Calculating the Percentage

PR 218.3

(C) The owner or operator of the CEMS shall:

(i) Flag any data point that is recorded and reported pursuant to clause (i)(2)(A) and subparagraph (i)(2)(B)(ii) as above 95 percent of upper span value for CEMS status code; and

(ii) Calculate a spiking data percentage for each calendar quarter using the following equation:

Spiking Data Percentage = F/T x 100%

Where:

F isthe amount of flagged one-minute data points recorded pursuant to clause (i)(2)(C)(i) for the calendar quarter during unit operation, excluding CEMS out-of-control period; and

T isthe total amount of one-minute data points recorded for the calendar quarter during unit operation, excluding CEMS out-of-control period.

(D) If the percentage determined pursuant to clause (i)(2)(C)(ii) is over 1.0 percent for any two calendar quarters in a consecutive four calendar quarter period, the owner or operator the CEMS shall submit a CEMS application within 30 days to certify an additional span range.

- ✓ The spiking data percentage is proposed as a backstop measure to prevent frequent occurrence of data spiking over 95% of the upper span value
- ✓ Staff's analysis covers all unit operation period including unit startup and shutdown
- ✓ The CEMS is intended to capture all data
- ✓ If emissions spiking is frequent, a higher span range is needed to capture the emission data

PR 218.3

PR 218.3 (i)(2)(D)
When the Percent of Spiking Data Is Over a Threshold

(D) If the percentage determined pursuant to clause (i)(2)(C)(ii) is over 1.0 percent for any two calendar quarters in a consecutive four calendar quarter period, the owner or operator the CEMS shall submit a CEMS application within 30 days to certify an additional span range.

- ✓ New provision
- ✓ Refer to Rule 218.2 (f) for the application process for CEMS certification or recertification
- ✓ The quarterly spiking data percentage should be included in the semiannual report

PR 218.3

PR 218.3 (i)(3)
Data Validity For Measurements Below 10 Percent or Above 95 Percent of the Full Span Range

(3) If the owner or operator of a certified CEMS is meeting the quality assurance requirements as specified in subdivision (g), data recorded and reported pursuant to paragraphs (i)(1) and (i)(2) shall be valid data for quantification, and available for the purpose of determining CEMS data availability.

- ✓ Considering data recorded and reported pursuant to paragraphs (i)(1) and (i)(2) as valid data provided:
  - (i)(1): Data points measured below 10% of the FSR
  - (i)(2): Data points measured above 95% of the FSR

PR (i)(4) - Emission Data Averaging

PR 218.3

PR 218.3 (i)(4)

New provision

- (i)(4)(A): Hourly average
- (i)(4)(B): 15-minute average
- (i)(4)(C): An average for an interval greater than one-hour
- (i)(4)(D): Pollutant concentration correction by diluent gas
- (i)(4)(E): When data average requirements by landing rules or permit conditions are different

PR 218.3 (i)(4)(A): Hourly Average

(4) Emission Data Averaging

The owner or operator of the CEMS shall perform emission data averaging according to the following methods:

(A) An hourly average shall cover the 60-minute period commencing on the hour. An hourly average shall be computed as follows utilizing all valid data points:

(i) For a full or partial unit operating hour, at least one valid data point in each 15-minute quadrant of the hour in which the unit operates is required to calculate the hourly average.

(ii) For any unit operating hour in which required maintenance or quality-assurance activities are performed:

(I) If the unit operates in two or more quadrants of the hour, a minimum of two valid data points, separated by at least 15 minutes, is required to calculate the hourly average; or

(II) If the unit operates in only one quadrant of the hour, at least one valid data point is required to calculate the hourly average.

- Aligning with Part 60 and Part 75 method
- Specifies how hourly averages are calculated for full and partial hours and during maintenance and quality assurance activities

PR 218.3 (i)(4)(B) & (i)(4)(C)
How to Average Data to Demonstrate Compliance for an Intervals Other than Hourly

PR 218.3

(B) For continuous monitoring systems used to demonstrate compliance for a 15-minute interval, emission data may be averaged for each 15-minute quadrant of the hour in which the unit operates, utilizing all valid data points.

(C) For continuous monitoring systems used to demonstrate compliance for an interval greater than one-hour, emission data may be averaged for the required interval utilizing hourly averages computed in accordance with subparagraph (i)(4)(A).

- ✓ Compliance for an interval other than hourly?
  - ➢ (i)(4)(B): 15-minute interval
  - ➢ (i)(4)(C): an interval greater than one-hour

PR 218.3 (i)(4)(D) & (E) – Other Emission Average Issues

PR 218.3

- PR 218.3 (i)(4)(D): Pollutant concentration correction by diluent gas

> (D) Pollutant concentration correction by diluent gas shall be performed with the averaged value at the interval required for compliance demonstration.

- PR 218.3 (i)(4)(E): When data average requirements by landing rules or permit conditions are different

> (E) Comparable emission data average requirements specified in source specific rules or permit conditions shall supersede subparagraphs (i)(4)(A) through (i)(4)(D).

PR (i)(5) – CEMS Data Availability

PR 218.3

PR 218.3 (i)(5):
CEMS Data Availability

New provision

- (i)(5)(A): CEMS data availability calculation
- (i)(5)(B): Operating hours that must be excluded
- (i)(5)(C): CEMS data availability threshold and subsequent requirements

PR 218.3 (i)(5)(A)
How to Calculate CEMS Data Availability

PR 218.3

(A) On a quarterly basis, the owner or operator of the CEMS shall calculate data availability for each analyzer using the following equation:

Data Availability = Y/Z x 100%

Where:

Y is the total unit operating hours during the calendar quarter when the monitor provided data, excluding the operating hours identified under subparagraph (i)(5)(B) and CEMS out-of-control period specified under subparagraph (i)(6)(A); and

Z is the total unit operating hours during the calendar quarter, excluding the operating hours identified under subparagraph (i)(5)(B)

- ✓ Purpose is to evaluate data availability for the period when the unit is operating
- ✓ "Unit" defined as the emission source
- ✓ Calculated on a calendar quarterly basis for example January to March, April to June, etc.
- ✓ The maximum value for the Data Availability is 100%

PR 218.3 (i)(5)(B) Operating Hours That Must be Excluded from Data Availability Calculation

PR 218.3

(B) An operating hour that includes any of the following periods shall be excluded from the data availability calculation:

(i) Startup and shutdown period that is not subject to any emission limit according to the permit condition or source specific rule;

(ii) CEMS maintenance, repair, or audit for up to 30 hours for each calendar quarter; and

(iii) A unit Breakdown that meets all Breakdown provisions of Rule 430 and is deemed as a valid Breakdown.

- ✓ Rule 218.1 provides up to 40 hours per month for calibration, maintenance, repair, or audit
- ✓ The proposed 30 hours for each calendar quarter is equivalent to the number of hours exempted under Rule 218.1
- ✓ A daily calibration hour is considered a valid maintenance hour and would not need to be applied towards the 30 hours for each calendar quarter under (i)(5)(B)(ii)

(C) CEMS data availability threshold and subsequent requirements

(i) When data availability of any analyzer falls below 95 percent for one calendar quarter, the owner or operator of the CEMS shall:

(I) Conduct a relative accuracy test audit within 30 days after the end of that calendar quarter; and

(II) Report the incident and corrective actions in the semi-annual report pursuant to Rule 218.2 (h)(1) for the period covering that calendar quarter.

(ii) When data availability of any analyzer falls below 95 percent for two consecutive calendar quarters, the owner or operator of the CEMS shall:

(I) Within 30 days after the end of those two consecutive calendar quarters, provide a temporary alternative monitoring method identified in subparagraph (i)(6)(B); and

(II) Within 180 days after the end of those two consecutive calendar quarters, modify or replace the CEMS, and recertify the CEMS.

(iii) The Executive Officer may request the owner or operator of the CEMS to revise the QAQC plan whenever data availability of any analyzer falls below the 95 percent threshold.

PR 218.3 (i)(5)(C) CEMS Data Availability Threshold and Subsequent Requirements

- ✓ Rule 218.1 requires a threshold of 95% on an annual basis
  - ➢ Recertification if over 95%
- ✓ PR 218.3 requires a threshold of 95% for each calendar quarter
  - ➢ RATA and reporting if over 95% for one quarter
  - ➢ Alternative monitoring and recertification if over 95% for two consecutive quarters

PR 218.3 (i)(6)
CEMS Out-of-Control Period and Alternative Data Acquisition

PR 218.3 (i)(6):

CEMS Out-of-Control Period and Alternative Data Acquisition

New provision

- (i)(6)(A): What is CEMS Out-of-Control period
- (i)(6)(B): Data generated during the CEMS Out-of-Control period
- (i)(6)(C): Data availability calculation during the CEMS Out-of-Control period
- (i)(6)(D): Options for alternative data acquisition during the CEMS out-of-control period

PR 218.3 (i)(6)(A) through (i)(6)(C) CEMS Out-of-Control Period

PR 218.3

(6) CEMS Out-of-Control Period and Alternative Data Acquisition

(A) A CEMS out-of-control period:

(i) Occurs when the owner or operator fails any QAQC test specified under subdivision (g), or fails to conduct the test when it is due.

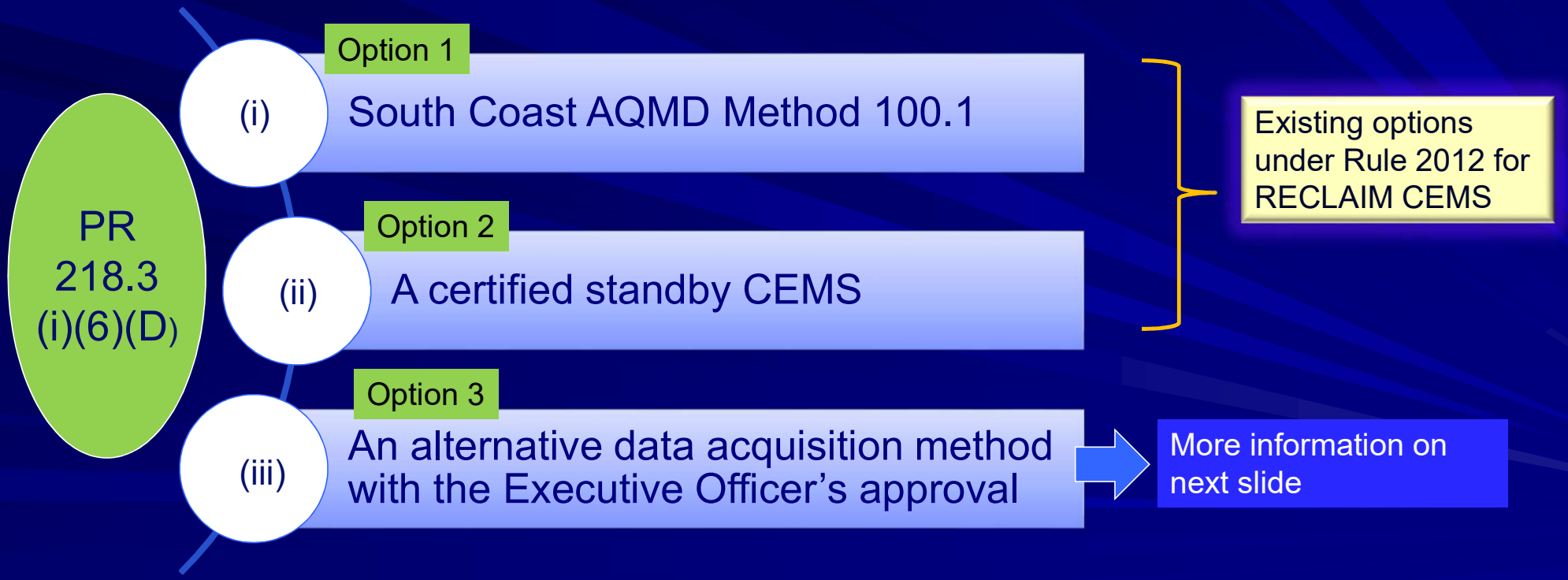
(ii) Begins with the hour of completion of the failed test, or the hour when it becomes overdue, and ends with the hour of completion of a passing test.

(B) The CEMS data generated during the CEMS out-of-control period shall be deemed invalid for emission quantification in any compliance demonstration

(C) The CEMS during the CEMS out-of-control period shall be considered not providing quality-assured data period for the data availability calculation.

- ✓ Not specified in Rules 218 and 218.1, but specified in Rule 2012
- ✓ Implemented through Data Acquisition and Handling System for both RECLAIM and non-RECLAIM CEMS

PR 218.3 (i)(6)(D)
Three Options for Alternative Data Acquisition During the CEMS Out-of-Control Period



PR 218.3 (i)(6)(D)(iii) – Option 3: An Alternative Data Acquisition Method With the Executive Officer's Approval

(iii) An alternative data acquisition method with the Executive Officer's approval provided that:

(I) The method is deemed equivalent to a South Coast AQMD certified CEMS on relative accuracy, reliability, reproducibility, and data handling; and

(II) The approval defines contingent requirements on duration of using the method, notification, and testing.

- ✓ Alternative data acquisition method upon Executive Officer approval
- ✓ Requirements would be defined for utilizing the method

PR 218.3 (j) - SCEMS Requirements

- A SCEMS is a continuous emission monitoring system that is different from a regular CEMS on response time and data acquisition frequency
- SCEMS that operate in the South Coast AQMD include:
  - Time – shared CEMS; and
  - Technologies such as gas chromatography (GC) analysis for sulfur compound composition, F-factors and higher heating value
- Subdivision (j) for SCEMS:
  - Clarifies pre-certification, certification, quality assurance and data handling requirements; and
  - Identifies the different requirements for a SCEMS as compared to a regular CEMS

SCEMS Requirements

218.1	218.3
(e)	(j)(1)
	(j)(2)

PR 218.3 (j)

PR 218.3
(j)(1):
SCEMS

New provision

PR 218.3
(j)(2):
Time-shared CEMS

Structure change
and minor addition

PR 218.3 (j)(1): SCEMS

(1) The owner or operator of a SCEMS shall:

(A) Comply with the pre-certification and certification requirements pursuant to subdivisions (e) and (f), except for the requirements on response time specified in subparagraph (f)(4)(A), where the response time for any SCEMS shall not exceed 15 minutes;

(B) Comply with the quality assurance requirements specified in subdivision (g);

(C) Comply with the data handling requirements pursuant to subdivision (i); and

(D) Use 15-minute data points instead of one-minute data points for the calculation required by subparagraph (i)(2)(C).

- ✓ The requirements have been implemented in practice
- ✓ New provision

PR 218.3 (j)(2): Time-shared CEMS

(2) The owner or operator of a time-shared CEMS shall meet all the following additional requirements for the time-shared CEMS:

(A) All units shall have mutually compatible range(s) of air pollutant gases at all times.

(B) Each unit shall have a data-reading period, at a minimum, equal to three times the longest response time of the system.

(C) For shared systems the response time shall be measured at the input or probe at each unit.

(D) A demonstration of response time for each unit shall be made during certification testing.

(E) Data shall not be collected following a switch of sample unit until a period of time equal to one response time has passed.

(F) Data shall be recorded every 15 minutes for each unit.

(G) Perform and record zero and span calibrations for each unit, including the calibration factors and correction values before and after every automatic calibration.

(H) Uniquely identify each unit on the DAHS.

- ✓ Time-shared CEMS is a type of SCEMS
- ✓ Based on Rule 218.1(e), the rule language is reorganized for easier comprehension
- ✓ Added (j)(2)(F) and (j)(2)(H) for clarification

PR 218.3 (k) - Moisture Correction

- PR 218.3 subdivision (k) provides provisions for moisture correction
- PR 218.3 provisions are the same requirements as in Rule 218.1 subparagraph (b)(4)(F)
- PR 218.3 provides clarifications
  - Specifies the guidance document “South Coast AQMD Technical Guidance Document R-001(TGD-R-001)”; and
  - Rearranges the proposed rule language to a more structured manner

Moisture Correction

218.1	218.3
(b)(4)(F)	(k)(1)
	(k)(2)

PR 218.3 (k)

PR 218.3

(k)(1):

Determine moisture according to guidance document

PR 218.3

(k)(2):

Calculate moisture by fuel property

No changes to requirements - clarifications

PR 218.3 (k): Moisture Correction

(k) Moisture Correction

(1) If a moisture correction in reporting flow and concentration is required, the owner or operator of a CEMS shall measure and monitor moisture in the stack gas used for emission data calculations in accordance with the South Coast AQMD Technical Guidance Document R-001(TGD-R-001).

(2) Alternatively, with Executive Officer approval, for equipment moisture that emanates only from fuel combustion, the owner or operator of the CEMS shall calculate the moisture content using fuel properties and ambient air humidity data or, for processes that saturate the exhaust gas with moisture, such as a wet scrubber system, the owner or operator shall use the saturation temperature for moisture content data.

- ✓ No change to requirements
- ✓ Minor structural changes to proposed rule language
- ✓ Specifies South Coast AQMD guidance document

PR 218.3 (l) - Exemption

- Source-specific rules or permits will supersede the PR 218.3 CEMS provisions when the CEMS provisions overlap
  - For example: If a source-specific rule and PR 218.3 specify data averaging, the operator must follow the source-specific data averaging requirements

Exemption

218.1	218.3
None	(l)

PR 218.3 (k)

PR 218.3

(l)(1):

Exemption provided when there is an overlapping requirement defined by a source specific rule or permit

New provision

PR 218.3 (l) - Exemption

(l) 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.

- ✓ New provision
- ✓ Implemented in practice

PR 218.3 Appendices

- The appendices include four tables and two attachments that are comprise of:
  - Existing appendices in Rule 218.1
  - New appendices containing
    - Existing Rule 218.1 specifications; and
    - Newly proposed specifications

PR 218.3 Appendices

PR 218.3 Appendices:	Table 1:Reference Methods
	Table 2: DAHS Status Codes
	Table 3: Equations
	Table 4: t-Values
	Attachment A: Supplemental and alternative CEMS performance requirements
	Attachment B: Concentration stratification and CEMS probe location

Table 1 and Attachment A

PR 218.3 Appendices:

- ✓ Table 1:Reference Methods
  - ✓ Existing appendices
  - ✓ No change
- ✓ Attachment A: Supplemental and alternative CEMS performance requirements

Table 2

PR 218.3 Appendices:

Table 2: DAHS Status Codes

- ✓ New table
- ✓ Referenced by 218.3 (e)(4)(E)

Tables 3 & 4 and Attachment B

PR 218.3 Appendices:

- ✓ Table 3: Equations
- ✓ Table 4: t-Values
- ✓ Attachment B: Concentration stratification and CEMS probe location

- ✓ New tables and attachment for existing information in Rule 218.1
- ✓ Table 3 and 4 information:
  - ➢ Included in definitions under Rule 218.1
- ✓ Attachment B information:
  - ➢ Included under rule 218.1 (b)(3)(C)
  - ➢ Referenced by PR 218.3 (f)(4)(D)

PAR 218 (b)(3) – Applicability and Monitoring Requirements

- Staff proposes to incorporate a phase out provision under Rule 218 subdivision (b) for applicability as follows:

> (3) The owner or operator of any CEMS subject to Rules 218 and 218.1 shall continue to comply with the requirements specified in these rules until the date specified in Rule 218.2 (d)(2) or Rule 218.3 (d)(2).

Next Steps – Rulemaking Process

- Public Workshop – December 2020
- Public Hearing – March 5, 2021

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