

AN OVERVIEW COMPARING RULE 218.1 AND PROPOSED RULE 218.3 REQUIREMENTS

Requirements	Rule 218.1	PR 218.3	Changes under PR 218.3 as compared with Rule 218.1
Purpose	None	(a)	<ul style="list-style-type: none"> Same purpose as for Rule 218.1, although it is not specified in Rule 218.1
Applicability	None	(b)	<ul style="list-style-type: none"> The applicability provision in Rule 218 is intended to cover Rule 218.1 PR 218.3 retains the concept of the applicability under Rule 218 and provides further clarification
Definitions	(a)	(c)	<p>The following new definitions added to PR 218.3:</p> <ul style="list-style-type: none"> ACEMS CEMS MODIFICATION FORMER RECLAIM FACILITY LOWEST VENDOR GUARANTEED SPAN RANGE MAINTENANCE RECLAIM RECLAIM FACILITY SPAN RANGE UPPER SPAN VALUE UNIT <p>Other changes:</p> <ul style="list-style-type: none"> Removed a list of existing definitions that are no longer used in Rule 218.3 or have been integrated in the rule language Revised a list of existing definitions for clarity (equations from certain definitions are incorporated in Table 3)
Implementation schedule	None	(d)	This new subdivision in PR 218.3 defines the timeline to transition facilities from complying with Rules 218 and 218.1 or Rule 2012 to PR 218.2 and 218.3
Pre-certification requirements			
CEMS location	(b)(1)(A)	(e)(1)	Minor change on wording
Sampling location	(b)(1)(B)	(e)(2)	Restructured the rule language
Span Range	(b)(1)(C)	(e)(3)	<p>New provisions</p> <ul style="list-style-type: none"> Approving a span range if (e)(3)(A) and (e)(3)(B) cannot be concurrently satisfied - (e)(3)(C) Approving a span range with the upper span value at up to 10 ppm for a unit with emission limit less than 5 ppm - (e)(3)(D)

AN OVERVIEW COMPARING RULE 218.1 AND PROPOSED RULE 218.3 REQUIREMENTS

Requirements	Rule 218.1	PR 218.3	Changes under PR 218.3 as compared with Rule 218.1
			<ul style="list-style-type: none"> Exempting the top span range of multiple span range analyzer - (e)(3)(E)
Data Acquisition and Handling System (DAHS)	(b)(1)(E)	(e)(4)	New provisions <ul style="list-style-type: none"> Recording all status code specified in Table 2 - (e)(4)(E) Incorporating all applicable data handling requirements specified in subdivision (i) - (e)(4)(G)
Operational Period	(b)(1)(F)	(e)(5)	Minor change on wording
Certification requirements			
Seven-day calibration drift testing	(b)(2)(A)	(f)(1)	Clarification provided <ul style="list-style-type: none"> Specified that calibration testing is performed for each span range for the same seven-day testing period Added 2-hour grace period for each test Specified calibration error test for stack flow monitors Referenced calculation equation in Table 3
Analyzer enclosure	(b)(2)(B)	(f)(2)	Minor structure changes and revisions <ul style="list-style-type: none"> Specified when corrective actions should be made
Relative accuracy test audit (RATA)	(b)(2)(C)	(f)(3)	New provisions <ul style="list-style-type: none"> Specified the guidance document to determine an outlier - (f)(3)(B): Added the reference to calculation equation (no change to the equation) - (f)(3)(C) Provided equations to clarify how to calculate a de minimis value - (f)(3)(D) Revision <ul style="list-style-type: none"> Standards for RA and <i>De Minimis</i> of a RATA - (f)(4)(E): <ul style="list-style-type: none"> ✓ Reduced NOx <i>de minimis</i> from 1.0 ppm to 0.5 ppm ✓ Provided a standard for units with CO emission limit < 2.0 ppm ✓ Added <i>de minimis</i> 1.0% for CO2 (only for O2 previously) ✓ Allowed 20.0% for O2/CO2 when its measured value is low
Other checks required along with RATA	(b)(3)	(f)(4)	New provisions <ul style="list-style-type: none"> Re-structured the rule language with no requirement changes:

AN OVERVIEW COMPARING RULE 218.1 AND PROPOSED RULE 218.3 REQUIREMENTS

Requirements	Rule 218.1	PR 218.3	Changes under PR 218.3 as compared with Rule 218.1
			<ul style="list-style-type: none"> ✓ Response time (f)(4)(A) ✓ Cyclonic flow (f)(4)(E) ✓ Linearity error (f)(4)(F) • Added: <ul style="list-style-type: none"> ✓ NOx converter efficiency (f)(4)(B) ✓ Sampling system bias check (f)(4)(C) (Both tests are conducted in practice and included in certification guidance document) • Relocated technical details to Attachment B for: <ul style="list-style-type: none"> ✓ Concentration stratification (f)(4)(D) • Removed <ul style="list-style-type: none"> ✓ Interference check 218.1 (b)(3)(A) (Not conducted in practice) ✓ Calibration error 218.1 (b)(3)(B) (Already required for 7-day drift and ongoing QAQC)
Alternative Emission Monitoring System (ACEMS)	None	(f)(5)	<p>This is a new provision</p> <ul style="list-style-type: none"> • Not specified in Rules 218 and 218.1 • Referencing the ACEMS specification under Rule 2012
Laboratory approval program	Part of 218 (c)(1)(A)	(f)(6)	No change
Quality Assurance Testing Requirements			
Calibration Error	(b)(4)(A)	(g)(1)	<p>Revision</p> <ul style="list-style-type: none"> • Revised previous language for test frequency in Rule 218.1 (b)(2)(A) “as close to 24-hour intervals as practicable” to “for every 24 hours with a 2-hour grace period” - (g)(1)(A)(i) <p>New provisions</p> <ul style="list-style-type: none"> • Specification for stack flow monitor test requirements are based on Rule 2012 for RECLAIM CEMS - (g)(1)(A)(ii) • 4-hour grace period for unit restart after one or more unit non-operation days - (g)(1)(B) • CEMS data validation – (g)(1)(E) &(F)
Relative Accuracy Testing Audit (RATA)	(b)(4)(C)	(g)(2)	<p>Revision</p> <ul style="list-style-type: none"> • Revised previous language for test frequency in Rule 218.1 “once every 12 months, no later than the end of the calendar quarter in which the date of the original certification test was performed” to “within 12 months of the end of the month of the previous relative accuracy test” - (g)(2)(A) <p>New provisions</p>

AN OVERVIEW COMPARING RULE 218.1 AND PROPOSED RULE 218.3 REQUIREMENTS

Requirements	Rule 218.1	PR 218.3	Changes under PR 218.3 as compared with Rule 218.1
			<ul style="list-style-type: none"> • Specification for stack flow monitor test requirements are based on Rule 2012 for RECLAIM CEMS - (g)(2)(D) • RATA at a unit restart (aligning with Rule 2012) – (g)(2)(D) • Paragraphs PR 218.3 (g)(2)(B) & (C) are referencing (f)(3) and (f)(4) for specifications where new provisions are included
Cylinder Gas Audit (CGA)	(b)(4)(D)	(g)(3)	New provisions <ul style="list-style-type: none"> • Allowing linearity error check to substitute cylinder gas audit • Exempting the test for a quarter with minimal operation
Daily check and periodic calibration for ACEMS	None	(g)(4)	This is a new provision <ul style="list-style-type: none"> • Not specified in Rules 218 and 218.1 or Rule 2012 • Addressed in the ACEMS QAQC plan and conducted in practice
Other checks for stack flow monitor	None	(g)(5)	This is a new provision <ul style="list-style-type: none"> • Not specified in Rules 218 and 218.1 • Based on the existing requirements in Rule 2012 for RECLAIM CEMS stack flow monitor
Maintenance for fuel flow meter (utilized for determining stack flow with F factor)	None	(g)(6)	This is a new provision <ul style="list-style-type: none"> • Not specified in Rules 218 and 218.1 or Rule 2012 • Currently addressed in the CEMS QAQC plan and implemented in practice
Calibration Gas and Zero Gas			
Calibration Gas	(d)(1)	(h)(1)	New provisions <ul style="list-style-type: none"> • Additional certification programs for calibration gas – (h)(1)(B) through (E) • Additional alternative options - (h)(1)(F)(i) & (ii)
Zero Gas	(d)(2)	(h)(2)	No change
Data handling			
Data points below 10 percent of the upper span value	(b)(1)(C)(v)	(i)(1)	No change
Data point above 95% of the upper span value	(b)(1)(C)(vi)	(i)(2)	New provisions <ul style="list-style-type: none"> • Spiking data recording (at 95% of the upper span value vs. being discarded as invalid data according to Rule 218.1 and Rule 2012) -(i)(2)(A) & (i)(2)(B)(ii) • The quarterly spiking data percentage calculation - (i)(2)(C)

AN OVERVIEW COMPARING RULE 218.1 AND PROPOSED RULE 218.3 REQUIREMENTS

Requirements	Rule 218.1	PR 218.3	Changes under PR 218.3 as compared with Rule 218.1
			<ul style="list-style-type: none"> Threshold for the quarterly spiking data percentage and subsequent requirement – (i)(2)(D) Data validity for measurements below 10 percent or above 95 percent of the upper span value
Validity for (i)(1) and (i)(2) data	None	(i)(3)	<p>New provision</p> <ul style="list-style-type: none"> Data validity for measurements below 10 percent or above 95 percent of the upper span value
Emission data averaging	None	(i)(4)	<p>New provisions</p> <ul style="list-style-type: none"> Hourly average calculation for full and partial unit operating hours and during maintenance and quality assurance activities – (i)(4)(A) Emissions averaging for a 15-minute interval – (i)(4)(B) Emission averaging for intervals greater than one-hour – (i)(4)(C) Pollutant concentration correction by diluent gas – (i)(4)(D) Comparable data average requirements by landing rules or permits superseding requirements under this paragraph – (i)(4)(E)
CEMS data availability	(b)(4)(E)	(i)(5)	<p>New provisions</p> <ul style="list-style-type: none"> Quarterly data availability calculation equation – (i)(5)(A) Operating hours to exclude for the calculation – (i)(5)(B) Data availability threshold and subsequent requirements – (i)(5)(C)
CEMS out-of-control period and alternative data acquisition	Part of (b)(4)(A)	(i)(6)	<p>New provisions</p> <ul style="list-style-type: none"> What is CEMS out-of-control period (not specified in Rules 218 and 218.1, but specified in Rule 2012) – (i)(6)(A) Data generated during the CEMS Out-of-Control period – (i)(6)(B) Data availability calculation during the CEMS Out-of-Control period – (i)(6)(C) Options for alternative data acquisition during the CEMS out-of-control period– (i)(6)(D) <ul style="list-style-type: none"> ✓ Existing options under Rule 2012 : South Coast AQMD Method 100.1 - (i)(6)(D)(i) and A certified standby CEMS - (i)(6)(D)(ii) ✓ New option: Alternative data acquisition method upon Executive Officer approval - (i)(6)(D)(iii)

AN OVERVIEW COMPARING RULE 218.1 AND PROPOSED RULE 218.3 REQUIREMENTS

Requirements	Rule 218.1	PR 218.3	Changes under PR 218.3 as compared with Rule 218.1
SCEMS Requirements			
SCEMS	(a)(16) & (b)(1)(E)	(j)(1)	PR 218.3 (j)(1) has combined the existing rule language and the actual implementation
Time-shared CEMS	(e)	(j)(2)	New provisions <ul style="list-style-type: none"> Added (j)(2)(F) and (j)(2)(H) for clarification
Moisture Correction			
	(b)(4)(F)	(k)	No change to requirements with only clarifications <ul style="list-style-type: none"> Minor rule structural change Specified the South Coast AQMD guidance document
Exemption			
	None	(l)	Implemented in practice
Tables and Attachments			
Table 1: Reference Methods	Table 1	Table 1	No change
Table 2: DAHS Status Codes	None	Table 2	New table <ul style="list-style-type: none"> Referenced by 218.3 (e)(4)(E)
Table 3: Equations	None	Table 3	New table <ul style="list-style-type: none"> Previously included under various definitions in Rule 218.1
Table 4: t-Values	None	Table 4	New table <ul style="list-style-type: none"> Included under definition (a)(9) in Rule 218.1
Attachment A: Supplemental and alternative CEMS performance requirements	Attachment A	Attachment A	No change
Attachment B: Concentration stratification and CEMS probe location	None	Attachment B	New attachment <ul style="list-style-type: none"> Included under rule 218.1 (b)(3)(C) Referenced by PR 218.3 (f)(4)(D)