

Requirements for Continuous Emission Monitoring

Proposed Amended Rules (PAR) 218 and 218.1

Working Group Meeting #6

November 12, 2019
1:30 pm

Telephone number: 1-866-705-2554
Passcode: 576465

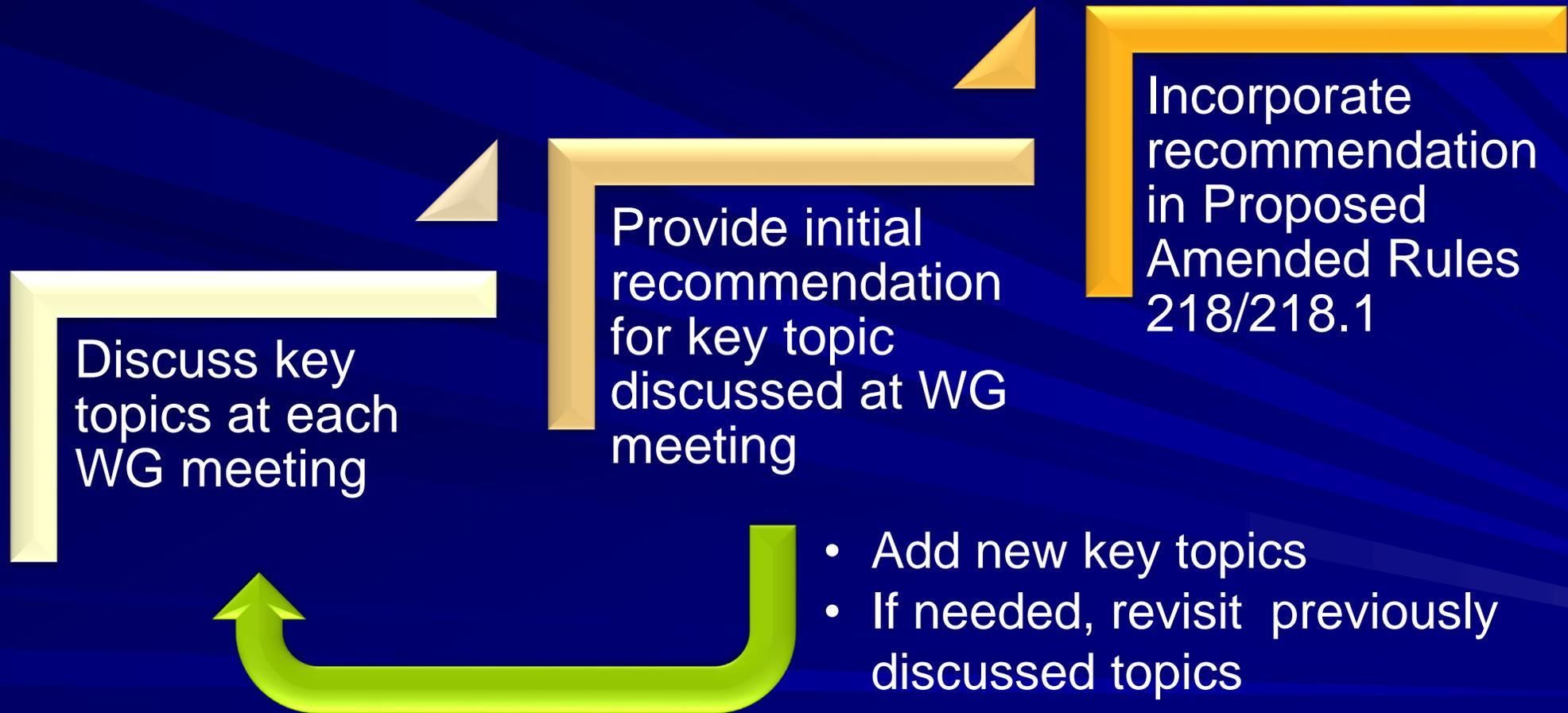
South Coast AQMD Headquarters
Diamond Bar, California

Agenda

- Progress of Key Topic Discussion
- New Key Topics for Today's Discussion
- Address Comments
- Next Steps

Progress of Key Topic Discussion

Overall Approach to Address Key Topics*



*Key topics related to proposed rule language

Progress of Key Topics Discussion

Key Topics	Discussion	Initial Recommendation
1. PAR 218/218.1 Applicability ➤ Any change?	Applicable to all pollutants, but the focus of this amendment will be on NOx MRR requirements	No changes to applicability
2. Semi - Continuous Emission Monitoring System (SCEMS) ➤ Any change to its requirements?	<ul style="list-style-type: none">• R218/218.1 includes time-shared CEMS in SCEMS definition• Rule 2012 has specification on time-shared CEMS• No impact to NOx sources to retain R218/218.1 SCEMS requirements	<ul style="list-style-type: none">• No changes to definition of SCEMS• Retain SCEMS requirements in PAR 218/218.1

Progress of Key Topics Discussion – cont.

Key Topics	Discussion	Initial Recommendation
3. NO ₂ to NO Conversion efficiency test ➤ Required?	Specified in Rules 218/218.1 but not in Rule 2012	Require NO ₂ to NO conversion efficiency test 
4. Reporting excess emissions ➤ Also applicable to non-Title V source CEMS?	Would impact RECLAIM CEMS of non-Title V sources that report all mass emissions but not excess emissions	Require reporting excess emissions for both Title V and non-Title V sources with CEMS 
5. The standards for “existing” CEMS ➤ Still applicable?	Obsolete requirements in Rules 218/218.1	Remove the requirement 

Progress of Key Topic Discussion – cont.

Key Topics	Discussion	Initial Recommendation
<p>6. Full Span Range (FSR)</p> <ul style="list-style-type: none"> ➤ Any change to existing requirements? ➤ What if most of data falls below 10% of the range? ➤ Is low value calibration gas available? 	<p>With concentration limit being established for facilities exiting RECLAIM, their Full Span Range should be aligned with the Rules 218/218.1 requirements</p>	<ul style="list-style-type: none"> • Use the Rules 218/218.1 requirements • Provide additional recommendation for data that falls below 10% of the range • Span range may be set otherwise upon approval for unit with emission limit at or below 5 ppm
<p>7. Missing Data Procedure</p> <ul style="list-style-type: none"> ➤ Applicable? 	<p>Required for RECLAIM sources, but no longer needed for concentration based monitoring</p>	<p>Remove the requirement</p>

Progress of Key Topic Discussion – cont.

Key Topics	Discussion	Initial Recommendation
8. Strip chart recorder ➤ Continue to require?	The existing CEMS Data Acquisition and Handling System (DAHS or DAS) would be sufficient	Remove the requirement 
9. Quality assurance (QA) test report submittal ➤ Extend the requirement to all CEMS?	<ul style="list-style-type: none">• Not required by Rules 218/218.1• Required by Rule 2012• RECLAIM facilities submit QA test report summary by Electronic Data Reporting (EDR)	Require all PAR 218/218.1 facilities submit QA test report for all applicable pollutants via EDR 

Progress of Key Topic Discussion – cont.

Key Topics	Discussion	Initial Recommendation
<p>10. PAR 218/218.1 alignment with EPA's Part 75</p> <ul style="list-style-type: none">➤ How to align?	<ul style="list-style-type: none">• An analyzer at or below 30 ppm span level is common in this area;• PAR 218/218.1 are also applicable for pollutants not regulated by Part 75;• Part 75 linearity check data could be used to calculate CGA;• PAR 218/218.1 CEMS monitored units may often have off-line time	<ul style="list-style-type: none">• Continue to require CGA instead of linearity check;• May allow linearity check as an alternative in complying with CGA requirement;• Continue to allow certain tests to be conducted off-line 

Progress of Key Topic Discussion – cont.

Key Topics	Discussion	Initial Recommendation
<p>11. CEMS data availability threshold</p> <ul style="list-style-type: none"> ➤ Can the rule be more specific and clear on this requirement? ➤ What will be required if it exceeds the threshold? ➤ What can be excluded from data availability calculation? ➤ Is it calculated on a quarterly or annual basis 	<p>Current R218/218.1</p> <ul style="list-style-type: none"> • Defines data availability on an annual basis • Requires 95% as the threshold for data availability • Excludes 40 hours of CEMS calibration, maintenance, repair, or audit each month from data availability calculation 	<ul style="list-style-type: none"> • Clarify the definition and calculation method for data availability; • Exclude the startup and shutdown hours allowed by permit condition from data availability calculation • Exclude CEMS maintenance, repair or audit for up to 120 hours/year (10 hours/month) • When data availability falls below 95%, certain requirements could be triggered • Compute data availability on a calendar quarter basis 

Progress of Key Topic Discussion – cont.

Key Topics	Discussion	Initial Recommendation
<p>12. CEMS measuring low emissions</p> <ul style="list-style-type: none"> ➤ What are the challenges on passing QAQC test? 	<p>Stakeholders expressed difficulty meeting a 7-day calibration drift standard for CEMS measuring low emissions</p>	<ul style="list-style-type: none"> • Analysis on in-house data for NOx ranging from 2 ppm to 50 ppm indicates no difficulty for CEMS measuring low emission • Will consider an alternative standard proposal based on forthcoming additional valid data received from stakeholders
<p>13. Certification testing</p> <ul style="list-style-type: none"> ➤ Any change? 	<p>Certification testing requirements were summarized at the WG meeting</p>	<ul style="list-style-type: none"> • Remove the requirements specific for RECLAIM (e.g., bias test for bias adjustment factor) • Update the Rule 218/218.1 guidance document for certification test accordingly 

Progress of Key Topic Discussion – cont.

Key Topics	Discussion	Initial Recommendation
<p>14. Recertification and diagnostic tests</p> <ul style="list-style-type: none">➤ Any changes?	<p>Any modification that may affect the description on the CEMS certification letter would require the CEMS application (Form ST-220) and the applicable tests according to Technical Guidance Document R-002</p>	<ul style="list-style-type: none">• The recertification requirements should not change• PAR 218/218.1 will provide clarification for recertification requirements• Staff will assess if the guidance document should be updated 

Progress of Key Topic Discussion – cont.

Key Topics	Discussion	Initial Recommendation
<p>15. Performance Standards for Relative Accuracy Test Audit (RATA)</p> <ul style="list-style-type: none"> ➤ What will be the changes to the relative accuracy standards and <i>de minimis</i> standards for RATA? 	<p>Relative accuracy and <i>de minimis</i>/Alternative Standards required by different regulations were compared</p>	<ul style="list-style-type: none"> • No change to the relative accuracy standards in PAR 218/218.1 (10% for O₂/CO₂, 20% for NO_x concentration and mass emission, and 15% for flow); • Specify calculation method on meeting <i>de minimis</i> standards; • Retain R218/218.1 <i>de minimis</i> standards, but add <i>de minimis</i> 1.0% for CO₂ and reduce the current NO_x <i>de minimis</i> standard from 1.0 ppm to a lower level • When the measured O₂/CO₂ is at or below 15%, allow 20% RA for O₂/CO₂ with Executive Officer's approval

Progress of Key Topic Discussion – cont.

Key Topics	Discussion	Initial Recommendation
<p>16. The option of complying with Part 60 Appendices B & F (<i>alternative to Rule 218.1 standards</i>)</p> <ul style="list-style-type: none"> ➤ Shall the permit holders refer to R218.1 only or have the option to refer to Part 60 for CEMS certification and QAQC requirements? 	<p>Analyzed the differences between Part 60 and R218.1 on:</p> <ul style="list-style-type: none"> • Certification tests • 7-day drift standard • Out-of-control period • Data point >95% of span • RATA standard • Operation load for RATA • Numbers of runs for RATA • Calibration gas requirement 	<ul style="list-style-type: none"> • Phase out Part 60 option for those requirements • EO has discretion to approve otherwise (e.g., Operation load for RATA below normal load) • Requirements will be effective at next CEMS recertification • Part 60 specifications on valid hour and hourly averaging (Key Topic #18) will be incorporated into PAR 218/218.1



Progress of Key Topic Discussion – cont.

Key Topics	Discussion	Initial Recommendation
<p>17. Relief on CEMS operation and data availability</p> <ul style="list-style-type: none">➤ Can the rule provide those types of relief during unit breakdown, unit non-operation, and CEMS repair	<ul style="list-style-type: none">• Existing requirements by R218/218.1 and R2012• Additional recommendations	<ul style="list-style-type: none">• CEMS non-operation:<ul style="list-style-type: none">➤ During CEMS maintenance/repair, allow up to 96 hours CEMS non-operation, and may extend it for additional 96 hours if the unit is not operating➤ Allow CEMS non-operation when the unit is off for at least 7 consecutive days, if certain requirements are met• Hours to exclude from data availability:<ul style="list-style-type: none">➤ Startup and shutdown exempted by permit condition from complying with any emission limit➤ CEMS maintenance, repair or audit for up to 120 hours/year (30 hours/quarter)➤ A valid unit Breakdown 

Progress of Key Topic Discussion – cont.

Key Topics	Discussion	Initial Recommendation
<p>18. Valid hour and hourly average</p> <ul style="list-style-type: none">➤ PAR 218/218.1 should specify and harmonize the requirements for valid hour and hourly average	<p>Compared 40 CFR Part 60 and Part 75, Rule 2012, and Rule 218/218.1 for:</p> <ul style="list-style-type: none">• Valid data points required for a valid hour• Hourly average method	<ul style="list-style-type: none">• Specify valid hour and hourly average in PAR 218/218.1 according to Part 60 & Part 75 method• RECLAIM CEMS may continue the RECLAIM averaging method until the next CEMS recertification as a result of any change needed to meet the landing rule NOx limits• Specification will be provided in PAR 218/218.1 for demonstrating compliance to emission limit of a 15-minute interval or an interval greater than 1-hour• Concentration correction by diluent gas should be performed with the averaged value at the interval required for compliance demonstration• The comparable requirement of a landing rule may supersede 

Progress of Key Topic Discussion – cont.

Key Topics	Discussion	Initial Recommendation
<p>19. Calibration gas</p> <ul style="list-style-type: none">➤ Should harmonize the requirements by various rules	<ul style="list-style-type: none">• Compared existing requirements by Rule 2012 and Rule 218/218.1• Took into consideration of stakeholder's comments	<p>Proposed requirements</p> <ul style="list-style-type: none">• EPA Protocol gases• NIST standard reference materials;• A standard reference material-equivalent compressed gas primary reference material;• NIST traceable reference material;• NIST/EPA-approved certified reference materials;• If not covered by any of above programs, and upon approval by the Executive Officer, facility may use NIST research gas mixture, gas manufacturer's intermediate standard, or gas manufacturer's alternative certification protocol for the specific compound or compounds 

Progress of Key Topic Discussion – cont.

Key Topics	Discussion	Initial Recommendation
20. Alternative CEMS ➤ PAR 218/218.1 should have a provision for Alternative CEMS	Currently there are eight Alternative CEMS, all certified through RECLAIM Rule 2012	For PAR 218/218.1, use R2012 Chapter 2 Alternative CEMS certification requirements <ul style="list-style-type: none">• Certifying Alternative CEMS according to the criteria specified in 40 CFR Part 75 Subpart E



Progress of Key Topic Discussion – cont.

Key Topics	Discussion	Initial Recommendation
21. Spiking data (data over 95% of span)	Discussion Today	Pending
22. Alternative data acquisition for CEMS out-of-control period	Discussion Today	Pending
23. Reporting – summary of emission data	Discussion Today	Pending

New Key Topics for WG #6 Discussion

New Key Topics for Today's WG Meeting

21. Spiking data (data over 95% of span)
22. Alternative data acquisition for CEMS out-of-control period
23. Reporting – summary of emission data

Spiking data

■ What is Spiking data

- Data greater than 95% of the single full span range (FSR) or the higher (or highest if more than 2 ranges) span of multiple span ranges
- Could be data point of any level (e.g., 1-minute, 15- minute, or hourly)

■ Existing requirements

- R218.1 and R2012: Any data point above 95% of FSR is:
 - Invalid for quantification
 - Considered unavailable for determining CEMS availability

■ Overarching concerns under current requirements

- Considered data loss for quantification at the spiking data point
- The averaged emissions would be under-estimated
- It is difficult to estimate excess emissions

Spiking Data – Observations of Spiking Activity

- Spiking data is typically not spontaneous
 - The spiking generally remains within a 15-min period, and the average of this 15-min period is mostly showing excess emissions
- NOx spiking normally occurs at the time of startup and shutdown, load change, or other type of change
 - In those situations during 1-min data spike, the 15-min average data are also likely to spike
- NOx spiking (fluctuation) also occurs under unknown causes
 - Spiking in this kind of situation is not as significant
 - The emissions may be over the limit but the data often remains within 95% of the primary span range
- In the case when the excess emission is out of the primary span, at least 1/3 of the 1-min data in a 15-min period are over 95% of the primary span

Spiking Data – Initial Recommendation

Handling Spiking Data

Record spiking data at the 95% of span value

Consider it as a valid data point for quantification
and for CEMS data availability

Incorporate a backstop measure to prevent excess
spiking data over 95% of span value

Spiking data – Initial Recommendation – cont.

Backstop Measure

Flag all spiking data points

For each calendar quarter, calculate the percentage of one-minute spiking as:

$$\% = \frac{\text{Amount of one-minute spiking data points}}{\text{Total amount of one-minute data points}} \times 100$$

When the percentage is over 1%* for any two calendar quarters ** in a consecutive four calendar quarters period

Require a higher span range

* Equivalent to 14.4 minutes/day or 1,296 minutes/quarter

** Those two quarters do not need to be consecutive

Spiking Data – Defining the Backstop Measure

For the purpose of calculating percentage of one-minute spiking:

- One-minute spiking data points should include:
 - All the one-minute data recorded during unit operation that are greater than 95% of the single full span range (FSR) or the higher (or highest if more than 2 ranges) span of multiple span ranges, excluding CEMS out-of-control period (discussed in next slide)
- Total amount of one-minute data points should include:
 - All the one-minute data recorded during unit operation, excluding CEMS out-of-control period

Alternative Data Acquisition for CEMS Out-of-Control Period

- What is CEMS out-of-control period
 - Whenever the facility fails a QAQC test, or fails to conduct the test when it is due
 - It begins with the hour of completion of the failed test (or the hour when it is due) and ends with the hour of completion of a passing test
- CEMS data during CEMS out-of-control period
 - All data generated by the CEMS shall be deemed invalid
 - CEMS data may not be used in calculating emission compliance nor be counted towards meeting minimum data availability
- Main concerns for CEMS out-of-control period
 - Affects data availability
 - When data availability falls below a threshold, the CEMS would be subject to subsequent requirements

Alternative Data Acquisition for CEMS Out-of-Control Period

- Existing options for alternative data acquisition when emissions data is not collected by the permanently installed CEMS
 - Rule 2012 Chapter 2 :
 - District Method 7.1 for a minimum of 12 samples over a 1-hour period
 - District Method 100.1 -Instrumental Analyzer Procedures for Continuous Gaseous Emission Sampling
 - Process curves or load curves
 - A certified standby CEMS (such as in a mobile van or other configuration)
 - Rule 218/218.1:
 - No existing rule language

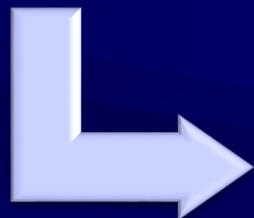
Alternative Data Acquisition for CEMS Out-of-Control Period - Initial Recommendation

- Propose two options from Rule 2012 for alternative data acquisition during CEMS out-of-control period
 1. District Method 100.1
 2. A certified standby CEMS
- Other options in Rule 2012 were never utilized and are deemed impractical

Emission Reporting

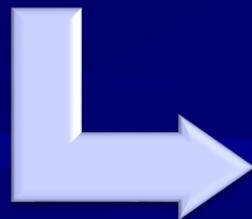
R2012 vs.
R218/218.1

- R2012 - *Mass* emission reporting for RECLAIM
- R218/218.1 – *Concentration limit* compliance and excess emission determination



Reporting
Format

- PAR 218/218.1 will provide template forms to standardize the reports



Report
Submittal

- PAR 218/218.1 will establish electronic reporting

Existing Emission Reporting Requirements by R218/218.1

Key Topic
#23

R218(f)(1) - Semi-annual emission reporting

- A summary of the concentration and/or emission rate data
- Any additional information to evaluate the accuracy and precision of the measurements
- Report within 30 days following the six-month period

R218(f)(2) - Excess emission

- Report within 24 hours or the next working day after such occurrence

R218(f)(3) - CEMS failure or shutdown exceeding 24 hours*

- Report within 24 hours or the next working day

* Additional reporting requirements will be implemented for the proposal on allowing CEMS shutdown at long term (≥ 168 consecutive hours) unit shut down

Emission Reporting – Initial Recommendation



* Additional reporting requirements will be implemented for CEMS long term shut down

** CROMERR - Cross-Media Electronic Reporting Rule by EPA to provide the legal framework for electronic reporting (<https://www.epa.gov/cromerr>)

Semi-Annual Report Draft Template Form -- Concept Only

**Key Topic
#23**

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT		Form 218-SE	
<p>Rule 218 Semi-Annual Emission Summary Reporting Form For Continuous Emissions Monitoring System (CEMS)</p> <ul style="list-style-type: none"> Please fill out the following information using one form for each CEMS This reporting form is recommended for Rule 218(f)(1) compliance only Maintain records and calculations (that constitute this report) on site and provide to Executive Officer or designee upon request 			
SECTION A - FACILITY INFORMATION			
Reporting Period: January – June <input type="checkbox"/> or July – December <input type="checkbox"/>		Yes <input type="checkbox"/> or No <input type="checkbox"/>	
Facility ID: _____		Facility Name: _____	
Facility Address (Equipment location): _____			
State: _____		City: _____ Zip: _____	
Mailing Address (if different from above): _____			
State: _____		City: _____ Zip: _____	
SECTION B – EMISSION SOURCE INFORMATION			
Source Permit No. (Or Application No.): _____		Source Description: _____	
Control Device Permit No. (Or Application No.): _____		Control Device Description: _____	
Emission Limit (e.g., 10 ppm)		Diluent Correction (e.g., @ 3% O ₂)	
Data Averaging Interval for the Limit (e.g., 15 consecutive minutes)			
NO _x			
CO			
Other(s) ()			
SECTION C – CEMS ANALYZER INFORMATION			
Analyzer	Manufacturer	Model No.	Certified Span Range(s):
NO _x			
O ₂			
CO			
Other (s)			
Final Certification Date: _____			
SECTION D – SEMI-ANNUAL EMISSION AND CEMS STATUS SUMMARY (Q1 – first three months of this period; Q2 – last three months of this period)			
Total Source Operating Time (in hours): _____		Total CEMS Operating Time (in hours): _____	
Number of occurrences: _____			

Form 218-SE			
CEMS failure or shutdown which exceeds 24 hours	For each occurrence	date/time	Duration (hours)
Data availability:	NO _x : Q1 _____%; Q2 _____%		
	Diluent Gas (O ₂ or CO ₂): Q1 _____%; Q2 _____%		
	CO: Q1 _____%; Q2 _____%		
	Other pollutant(s) (): Q1 _____%; Q2 _____%		
Percent of 1-minute data over 95% of span range (spiking data):	If < 95% for any of above, describe corrective actions taken:		
	Q1 _____%; Q2 _____%		
SECTION E - EXCESS EMISSIONS		SECTION F - CEMS FAILURE OR SHUTDOWN	
1. Duration (in hours) of excess emissions in reporting period due to:		1. CEMS downtime (in hours) in reporting period due to:	
a. Start-up or shut down		a. Monitor equipment malfunctions	
b. Control equipment problems		b. Non-Monitor equipment malfunctions	
c. Process problems		c. Quality assurance calibration	
d. Other known causes		d. Other known causes	
e. Unknown causes		e. Unknown causes	
2. Total duration of excess emissions		2. Total CEMS downtime	
3. Total estimated excess emissions (in lbs.)		3. Total CEMS downtime that is not granted by Rule 218 (f)(3) and xxx	
SECTION G – AUTHORIZATION/SIGNATURE			
I hereby certify that all information contained herein and information submitted with this report are true and correct.			
Print Name: _____		Title: _____	
Signature: _____		Date: _____	
Email address: _____		Phone Number: () - _____	

Deviation Report Draft Template Form – Concept Only

**Key Topic
#23**



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Rule 218 Deviation Reporting Form
For Continuous Emissions Monitoring System (CEMS)

Form 218-D

- Please fill out the following information using one form for each CEMS
- This reporting form is recommended for Rule 218(f)(2) through (f)(4) compliance only
- Maintain records and calculations (that constitute this report) on site and provide to Executive Officer or designee upon request

SECTION A - FACILITY INFORMATION

Reporting Period: January – June or July – December Year: _____ Title V: Yes or No

Facility ID: _____ Facility Name: _____

Facility Address (Equipment location): _____

State: _____ City: _____ Zip: _____

Facility Mailing Address (If different from above): _____

State: _____ City: _____ Zip: _____

SECTION B – REPORTING OF EXCESS EMISSIONS, AND CEMS FAILURE AND SHUTDOWN

1. This notification is to report a(n)

Type of Incident	Report Due
a. <input type="checkbox"/> Excess Emission under Rule 218(f)(2)	Within 24 hours or next business day after such occurrence
b. <input type="checkbox"/> CEMS failure or shutdown exceeding 24 hours under Rule 218(f)(3)	Within 24 hours or next business day for CEMS failure/shutdown exceeding 24 hours
c. <input type="checkbox"/> CEMS scheduled shutdown during the emission source (unit) long term shutdown under Rule 218(f)(4)	Within 24 hours or next business day for CEMS scheduled shutdown

Form 218-D

2. For Incident 1a under Rule 218(f)(2):

a. Emission source (unit) application # or Permit #: _____

b. Unit description: _____

c. Cause of the excess emissions: _____

d. Corrective actions taken: _____

e. Summary of excess emissions:

Pollutant (e.g., NOx)	Emission limit	Excess Emissions				
		Date	Start time	End Time	Total Duration	Excess Emissions (lbs)

3. For Incident 1b under Rule 218(f)(3):

a. Emission source (unit) application # or Permit #: _____

b. Unit description: _____

c. The CEMS was shut down on _____ (Date) at _____ (Time)

d. Cause of the CEMS failure or shutdown: _____

e. Is the unit operating? Yes No
(A) If no, when did the unit cease operation? _____ (date and time)

f. Is a petition for an interim variance filed? Yes NO
(A) If yes, when was it filed? _____ (date)

4. For Incident 1c under Rule 218(f)(4):

a. The initial notification (Dialing 1-800-cut-smog), required 96 hours prior to this scheduled CEMS shutdown, was reported by _____ (Name) on _____ (Date) at _____ (Time) with a notification # _____

b. The emission source (unit) was shut down on _____ (Date) at _____ (Time) with the following reason: _____

c. During the period of unit shut down, which action has been taken to show zero fuel flow to the unit:

- Disconnecting the fuel line with flanges placed at the both ends of the disconnected fuel line
- A fully operational quality assured fuel meter that is solely dedicated to this unit indicating zero fuel flow
 - i. Fuel meter model #: _____ and Serial #: _____
 - ii. Fuel meter reading at the time of unit shut down: _____

d. The CEMS was shut down on _____ (Date) at _____ (Time)

e. The projected date for the unit restart: _____

f. A final notification (Dialing 1-800-cut-smog) shall be filed 96 hours period to this scheduled CEMS restart

CROMERR

- A web registration will be required to comply with EPA's CROMERR standards for electronic reporting
- The web registration process of Rule 1403 (implemented since November 1, 2016) could be referenced
(<http://www.aqmd.gov/home/rules-compliance/compliance/asbestos-demolition-removal/r1403-web-app>)

Electronic Reporting

- The electronic reporting is expected to be established in the second quarter of 2020
- Reporting forms will be reviewed and finalized along with the rulemaking
- Other details of electronic reporting will be discussed with the working group in the first and second quarters of 2020

Address Comments

Response to Comment on EDR

Explain
Electronic Data
Reporting (EDR)
for QAQC test
results

- Electronic mail to rataedr@aqmd.gov
- For each submittal, include the following files
 - EDR worksheet - EDR_Rata.xls
 - Letter of Authenticity - EDR_Letter.doc
 - Instructions & Field List – EDR_Readme.doc
 - Facility Code List – EDR_Codes.pdf
- Instruction sheet is available and will be updated

Response to Comment on 7-Day Drift Test – cont.

Clarify 7-Day drift test

- Test is specified in the certification testing guidance document
- Test is required to be conducted for 7 consecutive CEMS operating days, regardless if the unit is on or off
- A hands-off test without any adjustment allowed during calibration and prior to the high scale calibration being completed
- No manual adjustment should be conducted during any part of this test

Response to Comment on Calibration

Require calibration only when the unit is restarted after long term unit shut down (Key Topic #17)

- The initial recommendation is to calibrate the CEMS before source restart and any emissions are detected
- Ensures the integrity of the system and prepares the CEMS for subsequent monitoring
- Staff believes the initial recommendation should be maintained

Response to Comments on non-QA operating quarter

Define “non-QA operating quarter” as Part 75 when QAQC is not required

- 40 CFR Part 75 QA operating quarter
 - 40 CFR § 72.2 defines a “QA operating quarter” as a calendar quarter in which there are at least 168 operating hours for the unit
 - Deadline for a quarterly linearity check or RATA may be extended for a “non-QA operating quarter” with certain conditions
- PAR 218/218.1 will provide equivalent relief
 - Allow CEMS non-operation during long term (≥ 168 hours) unit shut down
 - Allow RATA to be postponed during unit non-operation and then conducted within 14 days after unit restart (similar to RECLAIM)

Recap – Key Topics Discussed today

Initial or additional recommendation was provided for each topic below:

21. Spiking data (data over 95% of span) – valid for quantification and data availability, but a higher range may be required if it occurs often
22. Alternative data acquisition for CEMS out-of-control period - District Method 100.1 or a certified standby CEMS
23. Reporting – Establishing electronic reporting

Next Steps – Future Discussion

- Other key topics?
- Draft rule language

Next Steps - Future schedules

- Next Working Group Meeting – January, 2019
- Public Workshop – First Quarter of 2020
- Public Hearing – First/Second Quarter of 2020

Staff Contacts

Rule 218/218.1 Development

- Yanrong Zhu
Air Quality Specialist
(909) 396-3289
yzhu1@aqmd.gov
- Gary Quinn, P.E.
Program Supervisor
(909) 396-3121
gquinn@aqmd.gov

General and Landing Rule Contacts

General RECLAIM Questions

- Michael Morris
Planning and Rules Manager
(909) 396-3282
mmorris@aqmd.gov
- Kevin Orellana
Program Supervisor
(909) 396-3492
korellana@aqmd.gov

Rule 1146 series

- Lizabeth Gomez
Air Quality Specialist
(909) 396-3103
lgomez@aqmd.gov

Rule 1110.2

- Kevin Orellana
Program Supervisor
(909) 396-3492
korellana@aqmd.gov

General and Landing Rule Contacts – cont.

Rule 1135

- Uyen-Uyen Vo
Program Supervisor
(909) 396-2238
uvo@aqmd.gov

Proposed Rule 1109.1

- Sarady Ka
Air Quality Specialist
(909) 396-2331
ska@aqmd.gov

Rule 1134

- Michael Morris
Planning and Rules Manager
(909) 396-3282
mmorris@aqmd.gov

Proposed Rule 1179.1

- Melissa Gamoning
Assistant Air Quality Specialist
(909) 396-3115
mgamoning@aqmd.gov

General and Landing Rule Contacts – cont.

Proposed Rule 1147.1

- Shawn Wang
Air Quality Specialist
(909) 396-3319
swang@aqmd.gov

Proposed Rule 1147.2

- James McCreary
Assistant Air Quality Specialist
(909) 396-2451
jmccreary@aqmd.gov

Proposed Rule 1150.3

- Lisa Wong
Assistant Air Quality Specialist
(909) 396-2820
lwong@aqmd.gov

Proposed Amended Rule 1117

- Bob Gottschalk
Air Quality Specialist
(909) 396-2456
rgottschalk@aqmd.gov