

june 2008

Regulatory Roundup

Are You an Ozone Season Only (OSO) Reporter?

If the answer is yes, then you are already aware of the revised linearity and RATA requirements beginning this ozone season. The new rule required a pre-season/2nd quarter linearity check in the month of April. If this test was not completed by April 30th, conditional data validation may be used for a period of up to 168 units or stack operating hours. If the test is passed on the first attempt within the conditional data period, no data loss is incurred. Also, a linearity check is required in the 3rd quarter, by July 30th, or within a

168 operating hour period of conditional data validation. The new rule also requires that a RATA be done the earlier of either (1) the 1st quarter of the year; (2) in the month of April; or (3) within a subsequent 720 operating hour period of conditional data validation. If the required linearity or RATA is not performed by the applicable deadline, data is invalid at the expiration of the conditional data validation period and remains invalid until the required test is passed.

A new version of EPA's Monitor Data Checking (MDC) software was released in May to address these changes. Notwithstanding the RATA requirement outlined above, EPA will accept RATAs that were done in 2007 under the previous version of the rule (which was in effect at that time) in order to validate data for the 2008 ozone season. The new restriction on the timing of the RATAs for ozone season only reporters will be enforced beginning with the 2009 ozone season.

ECMPS Update

Sources that wish to officially switch to ECMPS must register in 2008 by the required deadlines below.

Quarter	Deadline to Register
2008 Quarter 3	August 1, 2008
2008 Quarter 4	November 1, 2008

A registration page has been posted on the CAMD website at: <http://www.epa.gov/airmarkets/business/ecmps/registration.html>

There are some important issues to be aware of with respect to switching to ECMPS in 2008... Sources that switch must submit data for all units and must be certain that they are ready to use it. Sources that register to use ECMPS will not be able to use ETS-FTP or MDC to make official submissions without contacting CAMD first. Once the official switch to ECMPS is made, ECMPS must continued to be used for all future submittals.

EPA released the latest versions of the ECMPS reporting instructions and the XML schemas on March 11, 2008. The ECMPS reporting instructions must be used by all sources who have registered to begin submitting their EDRs using the ECMPS Client Tool in 2008. To get access to these latest documents, go to: <http://www.epa.gov/airmarkets/business/ecmps/reporting-instructions.html> or <http://www.epa.gov/airmarkets/business/ecmps/technical-info.html>

While many of the updates to the latest reporting instructions relate to the reporting of data for the Acid Rain Program and the Clean Air Interstate Rule, a number of updates relate to the reporting of mercury emissions under the Clean Air Mercury Rule. As most of you know, on February 8, 2008, the U.S. Court of Appeals for the District of Columbia Circuit issued its decision in the State of New Jersey v. EPA, No. 05-1097, and vacated the Clean Air Mercury Rule. The Appeal of that ruling was denied on May 20, 2008. EPA has communicated that they intend to take appropriate action in the future concerning the updates relating to mercury emissions. Meanwhile, sources should not report any mercury emissions data to EPA until further notice.

ECMPS Production Version 1.0

Production version 1.0 of the ECMPS Client Tool was released on April 1 to sources that were officially registered to report in the new XML format for data from the first quarter of 2008. Only those facilities (DRs/ADRs and designated agents) that officially registered to report in XML have access to this new version of the Client Tool.

Part 75 Final Rule Published

The final rule revisions to Part 75 were published in the Federal Register on January 24, 2008. These revisions are prompted primarily due to EPA's re-engineering associated with the collection and processing of emissions, monitoring plan, quality assurance and certification data. Other revisions address mercury monitoring, clarify issues that have been raised during program implementation, fix specific inconsistencies in rule provisions and/or update references.

This summary is organized into four main categories as outlined in Table I below. The mercury provisions present in the final rule have not been included in this document because EPA is in the process of making core decisions as the result of the CAMR being vacated.

TABLE I: Part 75 Rule Revision Categories

Category A	Effective for Q1 2008 Reporting
Category B	Effective for Official Submittal of XML EDRs
Category C	Effective on January 1, 2009
Category D	Other Revisions & Former Rule Clarifications

Category A focuses on those rule revisions that are in effect for Q1 2008 reporting (regardless of reporting format, i.e. old RT/COL EDR or XML EDR). Category B focuses on those rule revisions that are in effect for facilities that have officially switched reporting formats to XML, whether in the 2008 transition year or in 2009. Category C focuses on those rule revisions that will be in effect beginning January 1, 2009 for all sources. Finally, Category D focuses on minor rule revisions and former rule clarifications.

Category A - Effective for Q1 2008 Reporting

Initial Monitoring Plan

- Submittal deadline reduced to 21 days prior to commencing certification testing (same as test notification requirement)
- EPA Form 7610-14 Certification Application retired and no longer required

NOx Mass Methodology

- Only one active methodology is permitted (i.e. NOXC or NOXR)
- Backup systems must use the same methodology as the primary system

Alternate Substitute Data for Controlled Units

- Removed the petition requirement to use the max controlled values from applicable lookback periods when control parameters indicate proper operation
- Added the concept of substituting MEC/MCR when the PMA < 80.0% and data is available to show proper operation of controls
- The old rule required MPC/MER regardless of control operation

Fuel Factors

- Separated default F-factors for bituminous and subbituminous coal
- Added F-factors for petroleum coke and tire derived fuel
- Clarified that sources burning combinations of fuels may use the highest (worst-case) F-factor for any op hour, in lieu of proration
- Note: The change in default fuel factors may be reported in either Q1 or Q2 of 2008

Fuel Type	Fd-Factor (dscf/mmBtu)	Fc-Factor (scf CO2/mmBtu)
Bituminous coal	9,780	1,800
Subbituminous coal	9,820	1,840
Petroleum coke	9,830	1,850
Tire derived fuel	10,260	1,800

Response/Cycle Time Procedure

- Revised to reverse the sequence from calibration gas to stack gas
- EPA notes that the stability criteria are much easier to meet and that it results in a more accurate indication of a monitors true response time

OSO Reporter Revised Linearity and RATA Requirements

Time Period	Requirement
Q1 January February March	RATA
Q2 April May June	Linearity by April 30th
Q3 July August September	Linearity by July 30th

- Conditional data validation may be used if the required test is not completed by due date (unless unresolved by the end of Q3)

Category B - Effective for Official Submittal of XML EDRs

Changes for LME Units

- Added use of a site-specific default SO₂ emission rate for fuel oil and a fuel and unit-specific default NO_x emission rate using data from a P60/75 or State CEMS
- Revised the UOM for Eq. LM-5 and LM-6 so the equations would be correct (rates were previously summed)
- Added less stringent testing requirements for LME units with very low capacity factors (2.5% for a 3 year average and 4.0% for a single year), both for initial certification testing and retests

Default Moisture Values

- Added defaults for natural gas-fired boilers (14% and 18%)

Missing Data Substitution

- Revised to specify that the new “step-wise” approach should be used as opposed to the “block” approach historically applied

Recordkeeping & Reporting

- Modified to reflect the new XML format while leaving in place the old format requirements throughout 2008

Diluent Monitoring Systems

- Revised to specify that diluent monitoring systems for HI must now be identified and QA'd as a stand-alone monitoring system

Diluent Capping

- Revised to limit use to only NO_xR calculations

Long Term Cold Storage (LTCS)

- Definition added to specify the complete shut down of a unit intended to last for at least 2 years
- Use of this provision requires that DRs notify EPA so they can stop reporting EDRs for quarters when in LTCS
- When the unit is expected to resume operation, the DR must notify EPA of the intent to start back up and must recertify all the monitoring systems (§ 75.61(a)(3) and (7))

Steam Load Reporting

- Added this 3rd option for reporting load data in units of mmBtu/hr of thermal output to allow allowance allocations to be made on an electrical or thermal output basis instead of HI basis (future programs)

3-Load Flow RATA & RATA Grace Period

- Modified the language requiring a 3-load flow RATA “once every 20 calendar quarters” (old was “5 consecutive calendar years”)
- Revised the method for determining the next RATA after a grace period test to go by the quarter in which the test was actually completed

Category C - Effective on January 1, 2009

EPA Protocol Gas Verification Program (PGVP)

- Definition for “EPA Protocol Gas Verification Program” added to require gas suppliers that sell EPA Protocol Gas to participate in this new program
- Effective January 1, 2009 to allow industry time to organize and implement

- Definition of “Qualified Individual” added to support this requirement
- This applies only for RATAs, Appendix E tests and LME tests, etc. NOT for daily calibrations, linearity testing, cycle/response time testing or the 7-day calibration error test

Air Emissions Testing Bodies (AETB)

- Definition for “Air Emissions Testing Bodies” added to require that stack testing companies comply with ASTM D7036-04 when conducting Part 75 stack testing activities (i.e. RATAs, Appendix E tests, and LME tests, etc.)

For more detail on either the EPA PGVP or AETB...

- See the preamble to the final rule (73 FR 4325-4327); or
- Contact John Schakenbach at (202) 343-9158 or schakenbach.john@epa.gov

Category D Other Revisions & Former Rule Clarifications

Monthly GCV of PNG and NNG

- EPA added language to clarify that the sampling frequency for the GCV of Natural Gas and Pipeline Natural Gas is Monthly
- Arithmetic Average of All samples (hourly, daily, weekly, etc) is used to calculate the monthly GCV
- Value applied to the entire month if multiple samples obtained within the calendar month
- Value applied from date of sampling if only one (1) sample taken in a calendar month
- Real time GCV monitoring only allowed for other gaseous fuels with “high GCV variability”

Offline Calibrations

- Clarified the restrictions and limited use of off-line calcs to validate data
- For a source that has passed the off-line calibration demonstration, data is valid for a particular operating hour if an off-line cal was passed within 26 clock hours prior to that hour and an on-line cal is passed within 26 unit operating hours prior to that hour

7-Day Calibration Tests

- Clarified that peakers are exempt for initial certification
- Any required test must be performed online

Linearity Exemptions for SO₂ and NO_x Spans 30 ppm

- Clarified that the exemption applies to initial certification, recertifications and ongoing QA

QA for Dual Range Analyzers

- Clarified that a successful hands-off QA test must be passed on both ranges of a dual range analyzer to end an OOC period if that same test is failed (or aborted) on either range

Range	QA Test	Data Status
A	Failed on either	OOC on both
B		
A	Passed	Valid
B	Expired	OOC

Definition of “Capacity Factor”

- Modified to require the use of the max observed hourly gross load (if > than the nameplate capacity)

Incorporation by Reference

- Changed to incorporate the reference standards listed in § 75.6
- Included ASTM D5453-06 in the list of acceptable methods in § 75.6 and § 2.2.5 of Appendix D

References to Part 60 Reference Test Methods

- Updated with restrictions (no dilution of gas standards allowed for P75 tests, no use of “take probe” and no dynamic spiking in lieu of standard method QA)
- Removed the reference to Method 20 for Appendix E testing and replaced with a direct reference to Method 7E with specified traverse points

Probe Leakage Electronic Audit

EPA has recently begun conducting electronic audits on data submitted in the quarterly EDR files to identify units with potential probe leakage or other CEMS issues that may lead to under-reporting of emissions from the affected unit. This audit is independent of the data checks conducted on the files through MDC or EPA mainframe and feedback associated with those requirements. EPA has developed a control chart methodology for conducting these audits and will use the reported CO₂ data as the indicating parameter of a potential CEMS issue.

The data values from the EDR files used for this analysis are:

- 1) Hourly CO₂ concentration
- 2) Load Bin information
- 3) MODC data
- 4) Completion date of most recent CO₂ RATA

To complete the analysis, data reported in the quarterly file from the most frequently used Load Bin is compared to a baseline average created from the data collected in the same load bin in the first 30 days after the completion of the previous RATA. Data for the baseline timeframe and period of interest are reduced to daily averages based on a minimum of 6 hours of operation within the calendar day. The daily averages for the baseline period are statistically analyzed to calculate the mean value and upper and lower control limits. The control limits used for this evaluation are ± 3 standard deviations from the mean.

Whenever 7 or more consecutive daily average values are below the lower control limit, EPA will send the Designated Representative a letter requesting an explanation for the discrepancy and indicate that the resolution of the matter may result in possible data substitution.

EPA is recommending that sites implementing this analysis as part of their onsite Quality Assurance procedures also include a warning level at ± 2 standard deviations from the mean value. As part of the QA procedure, EPA recommends investigation whenever the following are observed:

- 1) Any daily average exceeds the upper or lower control limit
- 2) 3 of 4 consecutive daily averages fall outside the warning level
- 3) 8 or more consecutive daily averages fall on one side of the baseline mean value

A copy of the White Paper and PowerPoint presentation given by Matthew Boze at the EPRI conference can be located at the following website under the EPRI CEM User Group Materials:

<http://www.epa.gov/airmarkets/workshops/index.html>

The ECMPS Transition Has Begun

First Quarter brought the beginning of the transition period to XML and, along with it, many questions and concerns. The biggest lesson that can be learned from the first official XML reporting period is this: **Preparation and Planning will be the keys to success.**

This transition is going to be a process. It is a process that can, and will, take a lot of time and patience to complete. All of the facilities that registered to officially switch to XML in Quarter 1 completed the submission of the necessary files on time, but not without some difficulties and late nights along the way. Every facility put in a significant amount of time in one or more of the following areas: Updating the Monitoring Plans in the ECMPS client tool, correcting Date Inconsistencies within the CAMD Business System, Resubmitting Past QA test records and fine tuning the existing Software Configurations for the new XML requirements.

To be successful, it is crucial to begin to identify the corrections and updates needed through the current testing session, plan the necessary time to resolve the matters and then use that information to determine which quarter the official transition should be made. To register for the current test session, go to the following location on the PQA website and register up to ten (10) facilities:

<http://ecmps.pqa.com/register.shtml>

In addition to using the test session to prepare, please install an XML viewer program (Microsoft offers a free one called XML Notepad) on the server. This is crucial for viewing and support when troubleshooting emissions files. The emissions files can range from 1 MB for a non-operating quarter to well over 10 MB for a full quarter of operation. Internet Explorer is the default program for this file type but cannot handle files of this size very well.

The Next Transition: CO₂ Reporting

EPA recently announced that they have begun work on developing the guidelines and thresholds for mandatory GHG emissions reporting. As part of the Consolidated Appropriations Act of 2008,

EPA has been allotted funds for this project and the Agency is required to publish a draft rule by September 2008 for all sectors of the economy for six GHGs [carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆)]. Mandatory reporting is set to begin by June 2009 according to the Bill that President Bush signed.

This mandatory reporting is intended to further enhance the knowledge currently gathered for the GHG Inventory report and will assist future policy makers when creating GHG programs. Abstracts and program contact information for the current items that EPA is working on related to GHG projects can be found on their new Action Initiation List, which will be published monthly online. Access to this list is available at the following location:

<http://www.epa.gov/lawsregs/search/ail.html#rptingofghg>

The Regional Influence

In addition to RGGI, two other regional programs are now in the planning stages to create GHG programs. The Western Climate Initiative (WCI) and the Midwestern Governors Association (MGA) Greenhouse Gas Accord have announced plans to implement Cap-and-Trade approaches as part of their overall goal to reduce GHG emissions. Between these three programs, over half of the states (as well as some of the Canadian Provinces and Mexican States) are actively participating in or observing the progress as part of their long term strategy to contain GHG emissions. All of these programs will likely have an influence on how a federal trading program is implemented, if that is the direction that EPA chooses. For more information on each program, visit the sites below:

<http://www.rggi.org/index.htm>

<http://www.westernclimateinitiative.org/index.cfm>

<http://www.midwesterngovernors.org/govenergynov.htm>

