

AIR/COMPLIANCE NEWS UPDATE

March 2004 Issue 8

NEW PERFORMANCE SPECIFICATION RELEASED FOR PM MONITORS

Author: Matthew C. Gregory, Project Scientist

EPA has finalized its Performance Specification 11 (PS-11): Specifications and Test Procedures for Particulate Matter (PM) Continuous Emission Monitoring Systems (CEMS) at Stationary Sources and Monitoring Requirements; and Procedure 2: Quality Assurance Requirements for PM CEMS at Stationary Sources. The final rule is available at EPA's Technology Transfer Network at <http://www.gpoaccess.gov/fr/browse.html>. The final rule establishes the initial installation and performance procedures that are required for evaluating the acceptability and ongoing performance of the PM CEMS. Some affected sources include power generation units and hazardous waste incinerators. There are several different types of PM CEMS technologies that are designed to sample continuously or by batch using in-situ or extractive sampling systems. Each type has site specific advantages; therefore, the type selected should be appropriate for the flue gas conditions at your source.

PERFORMANCE SPECIFICATION 11 (PS-11)

Initial PM CEMS Criteria

- The PM CEMS must pass 7-day zero and upscale drift checks (No greater than 2%, zero reference is between 0-20% and upscale reference is between 50-100% of the PM CEMS response range).
- If using sample volumes, a sample volume check must be completed and passed daily.

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NEW INTERSTATE AIR AND Hg RULES PROPOSED FOR POWER PLANTS

Author: Rebekah Merrill, Environmental Intern

In the January 30, 2004 Federal Register, the United States Environmental Protection Agency (USEPA) proposed new air rules for reducing emissions of sulfur dioxide (SO₂), nitrogen oxides (NO_x), and mercury at power plants. The focus of the Interstate Air Quality Rule is to limit emissions of 29 upwind states that are significantly contributing to fine particle (PM_{2.5}) and ozone pollution problems in other downwind states in the eastern United States. The rule will require the upwind states to revise their State Implementation Plans to include control measures to reduce emissions of SO₂, which is a precursor to PM_{2.5} and NO_x. Reducing upwind precursor emissions will assist the downwind PM_{2.5} and 8-hour ozone non-attainment areas in achieving the National Ambient Air Quality Standards (NAAQS). The required reductions are based on controls that are known to be highly cost effective for electric generating units. The USEPA is proposing that the emission reductions be implemented in two phases. The first phase will commence in 2010 and the second phase in 2015. This proposal will result in the deepest cuts in these emissions from power plants in more than a decade. This action also includes model multi-state cap and trade programs for SO₂ and NO_x.



In a separate but closely related action, USEPA proposed a rule to permanently cap and reduce mercury emissions from power plants. The USEPA believes it makes sense to address mercury, SO₂, and NO_x emissions concurrently. Two alternatives have been proposed by the USEPA for controlling emissions of mercury from power plants: the first proposed rule requires utilities to install "maximum achievable control technologies" (MACT); the second is a rule establishing a "cap and trade program" for mercury emissions from new and existing utilities. A new monitoring specification and test method were also proposed.

The USEPA will take comments on both regulations until March 30, 2004; contact William Maxwell at 919-341-5450 or Maxwell.bill@epa.gov.

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- Any auxiliary monitors needed to convert data must meet calibration drift (No greater than 2%).
- If flue gas flow rates vary by more than 10%, the PM CEMS sample must be isokinetic.

CEMS Correlation Testing

PS-11 performance procedures are based on emission correlations of PM CEM responses and emission concentrations of a reference method. This correlation is determined by conducting an initial correlation test. Using the correlation test data, the correlation is developed by regression analysis following a linear, polynomial, logarithmic, exponential, or power correlation model. Each model has its own set of equations. The correlation data collected should be representative of the full range or normal operating conditions of the source if the range of operation does vary for that source.

**Procedure 2**

Periodic evaluations of the PM CEMS using a combination of various quarterly audits and daily calibration procedures will ensure that the PM CEMS data quality is maintained. Sources must comply with these quality control and quality assurance measures immediately following successful completion of the correlation testing.

Quarterly

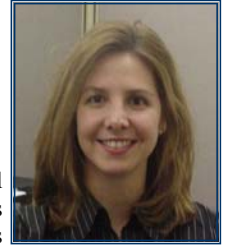
An Absolute Correlation Audit (ACA) and Sample Volume Audit (SCA) must be conducted once per calendar quarter no closer than 2 months apart. A Response Correlation Audit (RCA) or a Relative Response Audit (RRA) can be conducted in place of an ACA.

Reporting

Report all drift and accuracy data of any quarterly audit along with all emissions report data in a Data Assessment Report (DAR). Keep audit, emission, and calibration data for a period of 5 years.

FINAL NESHAP FOR LIME MANUFACTURING PUBLISHED

Author: Kimberly D. Coy, Senior Engineer



EPA finalized the Lime Manufacturing National Emission Standard for Hazardous Air Pollutants (NESHAP) on January 5, 2004 (69 FR 394). This rule applies to facilities that own or operate a lime manufacturing plant that is located at, or is part of a major source of hazardous air pollutants (HAPs). A brief summary of the rule follows:

The EPA is requiring that all lime manufacturing facilities potentially subject to the final NESHAP demonstrate, with an emissions test, that they emit less than 10 tpy HCl if they wish to claim area source status. The EPA is allowing three (3) test methods:

- EPA Method 320 in Appendix A to 40 CFR Part 63;
- EPA Method 321 in Appendix A to 40 CFR Part 63; and
- ASTM Method D 6735-01 (it is required that the paired-train option in Section 11.2.6 and the post-test analyte spike option in Section 11.2.7 be used).

Compliance Dates

- Compliance Date for Existing Sources – January 5, 2007.
- Compliance Date for New Sources Constructed before January 5, 2004 is January 5, 2004, and all performance tests must be conducted by July 5, 2004.
- Compliance Date for New Sources Constructed after January 5, 2004 is the initial date of start-up and all performance tests must be conducted no later than 180 days after start-up.

The affected sources include 1) lime kilns and its associated coolers; and 2) individual processed stone handling (PSH) systems. A PSH system includes all equipment beginning at the stone storage bin or open storage pile and ending where the processed stone is fed into the kiln. Emission units in a PSH system include conveying system transfer points, bulk loading or unloading systems, screening operations, bucket elevators and belt conveyors. No other material processing operations (MPO's) are subject to this rule.

The rule includes emission limitations, operating limits, and compliance testing requirements.

FINAL MACT RELEASED FOR MISCELLANEOUS COATING MANUFACTURING, SUBPART HHHHH

Author: Jill Merrill, President

The NESHAP for miscellaneous coating manufacturing facilities was published in the Federal Register on December 11, 2003. The rule establishes emission limits and work practice requirements for new and existing miscellaneous coating manufacturing operations, including process vessels, storage tanks, wastewater, transfer operations, equipment leaks, and heat exchange systems. Initial performance tests will be required on control devices used to meet the requirements.



Operating parameter ranges will be defined during the tests to demonstrate ongoing compliance. Some small control devices will be permitted to use a design evaluation to demonstrate compliance instead of testing. The leak detection provision will require periodic checks using instrumentation. The initial notification is due April 9, 2004 for existing affected sources.

After the compliance date, semi-annual compliance reports will be required to document monitoring, testing, excess emissions, and other data. For further information: <http://www.epa.gov/ttn/atw/mcm/mcmmpg.html>

RMP UPDATES DUE JUNE 2004 WITH PROPOSED EPA CHANGES LOOMING

Author: Jill Merrill, President

Since most facilities submitted their RMP's June 21, 1999, they will be required to submit a fully updated RMP by June 21, 2004. Owners should review an RMP checklist provided by EPA to perform their update. (See: EPA 550-F-04-001.) On July 31, 2003, USEPA proposed to revise the Part 68 Risk Management Plan (RMP) regulation to finalize the revisions and plans soon. The RMP rule was written to prevent hazardous accidental releases from occurring and ensuring agency awareness of the potential hazards at facilities. A primary requirement of the rule was for affected sources to develop a comprehensive RMP. The proposed revisions will require facilities to update their plan within six months of an accident and within one month of a change in their emergency contact information in their plan. Additional information must be added, including the emergency contact's email address, the address of any contractor preparing an RMP and the purpose for submitting any revisions to an RMP. EPA may also require injury and illness statistics be submitted with the RMP.

NOTE:

The EPA published the final National Emission Standards for Hazardous Air Pollutants (NESHAP) rule for Surface Coating of Metal Cans on November 13, 2003 (68 FR 64432). The compliance date for existing sources is November 13, 2006. For new or reconstructed sources, if the initial startup of the source is before the promulgation date, the compliance date is November 13, 2003; if the initial startup of the new or reconstructed source is after the promulgation date, the compliance date is the initial start-up date.

SITE REMEDIATION FINAL RULE, SUBPART GGGGG

Author: Jill Merrill, President



On October 8, 2003, the EPA promulgated a national emission standard for hazardous air pollutants (NESHAP) for the site remediation source category. The final rule will apply to a site that 1) is a major source, 2) has an affected "MACT" Source, and 3) is conducting remediation. Table 1 of Subpart GGGGG lists the regulated HAPs. A remediation site is defined as a site where remediation technologies and practices are used to clean up contaminated soils, ground waters, or surface waters; or where there are certain stored or disposed materials that pose a potential threat to contaminate environmental media. A "MACT" Activity is an activity that is included within the scope of a MACT source category. Remediation sites that are subject to the rule are required to control emissions of organic HAP by meeting emissions limitations and

work practice standards reflecting the application of maximum achievable control technology (MACT). Control requirements include emission controls and work practice standards for tanks, process vents, remediation material management units, and equipment leaks. A Title V reopening will be required to incorporate remediation activities. Performance tests will be required for any carbon adsorption, condenser, process heater, or incinerator used to control HAP emissions.

The rule applies to site remediation activities that occur at a facility where non-remediation sources make it a major source of HAP emissions. Some site remediation sites regulated under the Comprehensive Environmental Response and Compensation Liability Act (CERCLA) or the Resource Conservation and Recovery Act (RCRA) are exempt from the final rule.

[68 FR 58171-58224] <http://www.epa.gov/ttn/atw/siterm/sitermpg.html>



HELPFUL SAFETY WEB SITES

- *Industrial Hygiene (<http://www.aiha.org/>)
- *MSDS (<http://www.ilpi.com/msds/index.html>)
- *Ergonomics (<http://www.iea.cc/index.cfm>)
- *EPA's AIRNow site (<http://www.epa.gov/airnow>)
- *International Toxicity Estimates for Risk (ITER) (<http://www.tera.org/iter>)
- *EPA Chemical Accident Histories and Investigations (<http://www.epa.gov/ebtpages/emeraccidechemicalaccidents.html>)
- *National Institute for Occupational Safety and Health - NIOSH (<http://www.cdc.gov/niosh/homepage.html>)
- *EPA's Integrated Risk Information System (IRIS) (<http://www.epa.gov/iriswebp/iris/index.html>)

EXTRA! EXTRA!

4 New MACTS to be Published Soon

EPA released notice late February that it has finalized 4 new MACTS including industrial boilers, plywood and wood products, stationary reciprocating internal combustion engines (RICE's), and coating for autos and light duty trucks. Watch for posting of the new rules on: www.epa.gov/ttn/oarpg

The rules will usually be published in the Federal Register within 2 weeks of announcement.

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- ◆ Storm Water Management Plans
- ◆ Soil and Water Sampling
- ◆ Risk Management Plan Development
- ◆ Emission Control and Monitoring Assistance
- ◆ NESHAP Planning (SSM Plans)



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