



The Compliance Assurance Monitoring Rule: A Summary

by Howard Eris, Enviroplan Consulting

An estimated 27,000 facilities will be subject to the compliance assurance monitoring (CAM) rule recently promulgated by the U.S. Environmental Protection Agency (EPA) under 40 CFR Part 64 (*Federal Register*, Vol. 62, No. 204, October 22, 1997).

The CAM rule is designed to satisfy monitoring and compliance certification requirements in the Part 70 operating permits program. The regulation establishes criteria that define the monitoring, reporting, and record keeping that must be conducted by regulated emissions sources to demonstrate ongoing compliance with emission limitations and standards. The time frame for compliance ranges from 180 days to more than five years.

This summary describes which facilities are subject to the rule, when they must comply, and what they must do to comply.

WHICH FACILITIES ARE AFFECTED?

The CAM rule applies to every pollutant-specific emission unit (PSEU) at a major source that is required to obtain a Title V operating permit under 40 CFR Part 70 and that satisfies the following three conditions:

1. The unit is subject to an emission limit or standard.
2. The unit uses a control device to

achieve compliance with the emission limit or standard.

3. The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than the amount that classifies the source as a major source under 40 CFR Part 70.

A PSEU refers to an emission unit treated separately for each regulated air pollutant under this rule. *Control device* means equipment, other than inherent process equipment, that is used to destroy or remove air pollutants prior to discharge to the atmosphere.

Certain emission units are exempt from the requirements of the CAM rule (see Table 1).

WHEN?

There are separate deadlines for large PSEUs and other PSEUs. A *large PSEU* refers to an emission unit with the potential to emit the applicable regulated air pollution in an amount, after taking into account applicable control devices, that classifies it as a major source under 40 CFR Part 70.

For large PSEUs, if the Title V application has not yet been filed or has been filed and has not yet been determined to be complete by the permitting authority on or after 180 days from rule publication in the *Federal Register* (deadline date), the owner or operator (owner) shall submit by this

deadline date the information required under the rule. Whether the information required under this rule must be submitted within 180 days or after that date is at the discretion of the permitting authority.

For large PSEUs that have submitted their Title V applications and have received a determination of completeness by the deadline date and for all other PSEUs subject to this rule, the owner shall submit the information required under the rule as part of an application for the renewal of the operating permit; i.e., five or more years in the future.

WHAT?

Emission units subject to the CAM rule must monitor the operation of their air pollution control devices to evaluate performance and report whether the emission units comply with applicable emission limits and standards (applicable standards).

The six major requirements that must be satisfied by an emission unit subject to the CAM rule include monitoring design criteria, submittal requirements, approval of monitoring, operation of approved monitoring, quality improvement plan (QIP) requirements, and reporting and record keeping requirements.

1. Monitoring Design Criteria

- (a) Select the indicators of emission

- control performance of the control device to be monitored (e.g., flare temperature).
- (b) Select the indicator range of values or conditions within which

Table 1. Pollutant-specific emission units exempt from the CAM rule.

1. Exempt Emission Limits or Standards

- (a) Emission limits or standards proposed by the Administrator after November 15, 1990 under sections 111 and 112 of the Clean Air Act (Act).
- (b) Stratospheric ozone protection requirements under Title VI of the Act.
- (c) Acid Rain Program requirements pursuant to sections 404, 405, 406, 407(a), 407(b), or 410 of the Act.
- (d) Emission limits or standards or other applicable requirements that apply solely under an emissions trading program approved by the Administrator that allows trading emissions within a source or between sources.
- (e) An emission cap that meets the requirements specified in 40 CFR Part 70.4(b)(12) or 71.6(a)(3)(iii).
- (f) Emission limits or standards for which a Title V operating permit specifies a continuous compliance determination method as defined in the CAM rule (40 CFR Part 64.1).

2. Exemption for Backup Utility Power Emission Units

- The CAM rule shall not apply to a utility unit, as defined in 40 CFR part 72.2, that is municipally owned if the owner or operator provides documentation in a Title V operating permit application that:
- (a) The utility unit is exempt from all monitoring requirements in 40 CFR part 75.
 - (b) The utility unit is operated solely to provide electricity during periods of peak electrical demand or emergency situations and will be operated as such throughout the Title V permit term.
 - (c) The actual emissions from the utility unit, based on the annual average emissions over the last three calendar years (or shorter period for units operating less than three years), are less than 50 percent of the amount required for a source to be classified as a major source and are expected to remain so.

there is reasonable assurance of compliance with the applicable standards.

- (c) Provide monitoring specifications to obtain data representative of the indicators being monitored (e.g., location of temperature sensor for flare).
 - (d) Provide verification procedures for new or modified monitoring equipment to confirm operational status.
 - (e) Provide quality assurance and control practices to ensure the validity of the monitoring data.
 - (f) Specify the data collection procedure to be used (e.g., computerized data acquisition system).
 - (g) Specify the frequency of monitoring and the period over which monitored data points will be averaged to determine compliance with applicable standards. Minimum requirements are:
 - (i) hourly monitoring with a minimum of four data points per hour for PSEUs with a potential to emit, after including the effect of control devices, that would classify the unit as a major source, and
 - (ii) some monitored data collection at least once every 24 hours for other PSEUs [permitting authority may approve reduced data collection frequency based on information presented by the owner].
 - (h) Most use continuous emission monitoring, continuous opacity monitoring, or a predictive emission monitoring system to satisfy CAM rule requirements if currently required to satisfy applicable standards.
- (a) A monitoring program that satisfies the monitoring design criteria described above.
 - (b) Justification for the proposed elements of the monitoring, which may consist of existing applicable monitoring requirements or presumptively acceptable monitoring detailed in the rule.
 - (c) Control device operating parameter data obtained during a prior or planned performance test of the control device in which emissions are measured under conditions specified in an existing applicable rule or otherwise under conditions of maximum emissions potential under anticipated operating conditions.
 - (d) If existing data from performance testing is unavailable:
 - (i) test plan and schedule for obtaining such data within 180 days of the approval of the Title V operating permit by the permitting agency, or
 - (ii) indicator ranges based on engineering assessments and other data, along with justification for why performance testing is unnecessary to establish indicator ranges.

3. Approval of Monitoring

The permitting authority shall approve the proposed monitoring as long as it satisfies the above monitoring design criteria. The authority shall at minimum include the following in the Title V operating permit:

- (a) The approved monitoring approach.
- (b) The definition of excursions of exceedances of the applicable standards in terms of the averaging period and the level(s) for the operating parameter(s) above which an excursion or exceedance occurs, where

2. Submittal Requirements

The owner shall submit the following to the permitting authority:

- excursion is defined as a departure from an established indicator range and where exceedance is defined as monitoring data indicating that emissions exceed the applicable standard.
- (c) The obligation to conduct monitoring.
 - (d) If appropriate, a minimum valid data availability requirement.
 - (e) If performance testing is required, an enforceable schedule for completing such testing with milestones.

Learn About CAM Rule Requirements at A&WMA Workshops

Requirements that businesses must meet to satisfy the compliance assurance monitoring (CAM) rule will be the focus of workshops offered by A&WMA in the following cities:

- New Orleans, LA**
January 22-23, 1998
- Salt Lake City, UT**
February 12-13, 1998
- Baltimore, MD**
March 26-27, 1998

The workshops will be held in cooperation with EPA's Office of Air Quality Planning and Standards. They are designed for state and local regulators responsible for implementing CAM and industry staff and management responsible for ensuring their facilities comply with clean air regulations.

The day-and-a-half program will address CAM requirements and the implementation schedule. The sessions examine the EPA's CAM technical guidance document in depth and explore CAM's relationship to the credible evidence rule.

To register for a CAM workshop, contact Member Services, Air & Waste Management Association, One Gateway Center, Third Floor, Pittsburgh, PA 15222; phone (800) 270-3444; fax (412) 232-3450.

4. Operation of Approved Monitoring

- (a) Monitoring shall commence upon issuance of the Title V permit or by such later date specified in the permit.
- (b) Owner shall properly maintain the monitoring.
- (c) Owner shall keep the monitoring in operation at all times the PSEU is operating, except for monitoring malfunctions, repairs, and required quality assurance and control activities.
- (d) Upon detecting an excursion or exceedance, owner shall restore operation of the PSEU, including the control device as expeditiously as practical in accordance with good air pollution control practices.
- (e) Owner shall notify permitting authority and, if needed, submit a proposed revision to the Title V operating permit, if:
 - (i) he or she identifies a failure to achieve compliance with an applicable standard for which the approved monitoring did not provide an indication of exceedance while providing valid data, or
 - (ii) the results of compliance or performance testing document a need to modify the existing indicator ranges.

- (b) Procedures for conducting one or more of the following actions:

- (i) improved preventive maintenance practices;
- (ii) process operation changes;
- (iii) improvements to control methods;
- (iv) other steps appropriate to correct control performance; and
- (v) more frequent or improved monitoring.

The owner shall develop and implement the QIP as expeditiously as practicable and shall notify the permitting authority if this time exceeds 180 days from the date that the need for the QIP was determined.

6. Reporting and Record Keeping Requirements

The owner must submit a report to the permitting authority at least every six months following the required commencement of monitoring, as required under 40 CFR Part 70.6(a)(3)(iii). Prompt reporting of certain excursions and exceedances from permit requirements is also required, as determined by the permitting authority. The report, to be submitted every six months, must include:

- (a) All instances of excursions or exceedances from permit requirements.
- (b) Summary of the number, duration, and cause of excursions or exceedances and the corrective actions taken.
- (c) Summary of the number, duration, and cause of monitor downtime incidents other than downtime associated with daily calibration checks.

- (d) Actions taken to implement the QIP, if a QIP is required, and, in the next summary report upon completion of a QIP, documentation that the QIP has been completed and reduced the likelihood of future excursions and exceedances.

5. Quality Improvement Plan (QIP) Requirements

The Title V operating permit may specify a threshold (e.g., exceedances that occur more than five percent of a PSEU's operating time) for requiring a QIP. The permitting authority or the EPA Administrator may require a QIP following an evaluation of the owner's response to exceedances.

The QIP shall include:

- (a) Procedures for evaluating the control device performance problems.

(e) Certification of the truth, accuracy, and completeness of each report by a responsible official.

The owner shall retain all records of monitoring for at least a five-year period, including all calibration and maintenance records, copies of all reports required to be submitted to the permitting authority, monitoring data, monitoring performance data, corrective actions taken, any written QIP and activities taken to implement a QIP, and any other required supporting information.

ENFORCEMENT

The semi-annual reports (just discussed) will be used by enforcement agencies, together with other information, to

identify facilities with significant compliance problems and to decide how to target limited enforcement resources. PSEUs operating within their CAM indicator ranges will be presumed to be in compliance and will not be targets for enforcement actions.

PERIODIC MONITORING

Sources requiring Title V permits that are not subject to the CAM rule will still have requirements for some form of periodic monitoring that is sufficient to yield reliable data representative of the source's compliance with the permit. EPA continues to work on developing guidance for this periodic monitoring.

About the Author

Dr. Howard Ellis is president of EDM Consulting, L.L.C. 1/2a/Environmental Consulting, 81 Two Bridges Road, Fairfield, NJ 07004; phone 973-575-2555, ext. 3211; e-mail enviorplan@internetmc.com. He has 27 years experience as an environmental consultant specializing in air pollution and compliance management issues. He played an active role in the development of the CAM rule and chaired panel sessions on the CAM rule at three A&WMA annual meetings.

THE 22ND ANNUAL INFORMATION EXCHANGE

December 8-9, 1997 • EPA Environmental Research Center • Research Triangle Park, North Carolina

You Will... be provided with information about the 1990 Clean Air Act Amendments and upcoming regulatory developments. Special emphasis will be given to the effect these issues have on the power generation industry.

Provided...the opportunity to exchange information with EPA about the implementation of the 1990 Clean Air Act Amendments and upcoming regulatory developments. Special emphasis will be given to the effect these issues have on the power generation industry.

The Information Exchange...is a one-and-a-half day program that will begin on December 8th at 9:00am. Plenty of time has been allotted for the exchange of questions and answers. If you have questions about the meeting, contact John Kinsman, Edison Electric Institute at (202)505-4500 or Bob Hall, U.S. EPA at (919)541-2477

POTENTIAL TOPICS INCLUDE:

- Operating Permit Issues
- Visibility Issues
- Continuous Emission Monitors
- NAAQS, Ozone & Fine Particulate
- Advancements in Dispersion Modeling
- NOx Reduction Strategies
- MACT Standards
- HAP Risk Assessment
- Regional Air Emission Control

Yes, we're Open To The Public...however, seating is limited. Register early to guarantee your seat. Call the Registrar at the Air and Waste Management Association at 1-800-270-3444 or 412/232-3444, ext. 3142

HOTEL RESERVATIONS ARE EASY...call A&WMA for more information

LOCATION, LOCATION, LOCATION...the information Exchange will be held in the EPA Auditorium at Alexander Drive and Highway 54, Research Triangle Park, NC.



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