

Compliance Assurance Monitoring (CAM) - 40 CFR, Part 64

Summary:

Pursuant to requirements concerning enhanced monitoring and compliance certification under the Clean Air Act, EPA has promulgated new regulations and revised some existing regulations to implement compliance assurance monitoring (CAM) for major stationary sources of air pollution that are required to obtain operating permits under Title V of the act. The new regulations require owners or operators of such sources to conduct monitoring that satisfies particular criteria established in the rule to provide a reasonable assurance of compliance with applicable requirements under the act. Monitoring focuses on emissions units that rely on pollution control device equipment to achieve compliance with applicable standards. The effective date of this rule is November 21, 1997.

CAM applicability:

The CAM rule (40 CFR 64) applies to each Pollutant Specific Emissions Unit (PSEU) when it is located at major source that is required to obtain Title V, Part 70 or 71 permit and it meets all of the following criteria:

The PSEU must:

- a. be subject to an emission limitation or standard, and
- b. use a control device to achieve compliance, and
- c. have **potential pre-control** emissions that exceed or are equivalent to the major source threshold.

Please note that the term “PSEU” means an emissions unit considered separately with respect to each regulated air pollutant. Also the term “control device” means equipment, other than inherent process equipment, that is used to destroy or remove air pollutants prior to discharge to the atmosphere. The term “control device” does not include passive methods such as lids or seals or inherent process equipment provided for safety or material recovery.

[See section 40 CFR 64.2(a)].

CAM plan due dates:

1. For large (PSEU) units (potential post-control emissions greater than major source threshold)
 - CAM plan is due as part of the application for the initial permit and/or significant permit revision if permit application is not complete by 4/20/98.
 - CAM plan is due as part of the first permit renewal application if the application is complete before 4/20/98.
2. For other (PSEU) units (potential post-control emissions less than major source threshold)

- CAM plan is due as part of the application for the first permit renewal.

[See section 40 CFR 64.5].

Summary of CAM rule exemptions:

The following emission limitations or standards are exempted from the CAM rule:

- a. post – 11/15/90 NSPS or NESHAP standards, since those standards have been and will be designed with monitoring that provides a reasonable assurance of compliance;
- b. stratospheric ozone protection requirements under Title VI of the act;
- c. acid rain program requirements;
- d. emission limitations or standards or other requirements that apply solely under an approved emissions trading program;
- e. emissions cap that meets requirements of 70.4(b)(12) or 71.6(a)(13);
- f. emission limitations or standards for which a part 70 or 71 permit specifies a continuous compliance determination method, as defined in 40 CFR 64.1;
- g. certain municipally-owned utility units, as defined in 40 CFR 72.2.

Please note that the emission unit is not exempted from the CAM rule if nonexempt emission limitations or standards (e.g. a state rule or an older NSPS emission limits) apply to the emissions unit.

[See section 40 CFR 64.2(b)].

What does the CAM rule require of owners and operators?

The CAM rule aims to have owners and operators maintain their control devices at the levels that assure compliance.

The rule allows owners and operators to design CAM plans around current requirements and operating practices

- to select representative parameters upon which compliance can be assured,
- to establish indicator ranges – or procedures for setting the indicator ranges – for the parameters,
- to use performance testing and other information to verify the parameters and ranges, and,
- to correct control device performance problems as expeditiously as practicable.

[See section 40 CFR 64.3 and 64.7].

What are the elements of a CAM plan?

A CAM plan must:

- a. Describe the indicators to be monitored and how they are to be measured;
- b. Describe the indicator ranges or the process by which indicators are to be established;
- c. Describe the performance criteria for the monitoring approach, including
 - specifications for obtaining representative data
 - quality assurance and control procedures
 - monitoring frequency
 - data collection procedure
 - data averaging period;
- d. Provide a justification for the proposed elements of the monitoring;
- e. Provide historical monitoring data, emissions test data and control device operating data recorded during performance test, if necessary;
- f. Provide an implementation plan, if monitoring requires installation, testing, or other activities prior to implementation.

In addition to establishing indicator ranges, affected facilities may choose to propose threshold levels that trigger the requirement for a **Quality improvement plan (QIP)**. Part 64 provides that a QIP may be required if it is determined that the source owner or operator has failed to meet the obligation of properly operating and maintaining the source. Part 64 also provides that a threshold level may be set in the facility's permit, but does not require it.

The threshold level is based on the number of excursions identified in a reporting period. As suggested by Part 64, threshold levels also could be established on the basis of duration of excursions as a percentage of operating time.

Although establishing a threshold level is not required by Part 64, in many cases it may benefit the facility to propose a threshold level rather than to leave it to the permitting authority to make a determination of whether the facility is meeting the obligation to properly operate and/or maintain the source.

[See section 40 CFR 64.4].

Quality Improvement Plan (QIP):

A QIP is a written plan that outlines the procedures that will be used to evaluate problems that affect the performance of control equipment. The permitting authority or the administrator may require a source to develop and implement a QIP after a determination that the source has failed to use adequate procedures in responding to an excursion or exceedance. Once required, the written QIP must be maintained by the owner or operator, and must be available for inspection upon request.

The QIP is developed in two basic components.

1. The plan initially shall include evaluation procedures to determine the cause of control device performance problems.

2. Based on the results of the evaluation procedures, the owner or operator shall modify the plan to include the procedures that will reduce the probability of a recurrence of the problem, and the schedule for making such improvements. Depending on the nature of the problem, the modified QIP could include procedures for conducting one or more of the following, as appropriate:
 - a. Improved preventative maintenance practices;
 - b. Process operation changes;
 - c. Appropriate improvements to control methods; and/or
 - d. Other steps appropriate to correct problems affecting control performance.

In conjunction with these procedures, the QIP also may include more frequent or improved monitoring procedures.

[See section 40 CFR 64.8].

What needs to appear in permits?

Part 64 requires permits to specify at a minimum:

- a. The approved monitoring approach, including the indicators (or the means to measure the indicators) to be monitored, and performance requirements established to satisfy 40 CFR 64.3 (b) or (d), as applicable;
- b. The means by which the owner or operator will define exceedences or excursions;
- c. The duty to conduct monitoring;
- d. If appropriate, minimum data availability and averaging period requirements; and
- e. Milestones for testing, installation, or final verification.

[See section 40 CFR 64.6(c)].

Reporting and recordkeeping requirements:

Part 64 requires the owner or operator to submit monitoring reports to the permitting authority in accordance with 40 CFR 70.6(a)(3)(iii). The report for monitoring under Part 64 shall include, at a minimum, the information required under 40 CFR 70.6(a)(3)(iii) and the following information, as applicable:

- a. Summary information on the number, duration and cause (or if the cause is unknown, a statement to that effect) of excursions or exceedences, as applicable, and the corrective actions taken;
- b. Summary information on the number, duration and cause (or if the cause is unknown, a statement to that effect) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable);
- c. A description of the actions taken to implement a Quality improvement plan (QIP) during the reporting period as specified in 40 CFR 64.8

[See section 40 CFR 64.9].

