

The CAM Regulation

1. What is the CAM regulation?

CAM stands for Compliance Assurance Monitoring. The CAM rule was developed by the Environmental Protection Agency (EPA) and became an effective Federal Rule November 21, 1997. The rule was developed to provide reasonable assurance that large emission units that rely on air pollution control devices comply with established air emission standards. The full text of the federal requirement may be found in Title 40, Code of Federal Regulations, Part 64 (40 CFR, Part 64).

2. What kinds of sources are covered by the CAM rule?

CAM applies to each pollutant specific emission unit that meets the four criteria listed below. (This means that each pollutant from a source is considered separately, and is evaluated against the four criteria). Each pollutant specific emissions unit must satisfy all of the criteria, otherwise the CAM rule does not apply to that particular emission unit.

- The emission unit must be located at a major source which is required to have an operating permit under Chapter 6, Section 3 of Wyoming Air Quality Standards and Regulations (WAQS&R).
- The emission unit must be subject to emission limitations or standards for an applicable regulated air pollutant. This includes a limit set in a permit condition.
- The emission unit must use an add-on control device to achieve compliance with an emission limit or standard.
- The emission unit must have "potential pre-control device emissions" equal to or greater than the amount required for a source to be classified as a major source in the operating permit program. Typically this means uncontrolled emissions would exceed 100 tons per year for a criteria pollutant, or exceed 10 tons per year for a hazardous air pollutant.

It should be emphasized that the applicability determination is made on a pollutant-by-pollutant basis for each emission unit and that most major sources have more than one emission unit.

3. How soon do I have to comply with the CAM regulation?

The Federal Rule became effective November 21, 1997. However, most owners and operators will not need to submit CAM plans until the renewal of their initial operating permits. Very large emission units, those with post-control emissions which exceed or are equivalent to the major source threshold, and large emissions units for which the operating permit is reopened before renewal may have an earlier due date. The State of Wyoming Air Quality Division is in the process of adopting this Federal Rule as a State Air Quality Rule and expects that process to

be completed in the Fall of 2000. While the adoption of the CAM rule into state regulations will give the State more authority in implementation and enforcement of the rule, all requirements including submittal deadlines are the same under both the Federal and the proposed State rule.

4. What do I have to submit to comply with the CAM regulation?

The rule requires that owners and operators design a compliance assurance monitoring plan. The requirements are extensive and the owner or operator should consult the CAM Technical Guidance Document listed under question number 10 for more detail. Specific information will vary greatly, depending upon the type of emissions unit and control device. A monitoring plan is required for each pollutant specific emissions unit. If a single control device is common to more than one pollutant specific emissions unit, the owner or operator may provide a monitoring submittal for the control device that identifies all of the pollutant specific units covered under that plan. Similarly, if a single pollutant specific emissions unit is controlled by more than one control device that are similar in design and operation, then the owner or operator can submit a plan that applies to all the control devices.

In addition to basic background information identifying the emissions unit, applicable emission limits and a description of the control technology, each CAM plan must include the five elements summarized below:

- Information on indicators of performance of the control device. Such indicators *might be* pollution control device operating parameters, such as temperature or pressure drop; a recordkeeping item such as pounds of volatile organic compound per gallon of coating; a work practice activity such as records of solvent use; recorded findings of inspection, such as internal fabric filter baghouse inspection; or any combination of these types of indicators. The monitoring submittal must also include appropriate ranges for control device performance indicators. The range must provide reasonable assurance of compliance with the applicable requirements within the anticipated range of operations. Furthermore, the owner or operator must provide assurance that the data generated by the monitoring approach is valid, sufficient, and representative of the actual conditions being monitored. (See 40 CFR part 64.4(a))
- The owner or operator must present justification for selecting the indicators and the indicator ranges. (See 64.4(b))
- Control device operating parameter data obtained during performance tests conducted under conditions specified by the applicable rule. (See 64.4(c))
- Test plan and schedule if performance test data is not available. The owner or operator may rely on engineering assessments rather than performance tests if factors specific to the type of monitoring, control device or pollutant specific emissions unit make performance testing unnecessary to establish indicator ranges.(See 64.4(d))

- Implementation plan if monitoring requires installation of equipment or testing. (See 64.4(e))

5. Who is going to review these CAM plans?

CAM plans for sources operating in Wyoming will be reviewed by the Operating Permits Section of the Air Quality Division of the Department of Environmental Quality for the State of Wyoming, Herschler Building 4th floor, 122 W. 25th Street, Cheyenne, WY 82002. Reviews will be conducted with assistance from the Division's field staff who are most familiar with the pollutant specific emissions unit. The completeness and technical review procedures for operating permit applications found in Chapter 6, Section 3, WAQS&R will be followed.

6. How does CAM affect my Operating Permit?

Once a CAM submittal has been determined to be acceptable, the Division will establish new permit conditions in the renewed or modified operating permit specifying the required monitoring for the affected emission units. Any existing monitoring requirements (including periodic monitoring) will be replaced by CAM requirements for those units subject to CAM. Until CAM is in place, all existing monitoring requirements remain in effect.

7. What if I need to change the CAM plan at some later date?

CAM plans will be revised in accordance with the operating permit modification process given in Chapter 6, Section 3(d), WAQS&R.

8. Is there anything I can do to get out of this regulation?

Certain types of equipment, as listed below, are excluded from the CAM rule. Otherwise, all pollutant specific emission units which meet the four criteria listed in question number one must comply with the regulation.

1. Sources subject to section 111(New Source Performance Standards) or 112(National Emission Standards for Hazardous Air Pollutants) of the Clean Air Act promulgated after 11/15/90 are exempt, because those standards have been designed with monitoring that provides a reasonable assurance of compliance. This exemption does not apply to monitoring for compliance with other limitations that may also apply to that unit.
2. Sources regulated under the stratospheric ozone protection requirements.
3. Sources subject to the acid rain program, emissions trading programs, or emission caps are exempt. CAM is believed to be redundant for those units.
4. Certain municipally-owned utility units that produce electricity during periods of peak electrical demand or emergency situations are exempt, since these periods are infrequent.

9. What happens if the Division does not accept a CAM plan?

The source must continue to meet minimum monitoring requirements under Chapter 6, Section 3(h)(i)(C)(I)(2). A compliance schedule will be established for the source to resubmit the monitoring plan within 180 days of issuance of a permit. If the owner or operator fails to provide an approvable CAM plan within the 180 day compliance schedule, the owner or operator is not in compliance with the CAM rule.

10. What if I have more questions?

There are a number of general documents relating to the CAM rule which the owner or operator of an affected source can review. These documents are listed below and can be downloaded or viewed as indicated.

40 CFR part 64 Federal CAM Rule (10/97)
Chapter 7, Monitoring Regulations, Section 3, Compliance assurance monitoring (State proposed rule)
Technical Guidance Document: Compliance Assurance Monitoring (8/98), EPA
Frequently Asked Questions Concerning the CAM Rule - Document 1, EPA
Frequently Asked Questions Concerning the CAM Rule - Document 2, EPA

The Division has selected some typical CAM plans which could be used as examples for pollutant specific emissions units commonly found in Wyoming:

Example 1: Compliance Assurance Monitoring Plan: Fabric Filter for PM Control (typically operating without visible emissions)
Example 2: Compliance Assurance Monitoring Plan: Fabric Filter for PM Control (typically operating with visible emissions)
Example 3: Compliance Assurance Monitoring Plan: Wet Scrubber for PM Control
Example 4: Compliance Assurance Monitoring Plan: Venturi Scrubber for PM Control
(Additional examples will be added for other sources)

The Environmental Protection Agency (EPA) maintains a web site with CAM documents which can be accessed by clicking on the following internet address:

<http://www.epa.gov/ttnemc01/cam.html>

Applicants may also contact Mike Stoll or Lori Bocchino of the operating permits program:

Mike Stoll
(307)777-7380
mstoll@state.wy.us

Lori Bocchino
(307)777-8578
lbocch@state.wy.us