Which source does compliance assurance monitoring (CAM) apply to?

The CAM rule applies to certain emission units at facilities required to obtain a Part 70 permit.

In general (exemptions are listed later), CAM applies to emission units meeting the following criteria:

1. The emission unit is subject to an emission limit or standard (including New Source Performance Standards, National Emission Standards for Hazardous Air Pollutants (HAP), and limits and standards in Minnesota Rules contained in the State Implementation Plan) for an air pollutant regulated by Part 70.
2. Compliance with the applicable limit or standard is achieved through the use of add-on control equipment.
3. The emission unit has pre-controlled potential emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the Part 70 major source level for that pollutant (in tons per year).

Use of continuous emissions monitoring system (CEMS), continuous opacity monitoring system (COMS), or predictive emission monitoring system (PEMS) does not qualify as an exemption to the CAM rule. However, 40 CFR § 64.3(d) states that use of a CEMS, COMS, or PEMS meets the requirements of CAM.

CAM applicability is determined on a pollutant-by-pollutant basis for each “pollutant specific emissions unit,” defined at 40 CFR § 64.1 as “an emissions unit considered separately with respect to each regulated air pollutant.” For purposes of CAM submittal requirements, a “large pollutant specific emissions unit” is an emissions unit with potential controlled emissions equal to or greater than 100 percent of the major source threshold amount for a given regulated pollutant. (“Major source threshold amount” as it applies to Minnesota, means 100 tons per year of particulate matter (PM), particulate matter smaller than ten microns in aerodynamic diameter (PM<sub>10</sub>), particulate matter smaller than 2.5 microns in aerodynamic diameter (PM<sub>2.5</sub>), sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), volatile organic compounds (VOC), carbon monoxide (CO), or lead; 10 tons per year of any HAP; or 25 tons per year of any combination of HAPs. The levels may be different in current or future non attainment areas. Refer to 40 CFR § 70.2 under the definition of “major source” for further detail). “Other pollutant specific emissions units” are those units whose uncontrolled potential emissions may be equal to or greater than 100 percent of the major source threshold amount, but controlled emissions are less than that threshold.

When must I determine if CAM applies?

If you are applying for the first time for a Part 70 permit, after determining the uncontrolled and controlled potential
emissions of the emissions units, the questions listed below must be considered for each large pollutant specific emissions unit, as defined above.

If you are applying for a major amendment to an existing Part 70 permit, after determining the uncontrolled and controlled potential emissions of the emissions units, the questions listed below must be considered for each large pollutant specific emissions unit, as defined above, to which the amendment is applicable.

If you are applying for reissuance of an existing Part 70 permit, after determining the uncontrolled and controlled potential emissions of the emissions units, the questions listed below must be considered for each pollutant specific emissions unit (large and other) for which CAM applicability has not already been determined through a Part 70 permitting action.

1. Is the unit subject to an emission limitation or standard, specified in either a rule or permit? If no, the emission unit is not subject to CAM, and you need not answer the remaining questions for that unit. If yes, answer the next question.

2. Is an add-on control device used to achieve compliance with that limitation or standard? (For example, a boiler may have a NOx limit and an SO2 limit. If the boiler uses lime injection for SO2 control but relies on a low-NOx burner to meet the NOx limit, then the emission unit would be subject to CAM for SO2 but not for NOx). If no, the emission unit is not subject to CAM, and you need not answer the remaining question for that unit. If yes, answer the next question.

3. Is the unit exempt from CAM? If no, the unit is subject to CAM.

What are the exemptions?
The CAM rule does not apply to:

1. Units subject to federal regulations issued after 1990. In situations where some portions of a facility operate control devices in order to comply with emission standards issued prior to 1990, only those portions of the facility must comply with the requirements of the CAM rule.

2. Situations where continuous compliance monitoring is already specified in an operating permit. The CAM rule exempts the Permittee from additional monitoring requirements and directs the Permittee to use the continuous compliance monitoring data to fulfill the CAM rule monitoring and certification requirements.

3. Stratospheric ozone protection requirements.

4. Acid Rain Program requirements.

5. Emission limitations or standards that apply solely under an emissions trading program.

6. Municipally-owned utility peak-shaving units where:
   - the unit is exempt from all Acid Rain Program monitoring requirements
   - the unit operates for the sole purpose of providing electricity during periods of peak electrical demand or emergency situations
   - the unit will be operated consistent with that purpose throughout the permit term
   - emissions from the unit are less than 50 tons per year

What do I do if CAM does apply?
You must prepare a CAM submittal for each unit that you determined is subject to CAM at this time, and submit it with the permit or amendment application. The CAM submittal, also referred to as the monitoring approach submittal, should include:

- information on indicators (gauges, meters, or other devices used to monitor operating parameters of control equipment)
- indicator ranges, or the process by which indicators are to be established
- performance criteria
- justification for the proposed monitoring
- control device operating data recorded during a performance test, supplemented by engineering assessments or manufacturer’s recommendations to justify the proposed indicator range
- a test plan and schedule for obtaining data if performance test data are not available
- an implementation plan, if monitoring requires installation, testing or other activities prior to implementation

Some of this information will be incorporated into the operating permit. The permit will specify the approved
monitoring approach and the indicator range(s), including the averaging periods.

**What happens next?**

The next step is review and approval by the Minnesota Pollution Control Agency (MPCA). If additional information or corrections are required, the MPCA will notify you that the CAM submittal must be revised or supplemented. If the CAM submittal is determined to be complete and acceptable, the MPCA will establish permit terms for the affected emissions unit.

After approval and incorporation of the CAM requirements into the permit, owners and operators of affected units must implement the monitoring upon issuance of the permit, unless the permit specifies a later date.

**Further Information**

Interested parties can download the rule (40 CFR Section 64) from U. S. Environmental Protection Agency’s Web site on the Internet at the following address [http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=f1a848c88ac02f1f556ecb278b2333f2&rgn=div5&view=text&node=40:15.0.1.1.1&idno=40](http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=f1a848c88ac02f1f556ecb278b2333f2&rgn=div5&view=text&node=40:15.0.1.1.1&idno=40)

For further information about this or other rules, contact the MPCA at 651-296-6300 or 800-657-3864.

MPCA Web site: [www.pca.state.mn.us](http://www.pca.state.mn.us)