

ARTICLE 3. MONITORING REQUIREMENTS

Rule 5. Continuous Monitoring of Emissions

326 IAC 3-5-1 Applicability; continuous monitoring requirements for applicable pollutants

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11

Affected: IC 13-14-4-3; IC 13-15; IC 13-17

Sec. 1. (a) This rule applies to the following sources or emissions units to determine compliance with an emission limitation or standard:

- (1) Any emissions unit required to perform continuous monitoring under 326 IAC 12.
 - (2) Fossil fuel-fired steam generators of greater than one hundred million (100,000,000) British thermal units (Btu) per hour heat input capacity.
 - (3) Sulfuric acid plants of greater than three hundred (300) tons per day acid production capacity.
 - (4) Petroleum refinery catalyst regenerators for fluid bed catalytic cracking units of greater than twenty thousand (20,000) barrels or eight hundred forty thousand (840,000) gallons per day fresh feed capacity.
 - (5) Portland cement plants.
 - (6) Sources or emissions units that combust sewage sludge.
 - (7) Sources or emissions units making coke from raw materials, including the following:
 - (A) Coal refining byproducts.
 - (B) Petroleum refining byproducts.
 - (8) Emissions units in Clark and Floyd Counties that:
 - (A) have potential to emit nitrogen oxides (NO_x) of greater than or equal to forty (40) tons per year; and
 - (B) are located at sources that have potential to emit NO_x of greater than or equal to one hundred (100) tons per year as described in 326 IAC 10.
 - (9) Any emissions unit required to monitor under subsection (c).
- (b) Owners and operators of sources or emissions units described in subsection (a) are subject to the following requirements:
- (1) Any emissions unit subject to 326 IAC 12 shall comply with the following:
 - (A) The monitoring and reporting requirements as specified for the applicable rule.
 - (B) All requirements of this rule.
 - (2) The owner or operator of a fossil fuel-fired steam generator of greater than one hundred million (100,000,000) Btu per hour heat input capacity shall continuously monitor the following:
 - (A) Opacity, unless one (1) of the following occurs:
 - (i) Gaseous fuel is the only fuel combusted.
 - (ii) Oil or a mix of gas and oil are the only fuels combusted and the emissions unit is able to comply with both of the following rules without using particulate matter collection equipment:
 - (AA) 326 IAC 5-1.
 - (BB) 326 IAC 6-2.
 - (iii) An alternative monitoring requirement request has been granted by the department and approved by U.S. EPA. The owner or operator may request an alternative monitoring requirement when installation of an opacity monitoring system would not provide accurate determinations of emissions as a result of interference from condensed uncombined water vapor. Any alternative monitoring requirement request shall address the following:
 - (AA) Information pertaining to the inability of the affected emissions unit to find an acceptable monitoring location prior to the source of the condensed, uncombined water vapor.
 - (BB) A list of proposed alternative monitoring requirements. For each proposed alternative monitoring requirement, the request must provide a detailed description of thresholds or triggers for corrective action resulting from deviation from normal operating parameters and how deviations from key surrogate parameters shall be addressed to ensure continuous compliance with all applicable particulate and opacity requirements. An example of an acceptable alternative monitoring requirement is a particulate compliance demonstration that is performed at least annually, in accordance with 326 IAC 3-6 and a compliance monitoring plan that, at a minimum, satisfies monitoring requirements under 326 IAC 2-7 or 326 IAC 2-8.
 - (CC) Record keeping that is consistent with section 6 of this rule.
 - (DD) Reporting frequency that is no less frequent than that required in section 7 of this rule.
 - (iv) An alternative monitoring requirement request granted by the department under item (iii) shall be submitted to U.S. EPA as a state implementation plan (SIP) revision and shall not be in effect until approved as a SIP revision.
 - (B) Sulfur dioxide (SO₂) under the following conditions:
 - (i) SO₂ pollution control equipment has been installed.
 - (ii) A monitor is required to determine compliance with either:
 - (AA) 326 IAC 12; or

- (BB) a new construction permit or operating permit required under 326 IAC 2.
- (C) Nitrogen oxide (NO_x) under the following conditions:
 - (i) NO_x pollution control equipment has been installed.
 - (ii) A monitor is required to determine compliance with either:
 - (AA) 326 IAC 12; or
 - (BB) a new construction permit or operating permit required under 326 IAC 2.
- (D) The percent oxygen (O₂) or carbon dioxide (CO₂) if measurements of O₂ or CO₂ in the flue gas are required to convert either SO₂ or NO_x continuous monitoring data, or both, to units of the emission limitation for the particular emissions unit.
- (3) Sulfuric acid plants of greater than three hundred (300) tons per day acid production capacity shall monitor SO₂ for each sulfuric acid producing emissions unit within the source.
- (4) Petroleum refinery catalyst regenerators for fluid bed catalytic cracking units of greater than twenty thousand (20,000) barrels or eight hundred forty thousand (840,000) gallons per day fresh feed capacity shall monitor opacity for each regenerator within the source.
- (5) Portland cement plants shall monitor opacity at the following emissions units:
 - (A) Kilns.
 - (B) Clinker coolers.
- (6) Sources or emissions units that combust sewage sludge shall monitor from the effluent gas exiting the incinerator the following:
 - (A) Total hydrocarbons, unless the following conditions are met:
 - (i) The exit gas from the sewage sludge incinerator stack is monitored continuously for carbon monoxide (CO).
 - (ii) The monthly average concentration of CO in the exit gas from the sewage sludge incinerator stack, corrected for zero percent (0%) moisture and to seven percent (7%) oxygen, does not exceed one hundred (100) parts per million on a volumetric basis.
 - (B) Oxygen.
 - (C) Moisture, unless an alternative method is approved by the department and the U.S. EPA.
 - (D) Temperature.
- (7) Sources or emissions units making coke from coal shall monitor opacity on the underfire stack associated with each coke oven battery.
- (8) Emissions units in Clark and Floyd counties that have potential to emit NO_x greater than or equal to forty (40) tons per year and are located at sources that have potential to emit NO_x greater than or equal to one hundred (100) tons per year shall install NO_x continuous emission monitors as described in 326 IAC 10-1.
- (c) Upon approval by the department, the owner or operator of an emissions unit required to continuously monitor opacity under this section may be exempted from the requirement to install, certify, and operate a COMS if:
 - (1) a particulate CEMS for measuring PM emissions is used to demonstrate continuous compliance with any applicable emissions limitation; and
 - (2) the particulate CEMS is installed, certified, operated, and maintained on the affected source in accordance with the requirements of Performance Specification 11 (PS-11)* and Procedure 2 of 40 CFR 60, Appendix F*.
- (d) The department may require, as a condition of a construction or operating permit issued under 326 IAC 2-1.1, 326 IAC 2-2, 326 IAC 2-3, 326 IAC 2-7, 326 IAC 2-8, or 326 IAC 2-9 that the owner or operator of a new or existing source of air emissions monitor emissions to ensure compliance with the following:
 - (1) An emission limitation or standard established in one (1) of the permits listed in this subsection.
 - (2) Permit requirements.
 - (3) Monitoring requirements in 326 IAC 7.
- (e) Unless explicitly stated otherwise, nothing in this rule shall:
 - (1) excuse the owner or operator of a source or emissions unit from any monitoring, record keeping, or reporting requirement that applies under any provision of the CAA or state statutes or rules; or
 - (2) restrict the authority of the department to impose additional or more restrictive monitoring, record keeping, testing, or reporting requirements on any owner or operator of a source or emissions unit under any other provision of the CAA, including Section 114(a)(1), or state statutes or rules, as applicable.
- (f) All continuous monitoring systems shall be installed and operational and have the certification testing complete under section 3 of this rule within one hundred eighty (180) days of start-up of the emissions unit.

*These documents are incorporated by reference. Copies of these documents may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. (*Air Pollution Control Division; 326 IAC 3-5-1; filed Jan 30, 1998, 4:00 p.m.: 21 IR 2064; filed Dec 20, 2001, 4:30 p.m.: 25 IR 1596; errata filed Jan 7, 2002, 2:20 p.m.: 25 IR 1644; filed Aug 11, 2011, 1:54 p.m.: 20110907-IR-326050330FRA; filed Dec 16, 2013, 9:16 a.m.: 20140115-IR-326130215FRA*)