

## ARTICLE 3. MONITORING REQUIREMENTS

### Rule 1. Continuous Monitoring of Emissions

#### 3-1-1 Applicability

(a) Sources in the following categories shall continuously monitor and record emissions of air pollutants in accordance with this rule:

(1) Fossil fuel-fired steam generators of greater than 250 million Btu per hour heat input capacity.

(2) Nitric acid plants of greater than 300 tons per day production capacity, the production capacity being expressed at 100% acid.

(3) Sulfuric acid sources of greater than 300 tons per day acid production capacity, the production capacity being expressed at 100% acid.

(4) Petroleum refinery catalyst regenerators for fluid bed catalytic cracking units of greater than 20,000 barrels (840,000 gallons) per day fresh feed capacity.

(b) Other monitoring requirements are contained in 325 IAC 2-1-4(i) (formerly known as APC 19) [now codified at 326 IAC 2-1-3(h)] and 315 IAC 7-1 (formerly known as APC 13) [now codified at 326 IAC 7].

### Rule 2. Source Sampling Procedures

#### 3-2.1-5 Specific testing procedures

At Richmond Power and Light's Whitewater Generating Station, when sootblowing occurs during one (1) of the three (3) repetitions, emission test results shall be evaluated using either a time weighted averaging period (TWAP) or a straight averaging technique. When using TWAP, the following equation shall be used to ensure proper weighting of an intermittent cleaning cycle performance test run regardless of the length of the cleaning cycle and regardless of the number and duration of the test runs made on the unit. When using the TWAP, the representative pounds per hour of particulate emissions (E) shall be calculated by using the following equation:

$$E = E_{cc} \left[ \frac{(A + B) S}{AR} \right] + E_{ncc} \left[ \frac{(R S)}{R} \frac{BS}{AR} \right]$$

Where: E = pounds per hour of particulate emissions

E<sub>cc</sub> = average E of sample containing cleaning cycle

E<sub>ncc</sub> = average E of sample containing no cleaning cycle

A = hours of cleaning cycle operation during sample

B = hours with no cleaning cycle operation during sample

R = average hours of operation per twenty-four (24) hours

S = average hours of cleaning cycle operation per twenty-four (24) hours

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**TITLE 326 AIR POLLUTION CONTROL BOARD**

LSA Document #97-70(F)

**DIGEST**

Adds 326 IAC 3-4, general provisions, 326 IAC 3-5, continuous monitoring of emissions, 326 IAC 3-6, source sampling procedures, and 326 IAC 3-7, fuel sampling and analysis procedures. Amends 326 IAC 7-2-1 concerning reporting requirements and methods to determine compliance. Repeals 326 IAC 3-1.1, 326 IAC 3-2.1, and 326 IAC 3-3. Effective 30 days after filing with the secretary of state.

**HISTORY**

First Notice of Comment Period: August 1, 1995, Indiana Register (18 IR 3248).

Second Notice of Comment Period: April 1, 1996, Indiana Register (19 IR 1683).

Notice of Rescheduled Public Hearing: May 1, 1996, Indiana Register (19 IR 2181).

Notice of Rescheduled Public Hearing: September 1, 1996, Indiana Register (19 IR 3613).

Notice of Rescheduled Public Hearing: October 1, 1996, Indiana Register (20 IR 221).

Notice of Rescheduled Public Hearing: November 1, 1996, Indiana Register (20 IR 641).

Public Hearing: Opened December 4, 1996; Completed February 5, 1997.

Rule Preliminarily Adopted: February 5, 1997.

**326 IAC 3-1.1**

**326 IAC 3-2.1**

**326 IAC 3-3**

**326 IAC 3-4**

**326 IAC 3-5**

**326 IAC 3-6**

**326 IAC 3-7**

**326 IAC 7-2-1**

SECTION 2. 326 IAC 3-5 IS ADDED TO READ AS FOLLOWS:

**Rule 5. Continuous Monitoring of Emissions**

**326 IAC 3-5-1 Applicability; 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 establishes the following:

- (1) Substantive requirements for monitoring certain types of sources.
- (2) A process for developing suitable monitoring requirements for other types of sources.

(b) This rule applies to the following sources and facilities hereinafter referred to as affected facilities:

- (1) Any facility required to perform continuous monitoring under 326 IAC 12, which incorporates by reference the requirements of 40 CFR 60\*, or by a standard for hazardous air pollutants under 326 IAC 14, which incorporates by reference the requirements of 40 CFR 61\*, or 326 IAC 20, which incorporates by reference the requirements of 40 CFR 63\*.
- (2) Fossil fuel-fired steam generators of greater than one hundred million (100,000,000) British thermal units (Btus) per hour heat input capacity.
- (3) Sulfuric acid plants or production facilities 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 (eight hundred forty thousand (840,000) gallons) per day fresh feed capacity.

(5) Portland cement plants.

(6) Facilities that combust sewage sludge.

(7) Sources making coke from raw materials, including the following:

(A) Coal refining byproducts.

(B) Petroleum refining byproducts.

(8) Facilities in Clark and Floyd Counties that:

(A) have potential to emit NO<sub>x</sub> greater than or equal to forty (40) tons per year; and

(B) are located at sources that have potential to emit NO<sub>x</sub> greater than or equal to one hundred (100) tons per year as described in 326 IAC 10.

(c) Sources and facilities described in subsection (b) are subject to the following requirements or an approved streamlined requirement established in accordance with 326 IAC 2-7-24:

(1) Any facility subject to 326 IAC 12, which incorporates by reference the requirements of 40 CFR 60\*, 326 IAC 14, which incorporates by reference the requirements of 40 CFR 61\*, or 326 IAC 20, which incorporates by reference the requirements of 40 CFR 61\*, shall comply with the following:

(A) The monitoring and reporting requirements as specified for the applicable rule.

(B) All requirements of this rule.

(2) Fossil fuel-fired steam generators of greater than one hundred million (100,000,000) Btu per hour heat input capacity shall monitor the following:

(A) Opacity, unless:

(i) Gaseous fuel is the only fuel combusted.

(ii) Oil or a mix of gas and oil are the only fuels combusted and the facility is able to comply with both of the following 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. An alternative monitoring requirement may be requested 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 facility 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 insure continuous compliance with all applicable particulate and opacity requirements. An example of an acceptable alternative monitoring requirement is a particulate compliance demonstration that is no less frequent than annual 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 SIP revision and shall not be in effect until approved as a SIP revision.

(B) Sulfur dioxide (SO<sub>2</sub>) under the following conditions:

(i) SO<sub>2</sub> pollution control equipment has been installed.

(ii) A monitor is required to determine compliance with either of the following:

(AA) 326 IAC 12.

(BB) A construction permit required under 326 IAC 2.

(C) Nitrogen oxide (NO<sub>x</sub>) under the following conditions:

(i) NO<sub>x</sub> pollution control equipment has been installed.

(ii) A monitor is required to determine compliance with either of the following:

(AA) 326 IAC 12.

(BB) A construction permit required under 326 IAC 2.

(D) The percent O<sub>2</sub> or CO<sub>2</sub> if measurements of O<sub>2</sub> or CO<sub>2</sub> in the flue gas are required to convert either SO<sub>2</sub> or NO<sub>x</sub> continuous monitoring data, or both, to units of the emission limitation for the particular facility.

(3) Sulfuric acid plants or production facilities of greater than three hundred (300) tons per day acid production capacity shall monitor SO<sub>2</sub> for each sulfuric acid producing facility within the source.

(4) Petroleum refinery catalyst regenerators for fluid bed catalytic cracking units of greater than twenty thousand (20,000) barrels (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 facilities:

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## Final Rules

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North Senate Avenue, Indianapolis, Indiana 46206-6015.  
(Air Pollution Control Board; 326 IAC 3-5-1; filed Jan 30,  
1998, 4:00 p.m.: 21 IR 2064)

(A) Kilns.

(B) Clinker coolers.

(6) Facilities that combust sewage sludge shall monitor from the effluent gas exiting incinerator the following:

(A) Total hydrocarbons.

(B) Oxygen.

(C) Moisture, unless an alternative method is approved by the department and the U.S. EPA.

(D) Temperature.

(7) Sources making coke from coal shall monitor opacity on the underfire stack associated with each coke oven battery.

(8) Facilities in Clark and Floyd Counties that have potential to emit NO<sub>x</sub> greater than or equal to forty (40) tons per year and are located at sources that have potential to emit NO<sub>x</sub> greater than or equal to one hundred (100) tons per year shall install NO<sub>x</sub> continuous emission monitors as described in 326 IAC 10-1.

(d) The department may require, as a condition of a construction or operating permit issued under 326 IAC 2-1, 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 subsection (d) [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 from any monitoring, record keeping, or reporting requirement that applies under any provision of the CAA or state statutes or regulations.

(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 under any other provision of the CAA, including Section 114(a)(1), or state statutes or regulations, as applicable.

(f) Within one hundred eighty (180) days of start-up or, for a source existing on the effective date of this rule, within three hundred sixty-five (365) days of becoming an affected facility under this rule, all continuous monitoring systems shall be installed, operational, and the certification testing complete pursuant to section 3 of this rule.

\*Copies of the Code of Federal Regulations (CFR) referenced may be obtained from the Government Printing Office, Washington, D.C. 20402 and are available for copying at the Indiana Department of Environmental Management, Indiana Government Center-North, 100

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