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## **TITLE 326 AIR POLLUTION CONTROL BOARD**

### **FIRST NOTICE OF COMMENT PERIOD #05-23(APCB)**

## **DEVELOPMENT OF NEW RULE 326 IAC 20-95 CONCERNING INCORPORATION OF NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR INDUSTRIAL, COMMERCIAL, AND INSTITUTIONAL BOILERS AND PROCESS HEATERS**

### **PURPOSE OF NOTICE**

The Indiana Department of Environmental Management (IDEM) is soliciting public comment on new rule 326 IAC 20-95 concerning the incorporation of national emission standards for hazardous air pollutants for industrial, commercial, and institutional boilers and process heaters. IDEM seeks comment on the affected citations listed and any other provisions of Title 326 that may be affected by this rulemaking.

**CITATIONS AFFECTED:** 326 IAC 20-95.

**AUTHORITY:** IC 13-14-8; IC 13-17-3-4.

### **SUBJECT MATTER AND BASIC PURPOSE OF RULEMAKING**

#### **Basic Purpose and Background**

On September 13, 2004, U.S. EPA issued a final national emission standard for hazardous air pollutants (NESHAP) (69 FR 55218) to reduce arsenic, cadmium, chromium, hydrogen chloride, hydrogen fluoride, lead, manganese, mercury, nickel, and various organic hazardous air pollutants (HAPs) from industrial, commercial, and institutional boilers and process heaters. The NESHAP will implement Section 112(d) of the Clean Air Act by requiring all major sources in this source category to meet HAP emission standards reflecting the application of maximum achievable control technology (MACT). Major sources are sources that emit ten (10) tons a year or more of a single HAP, or twenty-five (25) tons a year or more of a combination of HAPs. The NESHAP includes emission limits and work practice standards for new and existing units.

Boilers produce steam by burning any combination of coal, wood, or other fuel. The steam is used to produce electricity or heat. Process heaters heat raw or intermediate materials during an industrial process. Boilers and process heaters are used at facilities such as refineries, chemical and manufacturing plants, paper mills, or as stand-alone units for heat.

The rule contains solid, liquid, and gaseous fuel subcategories of boilers and process heaters. Solid fuel includes, but is not limited to, coal, wood, biomass, tires, plastics, and other nonfossil solid materials. Liquid fossil fuel means petroleum, distillate oil, residual oil and any form of liquid fuel derived from such material. Gaseous fuel includes, but is not limited to, natural gas, process gas, landfill gas, coal derived gas, refinery gas, and biogas. Blast furnace gas is exempted from the definition of gaseous fuel.

The rule limits the amount of HAPs that may be released from exhaust stacks of existing large and limited use solid fuel boilers and process heaters. Large units are watertube boilers and process heaters with heat input capacities greater than ten (10) million British thermal units per hour (MMBtu/hr). A process heater means an enclosed device using controlled flame, that is not a boiler, and the unit's primary purpose is to transfer heat indirectly to a process material or to heat transfer material for use in a process unit, instead of generating steam. Process heaters do not include units used for comfort or space heat, food preparation for on-site consumption, or autoclaves. Large existing solid fuel units are subject to a particulate matter (PM) limit or an alternative total selected metals (TSM), hydrogen chloride (HCl,) and mercury (Hg) limits. Large existing limited use solid fuel units are only subject to the PM or alternative TSM limit. Existing industrial boilers and process heaters must comply with the rule no later than September 13, 2007.

Boilers and process heaters in the existing large or limited use gaseous or liquid fuel only have to submit an initial notification report, but these units are not subject to any other requirements in the rule. Boilers or process heaters in the existing small gaseous, liquid, or solid fuel subcategories are not required to keep any records or submit an initial notification. Initial notifications are due March 12, 2005.

For new units, large and limited use solid fuel units are subject to PM/TSM, HCl, Hg, and carbon monoxide (CO) limits. New small solid fuel units are subject to PM/TSM, HCl, and Hg limits. New large and limited use liquid fuel units are subject to PM, HCl, and

CO limits. New small liquid fuel units are subject to PM and HCl limits. New large gaseous fuel units are subject to a CO limit. New small liquid fuel units that only burn gaseous fuel or distillate oil only have to submit an initial notification. New small gaseous fuel subcategory units are not required to keep any records or submit an initial notification. New industrial boilers and process heaters must comply with the final rule when they are brought on line.

The final rule includes a compliance alternative provided for in the Clean Air Act (Section 112(d)(4)) based on threshold emission limits for HCl and manganese. If an owner/operator demonstrates that its boiler units can meet health based threshold emission limits, such sources are no longer subject to either the HCl limit in the rule or the manganese portion of the TSM limit. This compliance alternative is based on a U.S. EPA determination that those units do not pose a significant risk to human health or the environment. Sources that are eligible for the compliance alternative established in the federal rule must assume federally enforceable emissions limitations in their Title V permit. These limits ensure that the HAP emissions do not exceed levels used to qualify for the compliance alternative.

Additional requirements or clarifications that IDEM is evaluating during this rulemaking and for which IDEM is requesting comments are:

- 1) Emissions Averaging - The NESHAP allows emission averaging, if more than one existing large solid fuel boiler is located at the source, unless the state chooses to exclude the emission averaging option. IDEM proposes to retain the emission averaging option.
- 2) Notice for Compliance Test - The NESHAP requires sources to submit a notification of performance testing thirty (30) days prior to the date testing is scheduled to begin. 326 IAC 3-6 requires sources to submit notification of performance testing thirty-five (35) days prior to the test date. This rulemaking will clarify when test notifications are required to be submitted to IDEM.
- 3) Health Based Emission Limits - Sources complying with the health based emission limits for hydrogen chloride (HCl) or total selected metals (TSM) using the compliance alternative, either through lookup tables or by conducting a site specific risk assessment, are required to include the process parameters used in the health based compliance alternative demonstration in their Title V permit. The NESHAP does not specifically state that the Title V must include the alternative emission rate. IDEM is proposing that the state rule specify that the Title V permit include the alternative emission limit resulting from the health based compliance demonstration.
- 4) Site Specific Risk Assessment - Sources demonstrating eligibility for the health based compliance alternative can either use lookup tables provided in the federal rule or perform a site specific risk assessment. For sources performing a site specific risk assessment the federal rule allows the source to use any "scientifically accepted peer-reviewed risk assessment methodology" and does not provide for approval of methodology by IDEM or U.S. EPA. IDEM proposes that sources must use U.S. EPA's "Air Toxics Risk Assessment Reference Library" (EPA-453-K-04-001B). IDEM is considering allowing other methodologies subject to IDEM's approval.
- 5) Continuous Eligibility for Health Based Alternative/Population - The federal rule requires sources to update the demonstration every time there is a process change that would affect the sources eligibility for the health based limit. Sources are required to annually certify that the demonstration is still accurate. One change that could happen that would affect eligibility is changes in location of where people live around the plant for sources using a site specific risk assessment. The federal rule requires the site specific risk assessment to estimate inhalation exposure for the individual most exposed to the source's emissions. While there is no definition in the rule for this exposure estimate, U.S. EPA's "Air Toxics Risk Assessment Reference Library" defines "maximum exposed individual (MEI)" as the highest modeled offsite concentration and "maximum individual risk (MIR)" as the populated location with the highest modeled ambient concentration. This language leaves open the possibility that where people live could change over time. IDEM proposes to require sources to use a reasonable estimate of worst case exposure for both current and future land use assumptions to reduce the likelihood of changes due to population shifts.
- 6) Health based Eligibility Demonstration Submittal - The federal rule requires sources to submit the eligibility demonstration for the alternative compliance option to the permitting authority one year prior to the compliance date of the NESHAP. The federal rule allows sources to comply with the health based limits once the source submits the process parameters for incorporation into the Title V permit. For demonstrations submitted after the compliance date this would not give any time for IDEM to approve the demonstration. IDEM proposes to clarify that the health based compliance demonstration process parameters must be added to the Title V permit before the source is exempt from the MACT HCl or TSM emission limits.

#### **Alternatives To Be Considered Within the Rulemaking**

Alternative 1. Add rule as proposed above.

- Is this alternative an incorporation of federal standards, either by reference or full text incorporation? Yes, but includes clarifications and additional procedures with respect to implementing federal rule.
- Is this alternative imposed by federal law or is there a comparable federal law? Yes.
- If it is a federal requirement, is it different from federal law? Yes, but this notice includes options for clarifying federal requirements and additional procedures with respect to implementing the federal rule.
- If it is different, describe the differences. See six options discussed in background section of notice.

Alternative 2. Add rule as straight incorporation by reference.

- Is this alternative an incorporation of federal standards, either by reference or full text incorporation? Yes.
- Is this alternative imposed by federal law or is there a comparable federal law? Yes.
- If it is a federal requirement, is it different from federal law? No.
- If it is different, describe the differences. Not applicable.

Alternative 3. To take no action on the proposed new rule.

- Is this alternative an incorporation of federal standards, either by reference or full text incorporation? No; however, IC 13-14-8-7 requires NESHAPs to be incorporated into state rules.
- Is this alternative imposed by federal law or is there a comparable federal law? No.
- If it is a federal requirement, is it different from federal law? No.
- If it is different, describe the differences. Not applicable.

#### **Applicable Federal Law**

The intent of this rule is to incorporate the national emission standard for hazardous air pollutants (NESHAP) from industrial, commercial, and institutional boilers and process heaters (69 FR 55218) into a state rule.

#### **Potential Fiscal Impact**

Potential Fiscal Impact of Alternative 1. Most of the changes in this alternative will have minimal fiscal impact since the additional requirements beyond those already imposed by the federal rule are either clarifications or changes in implementation procedures. The proposal may have significant fiscal impact if a source using a site specific risk assessment is unable to meet the health based compliance alternative emission limits using a reasonable estimate of worst case exposure for both current and future land use. For example, a source may have to install a scrubber to meet the HCl limits in the rule if the source is unable to comply with the health based compliance alternative emission limit.

Potential Fiscal Impact of Alternative 2. This alternative would have no fiscal impact since the requirements are already imposed under federal law.

Potential Fiscal Impact of Alternative 3. This alternative would have no fiscal impact.

#### **Public Participation and Workgroup Information**

At this time, no workgroup is planned for the rulemaking. If you feel that a workgroup or other informal discussion on the rule is appropriate, please contact Susan Bem, Rules Section, Office of Air Quality at (317) 233-5697 or (800) 451-6027 (in Indiana).

### **STATUTORY AND REGULATORY REQUIREMENTS**

IC 13-14-8-4 requires the board to consider the following factors in promulgating rules:

- (1) All existing physical conditions and the character of the area affected.
- (2) Past, present, and probable future uses of the area, including the character of the uses of surrounding areas.
- (3) Zoning classifications.
- (4) The nature of the existing air quality or existing water quality, as the case may be.
- (5) Technical feasibility, including the quality conditions that could reasonably be achieved through coordinated control of all factors affecting the quality.
- (6) Economic reasonableness of measuring or reducing any particular type of pollution.
- (7) The right of all persons to an environment sufficiently uncontaminated as not to be injurious to human, plant, animal, or aquatic life or to the reasonable enjoyment of life and property.

### **REQUEST FOR PUBLIC COMMENTS**

At this time, IDEM solicits the following:

- (1) The submission of alternative ways to achieve the purpose of the rule.
- (2) The submission of suggestions for the development of draft rule language.

Mailed comments should be addressed to:

#05-23(APCB) Boiler MACT  
Susan Bem Mail Code: 61-50  
c/o Administrative Assistant  
Rules Section  
Office of Air Quality  
Indiana Department of Environmental Management  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251.

Hand delivered comments will be accepted by the IDEM receptionist on duty at the Tenth Floor East reception desk, Office of Air Quality, Indiana Government Center-North, 100 North Senate Avenue, Indianapolis, Indiana.

Comments may be submitted by facsimile at the IDEM fax number: (317) 233-2342, Monday through Friday, between 8:15 a.m. and 4:45 p.m. Please confirm the timely receipt of faxed comments by calling the Rules Section at (317) 233-0426.

**COMMENT PERIOD DEADLINE**

Comments must be postmarked, faxed, or hand delivered by March 31, 2005.

Additional information regarding this action may be obtained from Susan Bem, Rules Section, Office of Air Quality, (317) 233-5697 or (800) 451-6027 (in Indiana).

Kathryn A. Watson, Chief  
Air Programs Branch  
Office of Air Quality