

- H. What are the notification, recordkeeping, and reporting requirements?
- I. What are the compliance deadlines?
- III. Summary of Responses to Major Comments
 - A. How did we develop the MACT floors?
 - B. What surrogates did we use for HAP?
 - C. Is a risk analysis warranted?
 - D. How did we revise the emission limitations?
 - E. How did we revise the performance test requirements?
 - F. How did we revise the cost estimates and economic analysis?
- IV. Summary of Environmental, Energy, and Economic Impacts
 - A. What are the air emission impacts?
 - B. What are the cost impacts?
 - C. What are the economic impacts?
 - D. What are the non-air health, environmental and energy impacts?
- V. Statutory and Executive Order Reviews
 - A. Executive Order 12866: Regulatory Planning and Review
 - B. Paperwork Reduction Act
 - C. Regulatory Flexibility Act
 - D. Unfunded Mandates Reform Act
 - E. Executive Order 13132: Federalism
 - F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments
 - G. Executive Order 13045: Protection of Children from Environmental Health & Safety Risks
 - H. Executive Order 13211: Actions that Significantly Affect Energy Supply, Distribution, or Use
 - I. National Technology Transfer Advancement Act
 - J. Congressional Review Act

I. Background

Section 112(d) of the CAA requires us (the EPA) to establish national emission standards for all categories and subcategories of major sources of HAP and for area sources listed for regulation under section 112(c). Major sources are those that emit or have the potential to emit at least 10 tons per year (tpy) of any single HAP or 25 tpy of any combination of HAP. Area sources are stationary sources of HAP that are not major sources. Additional information on the NESHAP development process can be found in the preamble to the proposed rule (66 FR 36836).

We received a total of 16 comment letters on the proposed NESHAP from industry and trade association representatives, State agencies, industry experts, environmental groups, universities, and private citizens. We offered to provide interested individuals the opportunity for oral presentations of data, views, or arguments concerning the proposed rule, but a public hearing was not requested.

Today's final rule reflects our full consideration of all the comments we received. Major public comments on the proposed rule along with our responses

to these comments are summarized in section III of this document. A detailed response to all the comments is included in the Background Information Document (BID) for the Promulgated Standards (Docket ID No. OAR-2002-0083).

II. Summary of Final Rule

A. Who Must Comply With the Final Rule?

Each owner or operator of an affected source at an integrated iron and steel manufacturing facility that is (or is part of) a major source of HAP emissions must comply with the final rule.

B. What Are the Affected Sources and Emission Points?

The affected sources are each new or existing sinter plant, blast furnace, and BOPF shop at an integrated iron and steel manufacturing facility that is (or is part of) a major source of HAP emissions. Emission limitations apply to the sinter plant windbox exhaust, discharge end, and sinter cooler; the blast furnace casthouse; and the BOPF shop including each furnace and ancillary operations (hot metal transfer, hot metal desulfurization, slag skimming, and ladle metallurgy). These processes, as well as their emissions and controls, are described in the preamble to the proposed rule (66 FR 36838-36839).

C. What Are the Emission Limitations?

The final rule includes particulate matter (PM) emission limits and opacity limits as well as operating limits for capture systems and control devices. An operating limit also applies either to the oil content of the sinter plant feedstock or to the volatile organic compound (VOC) emissions from the sinter plant windbox exhaust stream. Particulate matter and opacity serve as surrogate measures of HAP emissions.

1. Sinter Plants

The PM emission limits for a windbox exhaust stream are 0.4 pounds per ton (lb/ton) of product sinter for an existing sinter plant and 0.3 lb/ton for a new sinter plant. The final rule limits PM emissions from a discharge end to 0.02 grains per dry standard cubic foot (gr/dscf) for an existing plant and 0.01 gr/dscf for a new plant. The discharge end PM limits are a flow-weighted average when multiple control devices are operated in parallel. A 20 percent opacity limit applies to fugitive emissions from a discharge end at an existing sinter plant; a 10 percent opacity limit applies to a new sinter plant (both are 6-minute averages). The PM emission limits for sinter cooler

stacks are 0.03 gr/dscf for an existing plant and 0.01 gr/dscf for a new plant. If the sinter cooler is vented to the same control device as the discharge end, the PM limit is 0.02 gr/dscf for an existing plant and 0.01 gr/dscf for a new plant.

2. Blast Furnaces

The PM emission limits for a control device applied to emissions from a casthouse are 0.01 gr/dscf for an existing blast furnace and 0.003 gr/dscf for a new blast furnace. The opacity limits for fugitive emissions from a casthouse are 20 percent for an existing blast furnace and 15 percent for a new blast furnace (both are 6-minute averages).

3. BOPF Shops

For primary emissions from BOPF, different PM emission limits apply based on the type of hood system (closed or open). For BOPF with closed hood systems at a new or existing BOPF shop, the PM emission limit is 0.03 gr/dscf, and it only applies during periods of primary oxygen blow. The primary oxygen blow is the period in which oxygen is initially blown into the furnace and does not include any subsequent reblows. For BOPF with open hood systems, the PM emission limits are 0.02 gr/dscf for an existing BOPF shop and 0.01 gr/dscf for a new BOPF shop. These emission limits apply during all periods of the steel production cycle. The steel production cycle begins when the furnace is first charged with scrap and ends 3 minutes after slag is removed. The BOPF limits are a flow-weighted average when multiple control devices are operated in parallel.

The PM emission limits for a control device applied solely to secondary emissions from a BOPF are 0.01 gr/dscf for an existing BOPF shop and 0.0052 gr/dscf for a new BOPF shop. Secondary emissions are those not controlled by the primary emission control system, including emissions that escape from open and closed hoods and openings in the ductwork to the primary control system.

For the BOPF shop, the PM emission limit for a control device applied to emissions from ancillary operations (hot metal transfer, skimming, and desulfurization) is 0.01 gr/dscf for an existing BOPF shop and 0.003 for a new BOPF shop. The PM emission limits for ladle metallurgy operations are 0.01 gr/dscf for an existing BOPF shop and 0.004 gr/dscf for a new BOPF shop.

For the BOPF roof monitor, a 20 percent opacity limit applies to fugitive emissions from the BOPF or BOPF shop operations in an existing BOPF shop. This opacity limit is based on 3-minute