

ENVIRONMENTAL PROTECTION AGENCY**40 CFR Part 63**

[EPA-HQ-OAR-2002-0034; FRL-]

RIN 2060-AM85**National Emission Standards for Hazardous Air Pollutants for
Iron and Steel Foundries****AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Final rule.

SUMMARY: EPA is issuing amendments to the national emission standards for hazardous air pollutants (NESHAP) for iron and steel foundries. These final amendments add alternative compliance options for cupolas at existing foundries and clarify several provisions to increase operational flexibility and improve understanding of the final rule requirements.

DATES: These final amendments are effective on [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]. The incorporation by reference of certain publications listed in these amendments is approved by the Director of the Federal Register as of [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA-HQ-OAR-2002-0034. All documents in the docket are listed in the Federal Docket Management System index at <http://www.regulations.gov>. Although listed in the index, some

information is not publicly available, e.g., confidential business information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through www.regulations.gov or in hard copy at the National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Docket, EPA/DC, EPA West, Room 3334, 1301 Constitution Ave., NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Air Docket is (202) 566-1742.

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SUPPLEMENTARY INFORMATION:

Outline

The information presented in this preamble is organized as follows:

- I. General Information
 - A. Does this action apply to me?
 - B. Where can I get a copy of this document?
 - C. Judicial Review
- II. Background Information
- III. Summary of the Final Amendments Made Since Proposal
 - A. Emissions Limitations
 - B. Work Practice Standards
 - C. Operation and Maintenance Requirements
 - D. Compliance with Alternative Emissions Limits
 - E. Monitoring Requirements
 - F. Recordkeeping and Reporting Requirements
 - G. Definitions
 - H. Applicability
 - I. Editorial Corrections
- IV. Summary of Comments and Responses
 - A. Language of Proposed Alternative Emissions Limits
 - B. Mercury Emissions Limit
 - C. Information on Mercury Switch Removal from Scrap Suppliers
- 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 and Safety Risks
 - H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use
 - I. National Technology Transfer Advancement Act
 - J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
 - K. Congressional Review Act

I. General Information

- A. Does this action apply to me?

The regulated categories and entities potentially affected by these final amendments include:

| Category | NAICS code ¹ | Examples of regulated entities |
|----------|-------------------------|--------------------------------|
|----------|-------------------------|--------------------------------|

| | | |
|---|--------|--|
| Industry. | 331511 | Iron foundries. Iron and steel plants. Automotive and large equipment manufacturers. |
| | 331512 | Steel investment foundries. |
| | 331513 | Steel foundries (except investment). |
| Federal government | | Not affected. |
| State/local/tribal government | | Not affected. |

¹ North American Industry Classification System.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this action. To determine whether your facility would be regulated by this action, you should examine the applicability criteria in 40 CFR 63.7682 of subpart EEEEE (NESHAP for Iron and Steel Foundries). If you have any questions regarding the applicability of this action to a particular entity, consult either the air permit authority for the entity or your EPA regional representative as listed in 40 CFR 63.13 of subpart A (General Provisions).

B. Where can I get a copy of this document?

In addition to being available in the docket, an electronic copy of this final action will also be available on the Worldwide Web (WWW) through the Technology Transfer Network (TTN). Following signature, a copy of this final action will be posted on the TTN's policy and guidance page for newly proposed or promulgated rules at the following address:

<http://www.epa.gov/ttn/oarpg/>. The TTN provides information and technology exchange in various areas of air pollution control.

C. Judicial Review

Under section 307(b)(1) of the Clean Air Act (CAA), judicial review of these final amendments is available only by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit by [INSERT DATE 60 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER]. Under section 307(d)(7)(B) of the CAA, only an objection to these final amendments that was raised with reasonable specificity during the period for public comment can be raised during judicial review. Moreover, under section 307(b)(2) of the CAA, the requirements established by these final amendments may not be challenged separately in any civil or criminal proceedings brought by EPA to enforce these requirements.

II. Background Information

The NESHAP for iron and steel foundries (40 CFR part 63, subpart EEEEE) establishes emissions limitations and work practice requirements for the control of hazardous air pollutants (HAP) from foundry operations. The NESHAP implements section 112(d) of the CAA by requiring all iron and steel foundries that are major sources of HAP to meet standards reflecting application of the maximum achievable control technology (MACT). The compliance date for most of the subpart

EEEEEE requirements was April 23, 2007.

After publication of the NESHAP (69 FR 21906, April 22, 2004), the American Foundry Society, the Alliance of Automobile Manufacturers, and the Steel Founders' Society of America filed petitions for reconsideration of the final rule. The American Foundry Society and the Steel Founders' Society of America also filed petitions for review of the final rule (Steel Founders' Society of America v. U.S. EPA, No. 04-1190, D.C. Cir.) and American Foundry Society v. U.S. EPA, No. 04-1191, D.C. Cir.). The concerns raised by the petitioners regarding the work practice standards for scrap management have been resolved by rule amendments issued on May 20, 2005 (97 FR 29400). The Steel Founders' Society of America petitioned the court for voluntary dismissal of their petition for review on March 23, 2006, and the court granted that petition on May 2, 2006. Thus, the only challenge to the NESHAP remaining before the court is the American Foundry Society petition for review, No. 04-1191.

In accordance with section 113(g) of the CAA, EPA published a notice of a proposed settlement agreement between EPA and the petitioner (72 FR 1986, January 17, 2007) and provided a 30-day comment period which ended on February 16, 2007. The settlement agreement became final on March 9, 2007. On April 17, 2007 (72 FR 19150), we proposed rule amendments which addressed the need for alternative emissions limits for cupolas at existing

foundries and clarification of other rule requirements as set forth in Attachment A to the settlement agreement. The proposed amendments also included corrections to a few minor editorial errors.

These final amendments are materially the same as the proposed amendments. EPA expects these final amendments to resolve the remaining issues raised by the petitioner.

III. Summary of Final Amendments and Changes Made Since Proposal

These final amendments include two changes since proposal. The first change is in the wording used to describe the emission limit for the new compliance option for cupola melting furnaces; instead of abbreviating the limit as lb/ton of particulate matter (PM) (or total metal HAP), we expressly state the limit as pound of PM (or total metal HAP) per ton of metal charged. We intend this as a clarification, not as a substantive change from what we proposed. We are also correcting a publication error in the definition of "deviation" as published at 72 FR 19164. All other final amendments are exactly as proposed.

A. Emissions Limitations

1. New Compliance Options for Cupola Metal Melting Furnaces

These final amendments add a new compliance option to §73.7690(a)(2) of the NESHAP. The new alternative emissions limits for cupola metal melting furnaces at existing iron and

steel foundries allows the use of control technologies that are designed on a mass removal basis rather than an outlet concentration basis. The levels of the new alternative emissions limits are the same as proposed: 0.10 pound of PM per ton of metal charged or 0.008 pound of total HAP per ton of metal charged. In response to public comment, we have revised the manner in which the emissions limits are stated in the rule for clarity. We have also revised associated compliance provisions in §§63.7732(b)(6) and (c)(6), 63.7734(a)(2)(iii) and (iv), and 63.7743(a)(2)(iii) and (iv) to refer to the new alternative limits in terms of pounds of PM per ton (lb/ton) of metal charged or pounds of total metal HAP per ton of metal charged instead of lb/ton of PM or lb/ton of total metal HAP, respectively.

2. Fugitive Emissions Opacity Limit

These final amendments specify that the opacity limitations apply only to buildings that house iron and steel foundry emissions sources. If nonfoundry operations are housed in the same building as the foundry operations, the foundry must comply with the opacity limits for that building.

3. Triethylamine Emissions Limit

These final amendments replace the reference to test conditions ("as determined when scrubbing with fresh acid solution") with the phrase "according to the performance test

procedures in §63.7732(g)” since §63.7732(g) contains the requirement to conduct the test when scrubbing with fresh acid solution.

B. Work Practice Standards

1. Capture and Collection Systems

These final amendments delete the word “standard” from 40 CFR 63.7690(b)(1) to clarify that capture and collection systems are required for emissions sources subject to an emissions limit but not for emissions sources subject to work practice standards.

2. Scrap Management

These final amendments specify that “chlorinated” plastics are to be removed from the scrap material (instead of all plastic). These final amendments also revise the requirement in 40 CFR 63.7700(c)(2) for the owner or operator to obtain and maintain onsite a copy of the procedures used by the scrap supplier for either removing accessible mercury switches or for purchasing automobile bodies that have had the switches removed. These final amendments include an alternative procedure that allows the plant to document their attempts to obtain a copy of the procedures from the scrap suppliers servicing their area. We note, however, that under 40 CFR 63.7700(c)(2) the materials acquisition program must specify that the scrap supplier remove accessible mercury switches from the trunks and hoods of any

automotive bodies contained in the scrap in addition to accessible lead components such as batteries and wheel weights. It is incumbent on the foundry owner or operator to communicate these specifications to their scrap suppliers.

3. Scrap Preheaters

The existing rule requires the owner or operator to install, operate, and maintain a gas-fired preheater according to 40 CFR 63.7700(e)(1) or charge only certain materials according to 40 CFR 63.7700(e)(2). These final amendments revise the language of §63.7700(e)(1) to clarify that foundries are not required to install gas-fired preheaters when not necessary for foundry operations. It was not our intent to mandate installation of preheaters, but rather to establish requirements for those existing facilities that use scrap preheaters in lieu of selecting the option in 40 CFR 63.7700(e)(2). Therefore, these final amendments clarify §63.7700(e)(1) by deleting the word "install". Instead, these final amendments require the owner or operator to operate and maintain a gas-fired preheater where the flame directly contacts the scrap charged.

C. Operation and Maintenance Requirements

These final amendments clarify that the requirement in 40 CFR 63.7700(e)(2) applies to each capture and collection system and control device for an emissions source subject to a PM,

metal HAP, triethylamine (TEA), or volatile organic hazardous pollutants (VOHAP) emissions limit in 40 CFR 63.7690(a).

D. Compliance with Alternative Emissions Limits

The existing NESHAP establishes PM emissions limits and alternative emissions limits expressed in total metal HAP for cupolas and other foundry processes. These final amendments clarify our original intent to allow foundries to demonstrate compliance with any of the applicable alternative emissions limitations that are provided for a specific emissions source. When multiple alternative emissions limitations are provided for a specific emissions source, iron and steel foundries can demonstrate initial compliance with any of the alternative limits; they are not required to comply with all of the alternative emissions limits at any one time. These final amendments also clarify a facility's ability to change their selected compliance alternative and the procedures needed to effect that change. However, regarding continuous compliance, the facility is expected to continuously comply with the alternative emissions limit that was selected as their compliance option as demonstrated in their most recent performance test. The facility may choose to alter their selected alternative but must continue to comply with the previously selected alternative until they successfully demonstrate compliance with the new alternative emissions

limitation.

We are also finalizing requirements for determining initial compliance for cupola melting furnaces at existing iron and steel foundries that are subject to the new mass rate emissions limit. The final amendments to 40 CFR 63.7732(b) and (c) include new equations for determining PM or total metal HAP emissions from cupolas in the lb/ton of metal charged format. Other amendments to 40 CFR 63.7732(b) and (c) clarify test methods source sampling requirements.

1. Single Performance Test for Control Devices Serving Multiple Units

Section 63.7734 of the NESHAP requires iron and steel foundries to demonstrate initial compliance with PM emissions limits by conducting a performance test for each process unit according to the procedures in 40 CFR 63.7732. One petitioner pointed out that a common emissions control system may serve two similar or identical cupolas or serve multiple furnaces or process units. According to the petitioner, a requirement for separate tests of the control device while the emissions sources are operating is redundant and imposes unnecessary costs because the control device should perform the same on each identical furnace. These final amendments resolve the petitioner's concern by adding a new provision to the performance test requirements. As proposed, the final amendment requires

foundries to submit a site-specific test plan for the situation described by the petitioner or other situations not expressly considered in 40 CFR 63.7734. The site-specific test plan, which is subject to approval by the Administrator, will explain the procedures that would be followed during the test, such as operation of the unit or units at the maximum operating condition of the control system. The Administrator or delegated authority will determine on a case-by-case basis if one representative furnace/control device configuration may be tested.

2. Sampling Procedure for Electric Arc Furnaces, Electric Induction Furnaces, and Scrap Preheaters

As proposed, we are clarifying the sampling instructions in 40 CFR 63.7732(c)(4) and (5) to state that the initial compliance demonstrations for electric arc metal melting furnaces, electric induction metal melting furnaces, and scrap preheaters must be conducted under normal production conditions. These final amendments require sampling during normal operating conditions, which may include charging, melting, alloying, refining, slagging, and tapping (for a furnace) or charging, heating, and discharging (for a scrap preheater).

3. Minimum Sampling Volume for Total Metal HAP

As proposed, these final amendments remove the requirement in 40 CFR 63.7732(c)(2) for a minimum sample volume for test

runs by EPA Method 29 (40 CFR part 60, appendix A) because the method already includes such a requirement.

4. Opacity Test

Section 63.7732(d) of the existing NESHAP establishes the requirements for opacity tests. These final amendments instruct the certified observer how to take opacity readings by Method 9 (40 CFR part 60, appendix A) for a building that has many openings. As proposed, these final amendments allow the observer to take readings from a limited number of openings or vents that appear to have the highest opacities instead of making observations for each opening or vent from the building or structure. Alternatively, a single observation for the entire building is allowed if the fugitive release points afford such an observation. These final amendments also revise the language of 40 CFR 63.7732(d) (2) to clarify that opacity tests are to be conducted during PM performance tests, but that PM performance tests are not required to occur during the semiannual opacity tests.

5. Alternative Test Method

Section 63.7732(g) (v) of the existing NESHAP requires the use of EPA Method 18 (40 CFR part 60, appendix A) to determine the TEA concentration of gases from the TEA cold box mold or core making line. As proposed, these final amendments allow NIOSH Method 2010, "Amines, Aliphatic" (incorporated by

reference—see §63.14) as an alternative to EPA Method 18 (40 CFR part 60, appendix A) provided the performance requirements outlined in section 13.1 of EPA Method 18 are satisfied. Method 2010 is included in the NIOSH Manual of Analytical Methods (4th edition, NIOSH Publication 94-113, August 1994). The manual is available from the Government Printing Office and the National Technical Information Service (NTIS), NTIS publication no. PB95154191. The NIOSH method may also be found on the NIOSH website at the following address: www.cdc.gov/niosh/nmam/method-4000.html.

6. Procedures for Establishing Operating Limits

As proposed, these final amendments clarify the procedures for establishing control device operating limits in 40 CFR 63.7733(b) through (d) by deleting the reference to the 3-hour average from the test procedures. These final amendments specify that the owner or operator is to compute and record the average operating parameter value for each valid sampling run in which the applicable limit is met.

7. Repeat Performance Tests

As proposed, these final amendments revise the requirements for repeat performance in 40 CFR 63.7731(a) to clarify that demonstrating compliance by one method does not preclude a plant from demonstrating compliance using an alternative method at a later date. A plant may elect to demonstrate compliance with an

alternative emissions limit during the repeat performance tests conducted at least every 5 years. Furthermore, a plant may elect to conduct a performance test earlier than 5 years in order to change an operating limit or to demonstrate compliance with a different alternative emissions limit. A test conducted for the purpose of changing operating limits is subject to notification requirements in 40 CFR 63.7750(d).

E. Monitoring Requirements

1. Baghouse Monitoring Requirements

Section 63.7740(b) of the existing NESHAP requires a bag leak detection system for each negative pressure baghouse and for each positive pressure baghouse equipped with a stack where the baghouse is applied to meet any PM or total metal HAP emissions limitation in subpart EEEEE. This provision also requires inspection of each baghouse according to the requirements in 40 CFR 63.7740(b)(1) through (8). As proposed, these final amendments include monitoring requirements for the visual inspection of positive pressure baghouses that are not equipped with a stack. As proposed, these final amendments to 40 CFR 63.7740(b) clarify the text to ensure that the requirements in this paragraph for installing and using a bag leak detection system apply only to negative pressure baghouses and positive pressure baghouses equipped with a stack. The inspection requirements are separated and placed in a new

paragraph (c) and clarified to state that the inspection requirements apply to each baghouse regardless of type. These final amendments to 40 CFR 63.7740 also renumber the paragraphs which follow new paragraph (c). Similar clarifications are made to the requirements for demonstrating continuous compliance in 40 CFR 63.7743(c).

2. Demonstration of Initial Compliance with Bag Leak Detection System Operation and Maintenance Requirements

Section 63.7736(c) of the existing NESHAP instructs the owner or operator how to demonstrate initial compliance with the requirements for bag leak detection systems. Under 40 CFR 63.7736(c)(1), the owner or operator must submit the bag leak detection system monitoring plan to the Administrator for approval according to the requirements in 40 CFR 63.7710(b). As proposed, these final amendments to 40 CFR 63.7736(c)(1) revise this provision to clarify that submission of the monitoring plan independent of the operation and maintenance plan is not necessary. Our intent is to include the bag leak detection system information in the operation and maintenance plan to streamline the approval process and avoid the administrative costs associated with a separate submission. In addition, having one integrated plan will provide a centralized reference tool for control device operation and maintenance requirements.

3. Installation, Operation, and Maintenance Requirements for

Monitors

As proposed, these final amendments revise the requirements for operation and maintenance of continuous parameter monitoring systems to more clearly describe the inspection requirements. Under the operation and maintenance requirements for flow measurement devices in 40 CFR 63.7741(a)(1)(iv), the owner or operator must perform monthly inspections of all flow sensor components for integrity, all electrical connections for continuity, and all mechanical connections for leakage. These final amendments change this provision to require a monthly visual inspection of all components, including all electrical and mechanical connections for proper functioning. The same changes are made to the monthly inspection requirements for other types of monitoring devices in §§63.7741(a)(2)(vi), (c)(1)(vi), (c)(2)(iv), (d)(8), and (e)(2)(iv).

As proposed, these final amendments also revise the requirement for pressure measurement devices in 40 CFR 63.7741(a)(2)(iii) and 40 CFR 63.7741(c)(1)(iv) for a "daily check of the pressure tap for pluggage." We are requiring a daily check for pluggage when using a regular pressure tap and a monthly check when using a non-clogging pressure tap. These final amendments also clarify the requirements for pressure measurement devices in 40 CFR 63.7741(a)(2)(iv) and 40 CFR 63.7741(c)(1)(iv) to allow the use of a manometer or equivalent

device for calibrations.

F. Recordkeeping and Reporting Requirements

As proposed, these final amendments clarify two of the recordkeeping requirements in 40 CFR 63.7752(a)(4). The requirement for the annual quantity of chemical binder or coating materials used to make molds and cores is revised to require the annual quantity of chemical binder or coating materials used to coat or make molds and cores. (We inadvertently omitted the word "coat" from the original rule language.) The final requirement for records of the annual quantity of HAP used states that records are required of the annual quantity of HAP used in these chemical binder or coating materials at the foundry, as calculated from the recorded quantities and chemical compositions (from Material Data Safety Sheet or other documentation). This final amendment clarifies that the HAP records requirement is specific to the chemicals used in the mold and core-making and coating operations and not to other HAP materials used at the foundry such as solvents used to clean or degrease equipment.

These final amendments to the reporting requirements allow foundries to report the results of the semiannual opacity tests within the semiannual reports rather than having to submit these semiannual documents separately. Other final amendments to the reporting requirements clarify the requirements for an immediate

startup, shutdown, and malfunction report by adding the same language used in 40 CFR 63.10(d)(5)(ii). These final amendments require an immediate report if a foundry has a startup, shutdown, or malfunction and exceeds any applicable emissions limitation in 40 CFR 63.7690.

G. Definitions

We are amending the definition of the term "Deviation" in 40 CFR 63.7765 to clarify that the enforcement authority determines if a deviation is a violation. The proposed amendment appeared at 72 FR 19164: however, due to a publication error, the new language was added after the first sentence of the original definition, rather than at the end. In these final amendments, we are correcting the placement of the new language.

As proposed, we are adding definitions of the terms "off blast" and "on blast" to 40 CFR 63.7765. The term "off blast" is defined as those periods of cupola operation when the cupola is not actively being used to produce molten metal. Off-blast conditions include cupola startup procedures as defined in the startup, shutdown, and malfunction plan. Off-blast conditions also include idling conditions when the blast air is turned off or down to the point that the cupola does not produce additional molten metal. The term "on blast" means those periods of cupola operation when combustion (blast) air is introduced to the cupola furnace and the furnace is capable of producing molten

metal. On blast conditions are characterized by both blast air introduction and molten metal production.

As proposed, these final amendments revise the definition of "total metal HAP" to specify the analytes to be included and how non-detect values are to be used in calculating the total metal HAP quantity. The definition of "total metal HAP" is the sum of the concentrations of antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, mercury, nickel, and selenium as measured by EPA Method 29 (40 CFR part 60, appendix A). Only the measured concentration of the listed analytes that are present at concentrations exceeding one-half of the quantification limit of the analytical method are used in the sum. If any of the analytes are not detected or are detected at concentrations less than one-half the quantification limit of the analytical method, the concentration of those analytes is assumed to be zero for the purposes of calculating the total metal HAP for this subpart.

As proposed, we are also clarifying the definition of "scrap preheater" to differentiate scrap dryers that are used solely to remove moisture from the scrap metal from scrap preheaters. The revised definition of "scrap preheater" states that scrap dryers, which are used solely to remove water from metal scrap that does not contain any volatile impurities or other tramp materials, are not considered to be scrap preheaters

for purposes of this subpart.

H. Applicability

As proposed, we are revising the applicability provisions in 40 CFR 63.7681 to reference the definition of "major source" in 40 CFR 63.2. This amendment clarifies that when we refer to a "major source" of hazardous air pollutants in 40 CFR 63.7681, we are referring to the definition of major source in 40 CFR 63.2, and not, for example, to the definition of major source in 40 CFR 51.166.

I. Editorial Corrections

As proposed, we are correcting a grammatical error in 40 CFR 63.7710(b), which should refer to an emissions source subject to a (rather than "an") PM, metal HAP, TEA, or VOHAP emissions limit in 40 CFR 63.7690(a). A comma is added to 40 CFR 63.7734(a)(11). The words "as possible" are added to 40 CFR 63.7741(a)(2)(i). The final amendments also correct a misspelling of the word "calendar" in 40 CFR 63.7700(c)(3)(iii).

IV. Summary of Comments and Responses

A. Language of Proposed Alternative Emissions Limits

Comment: One commenter expressed support for the proposed alternative standards for PM or total metal HAP and conforming amendments. However, the commenter believed that the wording of the proposed limit for total metal HAP is ambiguous even though the meaning is clear in context. According to the commenter,

the proposed limit for total metal HAP (0.008 lb/ton of total metal HAP) could be construed to mean that the standard is 0.008 pounds of some unspecified substance per ton of total metal HAP emitted. The commenter recommended that EPA clarify the language to read "0.008 pounds of total metal HAP per ton (lb/ton) of metal charged" which would be consistent with the language in §63.7690(a)(ii) for the proposed alternative PM limit.

Response: Section 63.7690(a)(2)(ii) of the proposed amendments establishes the alternative limit for PM as 0.10 pound of PM per ton (lb/ton) of metal charged; the lb/ton abbreviation is then used in §63.7690(a)(2)(iv) for the total metal HAP limit. While we agree with the commenter that the meaning is clear in context, we have revised the language for the total metal HAP limit to read according to the commenter's suggestion. For additional clarity, we have revised the wording of both limits when they appear in conforming amendments to read "pound of PM per ton (lb/ton) of metal charged" and "pound of total metal HAP per ton (lb/ton) of metal charged."

B. Mercury Emissions Limit

Comment: One commenter recommended that EPA adopt stand-alone mercury emissions standards similar to those in New

Jersey.¹ The commenter explained that the rule requires iron and steel melters (at both foundries and steel production plants) to meet a mercury emissions limit of 35 milligrams per ton (mg/ton) of steel produced or, in the alternative, reduce mercury emissions by 75 percent using a mercury control apparatus. The emission limit, which becomes effective in January 2010, can be achieved through source separation measures and, if necessary, additional exhaust controls. According to the commenter, the emissions limit determines the success of the source separation program and the need for add on mercury control measures on the melter exhaust. The commenter stated that one foundry had recently installed an activated carbon injection system for mercury control and a baghouse serving the cupola and that test results show greater than 90 percent mercury control and emissions less than 3 mg/ton. According to the commenter, other facilities with existing fabric filter control are testing carbon injection and have reported compliance with the mercury emissions limit but have not submitted formal test results.

Response: As described in the preamble to the final NESHP

¹ The State of New Jersey Department of Environmental Protection mercury regulations for iron and steel scrap melting specify that mercury emissions from each melter shall not exceed 35 megagrams per ton of steel produced. Alternatively, mercury emissions as measured at the exit of the mercury control apparatus must be reduced by at least 75 percent (N.J.A.C. 7:27-27.6). These rules have been upheld by the Appellate Division of the State Superior Court.

for Iron and Steel Foundries (69 FR 21906, April 22, 2004), the control systems used at iron and steel foundries at the time the NESHAP was developed were not effective in reducing mercury emissions. The pollution prevention measure of removing mercury switches from automotive scrap was determined to be a cost-effective "beyond the MACT floor" requirement and was included as a requirement in the final NESHAP as part of the scrap selection and inspection program. The final NESHAP was projected to reduce mercury emissions by 2,800 pounds per year at a cost of \$3.6-million per year (which includes increased cost of scrap for removing the mercury switches). We recognize that there are other mercury-containing devices in automotive scrap so that the pollution prevention program required by the final NESHAP does not eliminate all mercury from the scrap. At the time the NESHAP was developed, we considered requirements for more stringent mercury reduction requirements, either through additional scrap inspection and selection inspection requirements specific to other mercury-containing devices or through innovative mercury controls. Based on the small quantities of mercury in these other devices, these options were determined to be cost-ineffective.

A re-evaluation of the MACT floor for the Iron and Steel NESHAP in light of new control systems added to iron and steel foundries since the NESHAP was first promulgated is outside the

scope of the current package of amendments. We did not include or take comment on a separate mercury limit in our April 17, 2007 Notice of Proposed Rulemaking. Therefore, we are not including specific emission limits for mercury in the final amendments. A technology review of the MACT standards is required by the CAA eight years after promulgation. These newly installed mercury controls will be considered in detail during this technology review.

C. Information on Mercury Switch Removal from Scrap Suppliers

Comment: One commenter stated that EPA should not revise §63.7700(b)(2) to eliminate the requirement that facilities buy scrap only from suppliers willing to provide a copy of their procedures for ensuring that mercury switches are removed from automobile bodies that they supply. The commenter believed that no supplier will do this unless foundries require it because suppliers that do provide a copy of their procedures will be at a disadvantage to suppliers that either do not remove the mercury switches or are unwilling to document their removal procedures. According to the commenter, under the proposed amendments, suppliers would not be penalized as they are under the existing rule.

The commenter stated that this proposed amendment increases mercury emissions and that EPA did not provide an estimate of the health, environmental, and economic impacts of the increase.

The commenter also claimed that because of limitations currently enforced on some sources, the proposed amendment reduces the stringency of the rule below the MACT floor for new sources and possibly for existing sources. According to the commenter, the proposed amendment is inconsistent with the CAA.

Response: The amendment does not absolve the iron and steel foundry from the responsibility to use automotive scrap that has had accessible mercury switches removed. In previous amendments to the NESHAP (70 FR 29400, May 20, 2005), we included provisions for foundries to perform inspections at the scrap supplier. Thus, the foundry should be able to verify whether the supplier in fact removes accessible mercury switches. The reason for the amendment is to clarify that EPA is not imposing a regulatory burden on the scrap supplier through this rule. EPA is not requiring scrap suppliers to provide the foundry with written procedures for ensuring the mercury switches are removed. Nevertheless, because we require foundries to purchase only automotive scrap that has had accessible mercury switches removed from the trunks and hoods of automobile bodies, a foundry is much more likely to do business with a scrap supplier that supplies written procedures than with one that does not. It is incumbent on the foundry to document their attempt to obtain written procedures and to ensure, through site inspections or other means, that any automotive

scrap that they purchase from their suppliers has had accessible mercury switches removed from the trunks and hoods.

V. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review

This action is not a "significant regulatory action" under the terms of Executive Order 12866 (58 FR 51735, October 4, 1993) and is therefore not subject to review under the Executive Order.

B. Paperwork Reduction Act

This action does not impose any new information collection burden. These final amendments add a new compliance alternative, allow a new alternative test method, and clarify requirements in the existing rule. One amendment to the baghouse monitoring requirements clarifies our original intent to require inspections of positive pressure baghouses not equipped with a stack. No new burden is associated with this requirement because the burden was included in the approved information collection request (ICR) for the existing rule. However, the Office of Management and Budget (OMB) has previously approved the information collection requirements contained in the existing regulation (40 CFR part 63, subpart EEEEE) under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. and has assigned OMB control number 2060-0543, EPA ICR number 2096.03. A copy of the OMB-approved ICR

may be obtained from Susan Auby, Collection Strategies Division, U.S. EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, DC 20460, by e-mail at auby.susan@epa.gov, or by calling (202) 566-1672.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, disclose, or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in 40 CFR part 63 are listed in 40 CFR part 9.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act generally requires an agency to prepare a regulatory flexibility analysis of any rule subject

to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule would not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions.

For the purposes of assessing the impacts of these final amendments on small entities, small entity is defined as: (1) a small business that meets the Small Business Administration size standards for small businesses found at 13 CFR 121.201 (less than 500 employees for NAICS codes 331511, 331512, and 331513); (2) a small governmental jurisdiction that is a government of a city, county, town, school district, or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of these final amendments on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. In determining whether a rule has a significant economic impact on a substantial number of small entities, the impact of concern is any significant adverse economic impact on small entities, since the primary purpose of the regulatory flexibility analyses is to identify and address

regulatory alternatives “which minimize any significant economic impact of the rule on small entities.” 5 U.S.C 603 and 604. Thus, an agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, or otherwise has a positive economic effect on all of the small entities subject to the rule.

There would not be any adverse impacts on any source (including any small entity) as a result of the final amendments because the final amendments do not create any new requirements or burdens that were not already included in the economic impact assessment for the existing rule. These final amendments relieve regulatory burden for all entities as a result of the operational flexibility afforded by the alternative compliance option, alternative test method, and provisions allowing plants to combine multiple reports into a single submission. We have therefore concluded that these final amendments will relieve regulatory burden for all affected small entities.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a

written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures by State, local, and tribal governments, in the aggregate, or by the private sector, of \$100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the

regulatory requirements.

EPA has determined that these final amendments do not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, and tribal governments, in the aggregate, or the private sector in any one year. The final amendments are expected to result in an overall reduction in expenditures for the private sector and are not expected to impact State, local, or tribal governments. Thus, the final amendments are not subject to the requirements of sections 202 and 205 of the UMRA. EPA has determined that these final amendments contain no regulatory requirements that might significantly or uniquely affect small governments. These final amendments contain no requirements that apply to such governments, and impose no obligations upon them.

E. Executive Order 13132: Federalism

Executive Order 13132 (64 FR 43255, August 10, 1999) requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" are defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various

levels of government.”

These final amendments do not have federalism implications. They will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. These final amendments do not impose any requirements on State and local governments. Thus, Executive Order 13132 does not apply to these final amendments.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

Executive Order 13175 (65 FR 67249, November 6, 2000), requires EPA to develop an accountable process to ensure “meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.” These final amendments do not have tribal implications, as specified in Executive Order 13175. These final amendments impose no requirements on tribal governments. Thus, Executive Order 13175 does not apply to these final amendments.

G. Executive Order 13045: Protection of Children from Environmental Health and Safety Risks

Executive Order 13045, “Protection of Children from Environmental Health Risks and Safety Risks” (62 FR 19885, April

23, 1997) applies to any rule that: (1) is determined to be “economically significant” as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, EPA must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

EPA interprets Executive Order 13045 as applying only to those regulatory actions that are based on health or safety risks, such that the analysis required under section 5-501 of the Executive Order has the potential to influence the regulation. These final amendments are not subject to Executive Order 13045 because they are based on technology performance and not on health or safety risks.

H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use

These final amendments are not subject to Executive Order 13211, “Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use” (66 FR 28355, May 22, 2001) because they are not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer Advancement Act

As noted in the proposed rule, Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) of 1995 (Public Law No. 104-113, Section 12(d), 15 U.S.C. 272 note) directs EPA to use voluntary consensus standards (VCS) in its regulatory activities, unless to do so would be inconsistent with applicable law or otherwise impractical. The VCS are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by VCS bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency does not use available and applicable VCS.

These final amendments involve technical standards. Therefore the Agency conducted a search to identify potential VCS in addition to the EPA and alternative method. However, we identified no such standards and none were brought to our attention in comments. Therefore EPA has decided to use an alternative methodology, the NIOSH Method 2010, "Amines, Aliphatic" (incorporated by reference in §63.14) for EPA Method 18 (40 CFR part 60, appendix A) to determine the TEA concentration of gases from the TEA cold box mold or core making line provided the performance requirements outlined in section 13.1 of EPA Method 18 are satisfied.

For the methods required or referenced by these final amendments, a source may apply to EPA for permission to use alternative test methods or alternative monitoring requirements in place of any required testing methods, performance specifications, or procedures under §§63.7(f) and 63.8(f) of subpart A of the General Provisions.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order 12898 (59 FR 7629, February 16, 1994) establishes Federal executive policy on environmental justice. Its main provision directs Federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

EPA has determined that these final amendments will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because they do not affect the level of protection provided to human health or the environment. These final amendments do not relax the control measures on sources regulated by the rule and

therefore will not cause emissions increases from these sources.

K. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801, et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of Congress and to the Comptroller General of the United States. EPA will submit a report containing these final amendments and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the final amendments in the Federal Register. A major rule cannot take effect until 60 days after it is published in the Federal Register. This action is not a "major rule" as defined by 5 U.S.C. 804(2). These final amendments will be effective on [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Hazardous substances, Incorporation by reference, Reporting and recordkeeping requirements.

Dated:

Stephen L. Johnson,
Administrator.

For the reasons stated in the preamble, part 63, title 40, chapter I, of the Code of Federal Regulations is amended as follows:

PART 63--[AMENDED]

1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401, et seq.

Subpart A-- [AMENDED]

2. Section 63.14 is amended by adding paragraph (k) (2) to read as follows:

§63.14 Incorporations by reference.

* * * * *

(k) * * *

(2) The following method as published in the National Institute of Occupational Safety and Health (NIOSH) test method compendium, "NIOSH Manual of Analytical Methods", NIOSH publication no. 94-113, Fourth Edition, August 15, 1994.

(i) NIOSH Method 2010, "Amines, Aliphatic," Issue 2, August 15, 1994, IBR approved for §63.7732(g)(1)(v) of Subpart EEEEE of this part.

(ii) [Reserved]

Subpart EEEEE-- [AMENDED]

3. Section 63.7681 is amended by revising the second

sentence to read as follows:

§63.7681 Am I subject to this subpart?

* * * Your iron and steel foundry is a major source of HAP for purposes of this subpart if it emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year or if it is located at a facility that emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year as defined in §63.2.

4. Section 63.7690 is amended by:

- a. Revising paragraphs (a) introductory text;
- b. Revising paragraph (a) (2);
- c. Revising paragraph (a) (7);
- d. Revising paragraphs (a) (11) (i) and (ii); and
- e. Revising paragraph (b) (1) introductory text to read as

follows:

§63.7690 What emissions limitations must I meet?

(a) You must meet the emissions limits or standards in paragraphs (a) (1) through (11) of this section that apply to you. When alternative emissions limitations are provided for a given emissions source, you are not restricted in the selection of which applicable alternative emissions limitation is used to demonstrate compliance.

* * * * *

(2) For each cupola metal melting furnace at an existing iron and steel foundry, you must not discharge emissions through a conveyance to the atmosphere that exceed either the limit for PM in paragraph (a)(2)(i) or (ii) of this section or, alternatively the limit for total metal HAP in paragraph (a)(2)(iii) or (iv) of this section:

(i) 0.006 gr/dscf of PM; or

(ii) 0.10 pound of PM per ton (lb/ton) of metal charged,

or

(iii) 0.0005 gr/dscf of total metal HAP; or

(iv) 0.008 pound of total metal HAP per ton (lb/ton) of metal charged.

* * * * *

(7) For each building or structure housing any iron and steel foundry emissions source at the iron and steel foundry, you must not discharge any fugitive emissions to the atmosphere from foundry operations that exhibit opacity greater than 20 percent (6-minute average), except for one 6-minute average per hour that does not exceed 27 percent opacity.

* * * * *

(11) * * *

(i) You must not discharge emissions of TEA through a conveyance to the atmosphere that exceed 1 ppmv, as determined

according to the performance test procedures in §63.7732(g); or

(ii) You must reduce emissions of TEA from each TEA cold box mold or core making line by at least 99 percent, as determined according to the performance test procedures in §63.7732(g).

(b) * * *

(1) You must install, operate, and maintain a capture and collection system for all emissions sources subject to an emissions limit for VOHAP or TEA in paragraphs (a)(8) through (11) of this section.

* * * * *

5. Section 63.7700 is amended by:

- a. Revising the last sentence in paragraph (b);
- b. Revising paragraphs (c)(1)(i) and (ii);
- c. Revising the last sentence in paragraph (c)(2);
- d. Revising paragraph (c)(3)(iii); and
- e. Revising paragraph (e)(1) to read as follows:

§63.7700 What work practice standards must I meet?

* * * * *

(b) * * * Any post-consumer engine blocks, post-consumer oil filters, or oily turnings that are processed and/or cleaned to the extent practicable such that the materials do not include lead components, mercury switches, chlorinated plastics, or free organic liquids can be included in this certification.

(c) * * *

(1) * * *

(i) For scrap charged to a scrap preheater, electric arc metal melting furnace, or electric induction metal melting furnace, specifications for scrap materials to be depleted (to the extent practicable) of the presence of used oil filters, chlorinated plastic parts, organic liquids, and a program to ensure the scrap materials are drained of free liquids; or

(ii) For scrap charged to a cupola metal melting furnace, specifications for scrap materials to be depleted (to the extent practicable) of the presence of chlorinated plastic, and a program to ensure the scrap materials are drained of free liquids.

(2) * * * You must either obtain and maintain onsite a copy of the procedures used by the scrap supplier for either removing accessible mercury switches or for purchasing automobile bodies that have had mercury switches removed, as applicable, or document your attempts to obtain a copy of these procedures from the scrap suppliers servicing your area.

(3) * * *

(iii) The inspection procedures must include provisions for rejecting or returning entire or partial scrap shipments that do not meet specifications and limiting purchases from vendors whose shipments fail to meet specifications for more

than three inspections in one calendar year.

* * * * *

(e) * * *

(1) You must operate and maintain a gas-fired preheater where the flame directly contacts the scrap charged; or

* * * * *

6. Section 63.7710 is amended by revising the first sentence in paragraph (b) introductory text to read as follows:

§63.7710 What are my operation and maintenance requirements?

* * * * *

(b) You must prepare and operate at all times according to a written operation and maintenance plan for each capture and collection system and control device for an emissions source subject to a PM, metal HAP, TEA, or VOHAP emissions limit in §63.7690(a). * * *

* * * * *

7. Section 63.7731 is amended by revising the first sentence in paragraph (a) to read as follows:

§63.7731 When must I conduct subsequent performance tests?

(a) You must conduct subsequent performance tests to demonstrate compliance with all applicable PM or total metal HAP, VOHAP, and TEA emissions limitations in §63.7690 for your iron and steel foundry no less frequently than every 5 years and each time you elect to change an operating limit or to comply

with a different alternative emissions limit, if applicable.

* * *

* * * * *

8. Section 63.7732 is amended by:

a. Revising paragraph (a);

b. Redesignating Equations 1 through 5 as Equations 3 through 7;

c. Revising paragraphs (b) introductory text, (b) (4), and (b) (5) and adding paragraph (b) (6) containing Equation 1;

d. Revising paragraphs (c) introductory text, (c) (2), (c) (4), and (c) (5) and adding paragraph (c) (6) containing Equation 2;

e. Revising paragraph (d) introductory text, adding two sentences to the end of paragraph (d) (1), and revising paragraph (d) (2);

f. Revising paragraph (e) (3);

g. Revising paragraphs (f) (2) (ix) and (f) (3);

h. Revising paragraphs (g) (1) (v), (g) (2), and (g) (4);

i. Revising paragraphs (h) (2) (ii), (h) (3) (ii), and (h) (3) (iii); and

j. Adding paragraph (i) to read as follows:

§63.7732 What test methods and other procedures must I use to demonstrate initial compliance with the emissions limitations?

(a) You must conduct each performance test that applies to

your iron and steel foundry based on your selected compliance alternative, if applicable, according to the requirements in §63.7(e)(1) and the conditions specified in paragraphs (b) through (i) of this section.

(b) To determine compliance with the applicable emissions limit for PM in §63.7690(a)(1) through (6) for a metal melting furnace, scrap preheater, pouring station, or pouring area, follow the test methods and procedures in paragraphs (b)(1) through (6) of this section.

* * * * *

(4) For electric arc and electric induction metal melting furnaces, sample only during normal production conditions, which may include, but are not limited to the following cycles: charging, melting, alloying, refining, slagging, and tapping.

(5) For scrap preheaters, sample only during normal production conditions, which may include, but are not limited to the following cycles: charging, heating, and discharging.

(6) Determine the total mass of metal charged to the furnace or scrap preheater For a cupola metal melting furnace at an existing iron and steel foundry that is subject to the PM emissions limit in §63.7690(a)(ii), calculate the PM emissions rate in pounds of PM per ton (lb/ton) of metal charged using Equation 1 of this section:

$$EF_{PM} = C_{PM} \times \left(\frac{Q}{M_{charge}} \right) \times \left(\frac{t_{test}}{7,000} \right) \quad (\text{Eq. 1})$$

Where:

EF_{PM} = Mass emissions rate of PM, pounds of PM per ton (lb/ton) of metal charged;

C_{PM} = Concentration of PM measured during performance test run, gr/dscf;

Q = Volumetric flow rate of exhaust gas, dry standard cubic feet per minute (dscfm);

M_{charge} = Mass of metal charged during performance test run, tons;

t_{test} = Duration of performance test run, minutes; and

7,000 = Unit conversion factor, grains per pound (gr/lb).

(c) To determine compliance with the applicable emissions limit for total metal HAP in §63.7690(a)(1) through (6) for a metal melting furnace, scrap preheater, pouring station, or pouring area, follow the test methods and procedures in paragraphs (c)(1) through (6) of this section.

* * * * *

(2) A minimum of three valid test runs are needed to comprise a performance test.

* * * * *

(4) For electric arc and electric induction metal melting furnaces, sample only during normal production conditions, which may include, but are not limited to the following cycles: charging, melting, alloying, refining, slagging, and tapping.

(5) For scrap preheaters, sample only during normal production conditions, which may include, but are not limited to

the following cycles: charging, heating, and discharging.

(6) Determine the total mass of metal charged to the furnace or scrap preheater during each performance test run and calculate the total metal HAP emissions rate (pounds of total metal HAP per ton (lb/ton) of metal charged) using Equation 2 of this section:

$$EF_{TMHAP} = C_{TMHAP} \times \left(\frac{Q}{M_{charge}} \right) \times \left(\frac{t_{test}}{7,000} \right) \quad (\text{Eq. 2})$$

Where:

EF_{TMHAP} = Emissions rate of total metal HAP, pounds of total metal HAP per ton (lb/ton) of metal charged;

C_{TMHAP} = Concentration of total metal HAP measured during performance test run, gr/dscf;

Q = Volumetric flow rate of exhaust gas, dscfm;

M_{charge} = Mass of metal charged during performance test run, tons;

t_{test} = Duration of performance test run, minutes; and

7,000 = Unit conversion factor, gr/lb.

(d) To determine compliance with the opacity limit in §63.7690(a)(7) for fugitive emissions from buildings or structures housing any iron and steel foundry emissions source at the iron and steel foundry, follow the procedures in paragraphs (d)(1) and (2) of this section.

(1) * * * The certified observer may identify a limited number of openings or vents that appear to have the highest opacities and perform opacity observations on the identified openings or vents in lieu of performing observations for each

opening or vent from the building or structure. Alternatively, a single opacity observation for the entire building or structure may be performed, if the fugitive release points afford such an observation.

(2) During testing intervals when PM performance tests, if applicable, are being conducted, conduct the opacity test such the opacity observations are recorded during the PM performance tests.

(e) * * *

(3) For a cupola metal melting furnace, correct the measured concentration of VOHAP, TGNMO, or TOC for oxygen content in the gas stream using Equation 3 of this section:

$$C_{VOHAP,10\%O_2} = C_{VOHAP} \left(\frac{10.9\%}{20.9\% - \%O_2} \right) \quad (\text{Eq. 3})$$

Where:

C_{VOHAP} = Concentration of VOHAP in ppmv as measured by Method 18 in 40 CFR part 60, appendix A or the concentration of TGNMO or TOC in ppmv as hexane as measured by Method 25 or 25A in 40 CFR part 60, appendix A; and

$\%O_2$ = Oxygen concentration in gas stream, percent by volume (dry basis).

* * * * *

(f) * * *

(2) * * *

(ix) Calculate the site-specific VOC emissions limit using Equation 4 of this section:

$$VOC_{limit} = 20 \times \frac{C_{VOHAP,avg}}{C_{CEM}} \quad (\text{Eq. 4})$$

Where:

$C_{VOHAP,avg}$ = Average concentration of VOHAP for the source test in ppmv as measured by Method 18 in 40 CFR part 60, appendix A or the average concentration of TGNMO for the source test in ppmv as hexane as measured by Method 25 in 40 CFR part 60, appendix A; and

C_{CEM} = Average concentration of total hydrocarbons in ppmv as hexane as measured using the CEMS during the source test.

(3) For two or more exhaust streams from one or more automated conveyor and pallet cooling lines or automated shakeout lines, compute the flow-weighted average concentration of VOHAP emissions for each combination of exhaust streams using Equation 5 of this section:

$$C_w = \frac{\sum_{i=1}^n C_i Q_i}{\sum_{i=1}^n Q_i} \quad (\text{Eq. 5})$$

Where:

C_w = Flow-weighted concentration of VOHAP or VOC, ppmv (as hexane);

C_i = Concentration of VOHAP or VOC from exhaust stream "i", ppmv (as hexane);

n = Number of exhaust streams sampled; and

Q_i = Volumetric flow rate of effluent gas from exhaust stream "i", dscfm.

(g) * * *

(1) * * *

(v) Method 18 to determine the TEA concentration.

Alternatively, you may use NIOSH Method 2010 (incorporated by

reference-see §63.14) to determine the TEA concentration provided the performance requirements outlined in section 13.1 of EPA Method 18 are satisfied. The sampling option and time must be sufficiently long such that either the TEA concentration in the field sample is at least 5 times the limit of detection for the analytical method or the test results calculated using the laboratory's reported analytical detection limit for the specific field samples are less than 1/5 of the applicable emissions limit. When using Method 18, the adsorbent tube approach, as described in section 8.2.4 of Method 18, may be required to achieve the necessary analytical detection limits. The sampling time must be at least 1 hour in all cases.

(2) If you use a wet acid scrubber, conduct the test as soon as practicable after adding fresh acid solution and the system has reached normal operating conditions.

* * * * *

(4) If you are subject to the 99 percent reduction standard, calculate the mass emissions reduction using Equation 6 of this section:

$$\%reduction = \frac{E_i - E_o}{E_i} \times 100\% \quad (\text{Eq. 6})$$

Where:

E_i = Mass emissions rate of TEA at control device inlet, kilograms per hour (kg/hr); and

E_o = Mass emissions rate of TEA at control device outlet, kg/hr.

(h) * * *

(2) * * *

(ii) Calculate the flow-weighted average emissions limit, considering only the regulated streams, using Equation 5 of this section, except C_w is the flow-weighted average emissions limit for PM or total metal HAP in the exhaust stream, gr/dscf; and C_i is the concentration of PM or total metal HAP in exhaust stream "i", gr/dscf.

* * * * *

(3) * * *

(ii) Measure the flow rate and PM or total metal HAP concentration of the combined exhaust stream both before and after the control device and calculate the mass removal efficiency of the control device using Equation 6 of this section, except E_i is the mass emissions rate of PM or total metal HAP at the control device inlet, lb/hr and E_o is the mass emissions rate of PM or total metal HAP at the control device outlet, lb/hr.

(iii) Meet the applicable emissions limit based on the calculated PM or total metal HAP concentration for the regulated emissions sources using Equation 7 of this section:

$$C_{released} = C_i \times \left(1 - \frac{\%reduction}{100} \right) \quad (Eq. 7)$$

Where:

C_{released} = Calculated concentration of PM (or total metal HAP) predicted to be released to the atmosphere from the regulated emissions source, gr/dscf; and
 C_i = Concentration of PM (or total metal HAP) in the uncontrolled regulated exhaust stream, gr/dscf.

(i) To determine compliance with an emissions limit for situations when multiple sources are controlled by a single control device, but only one source operates at a time, or other situations that are not expressly considered in paragraphs (b) through (h) of this section, a site-specific test plan should be submitted to the Administrator for approval according to the requirements in §63.7(c)(2) and (3).

9. Section 63.7733 is amended by revising paragraphs (b)(2), (c)(2), and (d)(2) to read as follows:

§63.7733 What procedures must I use to establish operating limits?

* * * * *

(b) * * *

(2) Compute and record the average pressure drop and average scrubber water flow rate for each valid sampling run in which the applicable emissions limit is met.

(c) * * *

(2) Compute and record the average combustion zone temperature for each valid sampling run in which the applicable emissions limit is met.

(d) * * *

(2) Compute and record the average scrubbing liquid flow rate for each valid sampling run in which the applicable emissions limit is met.

* * * * *

10. Section 63.7734 is amended by:

- a. Revising paragraph (a) introductory text;
- b. Revising paragraph (a) (2) (ii);
- c. Adding paragraphs (a) (2) (iii) and (iv);
- d. Revising paragraphs (a) (7) and (a) (11) to read as

follows:

§63.7734 How do I demonstrate initial compliance with the emissions limitations that apply to me?

(a) You have demonstrated initial compliance with the emissions limits in §63.7690(a) by meeting the applicable conditions in paragraphs (a) (1) through (11) of this section. When alternative emissions limitations are provided for a given emissions source, you are not restricted in the selection of which applicable alternative emissions limitation is used to demonstrate compliance.

* * * * *

(2) * * *

(ii) The average total metal HAP concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(c), did not exceed 0.0005 gr/dscf; or

(iii) The average PM mass emissions rate, determined according to the performance test procedures in §63.7732(b), did not exceed 0.10 pound of PM per ton (lb/ton) of metal charged; or

(iv) The average total metal HAP mass emissions rate, determined according to the performance test procedures in §63.7732(c), did not exceed 0.008 pound of total metal HAP per ton (lb/ton) of metal charged.

* * * * *

(7) For each building or structure housing any iron and steel foundry emissions source at the iron and steel foundry, the opacity of fugitive emissions from foundry operations discharged to the atmosphere, determined according to the performance test procedures in §63.7732(d), did not exceed 20 percent (6-minute average), except for one 6-minute average per hour that did not exceed 27 percent opacity.

* * * * *

(11) For each TEA cold box mold or core making line in a new or existing iron and steel foundry, the average TEA concentration, determined according to the performance test procedures in §63.7732(g), did not exceed 1 ppmv or was reduced by 99 percent.

* * * * *

11. Section 63.7736 is amended by revising paragraph

(c) (1) to read as follows:

§63.7736 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?

* * * * *

(c) * * *

(1) You have submitted the bag leak detection system monitoring information to the Administrator within the written O&M plan for approval according to the requirements of §63.7710 (b);

* * * * *

12. Section 63.7740 is amended by:

a. Revising paragraph (b);

b. Redesignating paragraphs (c) through (g) as (d) through (h); and

c. Adding paragraph (c) to read as follows:

§63.7740 What are my monitoring requirements?

* * * * *

(b) For each negative pressure baghouse or positive pressure baghouse equipped with a stack that is applied to meet any PM or total metal HAP emissions limitation in this subpart, you must at all times monitor the relative change in PM loadings using a bag leak detection system according to the requirements in §63.7741 (b).

(c) For each baghouse, regardless of type, that is applied

to meet any PM or total metal HAP emissions limitation in this subpart, you must conduct inspections at their specified frequencies according to the requirements specified in paragraphs (c)(1) through (8) of this section.

(1) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual.

(2) Confirm that dust is being removed from hoppers through weekly visual inspections or other means of ensuring the proper functioning of removal mechanisms.

(3) Check the compressed air supply for pulse-jet baghouses each day.

(4) Monitor cleaning cycles to ensure proper operation using an appropriate methodology.

(5) Check bag cleaning mechanisms for proper functioning through monthly visual inspections or equivalent means.

(6) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (knead or bent) or lying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices.

(7) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks.

(8) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.

* * * * *

13. Section 63.7741 is amended by:

a. Revising paragraphs (a) (1) (iv), (a) (2) (i), (a) (2) (iii), (a) (2) (iv), and (a) (2) (vi);

b. Revising paragraph (b) introductory text;

c. Revising paragraphs (c) (1) (iii), (c) (1) (iv), (c) (1) (vi), and (c) (2) (iv);

d. Revising paragraph (d) (8); and

e. Revising paragraph (e) (2) (iv) to read as follows:

§63.7741 What are the installation, operation, and maintenance requirements for my monitors?

(a) * * *

(1) * * *

(iv) At least monthly, visually inspect all components, including all electrical and mechanical connections, for proper functioning.

(2) * * *

(i) Locate the pressure sensor(s) in or as close as possible to a position that provides a representative measurement of the pressure and that minimizes or eliminates pulsating pressure, vibration, and internal and external

corrosion.

* * * * *

(iii) Check the pressure tap for pluggage daily. If a "non-clogging" pressure tap is used, check for pluggage monthly.

(iv) Using a manometer or equivalent device such as a magnahelic or other pressure indicating transmitter, check gauge and transducer calibration quarterly.

* * * * *

(vi) At least monthly, visually inspect all components, including all electrical and mechanical connections, for proper functioning.

* * * * *

(b) For each negative pressure baghouse or positive pressure baghouse equipped with a stack that is applied to meet any PM or total metal HAP emissions limitation in this subpart, you must install, operate, and maintain a bag leak detection system according to the requirements in paragraphs (b)(1) through (7) of this section.

* * * * *

(c) * * *

(1) * * *

(iii) Check the pressure tap for pluggage daily. If a "non-clogging" pressure tap is used, check for pluggage monthly.

(iv) Using a manometer or equivalent device such as a

magnahelic or other pressure indicating transmitter, check gauge and transducer calibration quarterly.

* * * * *

(vi) At least monthly, visually inspect all components, including all electrical and mechanical connections, for proper functioning.

(2) * * *

(iv) At least monthly, visually inspect all components, including all electrical and mechanical connections, for proper functioning.

(d) * * *

(8) At least monthly, visually inspect all components, including all electrical and mechanical connections, for proper functioning.

(e) * * *

(2) * * *

(iv) At least monthly, visually inspect all components, including all electrical and mechanical connections, for proper functioning.

* * * * *

14. Section 63.7743 is amended by:

a. Adding a second sentence to the end of paragraph (a) introductory text and removing the colon after the first sentence in paragraph (a) in text and adding period in its

place;

b. Revising paragraph (a) (2) (ii) and adding paragraphs (a) (2) (iii) and (iv);

c. Revising paragraph (a) (7); and

d. Revising paragraph (c) introductory text and paragraphs (c) (1) and (2) to read as follows:

§63.7743 How do I demonstrate continuous compliance with the emissions limitations that apply to me?

(a) * * * When alternative emissions limitations are provided for a given emissions source, you must comply with the alternative emissions limitation most recently selected as your compliance alternative.

* * * * *

(2) * * *

(ii) Maintaining the average total metal HAP concentration in the exhaust stream at or below 0.0005 gr/dscf; or

(iii) Maintaining the average PM mass emissions rate at or below 0.10 pound of PM per ton (lb/ton) of metal charged; or

(iv) Maintaining the average total metal HAP mass emissions rate at or below 0.008 pound of total metal HAP per ton (lb/ton) of metal charged.

* * * * *

(7) For each building or structure housing any iron and steel foundry emissions source at the iron and steel foundry,

maintaining the opacity of any fugitive emissions from foundry operations discharged to the atmosphere at or below 20 percent opacity (6-minute average), except for one 6-minute average per hour that does not exceed 27 percent opacity.

* * * * *

(c) For each baghouse,

(1) Inspecting and maintaining each baghouse according to the requirements of §63.7740(c)(1) through (8) and recording all information needed to document conformance with these requirements; and

(2) If the baghouse is equipped with a bag leak detection system, maintaining records of the times the bag leak detection system sounded, and for each valid alarm, the time you initiated corrective action, the corrective action taken, and the date on which corrective action was completed.

* * * * *

15. Section 63.7750 is amended by adding a sentence to the end of paragraph (e) introductory text to read as follows:

§63.7750 What notifications must I submit and when?

* * * * *

(e) * * * For opacity performance tests, the notification of compliance status may be submitted with the semiannual compliance report in §63.7751(a) and (b) or the

semiannual part 70 monitoring report in §63.7551(d).

* * * * *

16. Section 63.7751 is amended by revising paragraph (c) to read as follows:

§63.7751 What reports must I submit and when?

* * * * *

(c) Immediate startup, shutdown, and malfunction report. If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan and the source exceeds any applicable emissions limitation in §63.7690, you must submit an immediate startup, shutdown, and malfunction report according to the requirements of §63.10(d)(5)(ii).

* * * * *

17. Section 63.7752 is amended by revising paragraph (a)(4) to read as follows:

§63.7752 What records must I keep?

(a) * * *

(4) Records of the annual quantity of each chemical binder or coating material used to coat or make molds and cores, the Material Data Safety Sheet or other documentation that provides the chemical composition of each component, and the annual quantity of HAP used in these chemical binder or coating materials at the foundry as calculated from the recorded

quantities and chemical compositions (from Material Data Safety Sheets or other documentation).

* * * * *

18. Section 63.7765 is amended by:

a. Revising the definition for "Deviation";

b. Adding, in alphabetical order, definitions for "Offblast" and "On blast"; and

c. Revising the definitions "Scrap preheater" and adding "Total metal HAP" to read as follows:

§63.7765 What definitions apply to this subpart?

* * * * *

Deviation means any instance in which an affected source or an owner or operator of such an affected source:

(1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emissions limitation (including operating limits), work practice standard, or operation and maintenance requirement;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any iron and steel foundry required to obtain such a permit; or

(3) Fails to meet any emissions limitation (including operating limits) or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether

or not such failure is permitted by this subpart.

A deviation is not always a violation. The determination of whether a deviation constitutes a violation of the standard is up to the discretion of the entity responsible for enforcement of the standards.

* * * * *

Off blast means those periods of cupola operation when the cupola is not actively being used to produce molten metal. Off blast conditions include cupola startup when air is introduced to the cupola to preheat the sand bed and other cupola startup procedures as defined in the startup, shutdown, and malfunction plan. Off blast conditions also include idling conditions when the blast air is turned off or down to the point that the cupola does not produce additional molten metal.

On blast means those periods of cupola operation when combustion (blast) air is introduced to the cupola furnace and the furnace is capable of producing molten metal. On blast conditions are characterized by both blast air introduction and molten metal production.

Scrap preheater means a vessel or other piece of equipment in which metal scrap that is to be used as melting furnace feed is heated to a temperature high enough to eliminate volatile impurities or other tramp materials by direct flame heating or similar means of heating. Scrap dryers, which solely remove

moisture from metal scrap, are not considered to be scrap preheaters for purposes of this subpart.

Total metal HAP means, for the purposes of this subpart, the sum of the concentrations of antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, mercury, nickel, and selenium as measured by EPA Method 29 (40 CFR part 60, appendix A). Only the measured concentration of the listed analytes that are present at concentrations exceeding one-half the quantitation limit of the analytical method are to be used in the sum. If any of the analytes are not detected or are detected at concentrations less than one-half the quantitation limit of the analytical method, the concentration of those analytes will be assumed to be zero for the purposes of calculating the total metal HAP for this subpart.

* * * * *

19. Table 1 to subpart EEEEE is amended by revising the entry for §63.9 to read as follows:

TABLE 1 TO SUBPART EEEEE OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART EEEEE

* * * * *

| Citation | Subject | Applies to Subpart EEEEE? | Explanation |
|----------|---------------------------|---------------------------|--|
| * | * | * | * * * |
| 63.9 | Notification requirements | Yes... | Except: for opacity performance tests, |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | Subpart EEEEE allows the notification of compliance status to be submitted with the semiannual compliance report or the semiannual part 70 monitoring report. | | | |
| * | * | * | * | * | * | * |