ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA–HQ–OAR–2006–0359; FRL–8466–7]

RIN 2060–AM36

National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA is proposing national emission standards for hazardous air pollutants for two area source categories (iron foundries and steel foundries). The proposed requirements for the two area source categories are combined in one subpart. The proposed rule establishes different requirements for foundries based on size. Small iron and steel foundries would be required to comply with pollution prevention management practices for metallic scrap, the removal of mercury switches, and binder formulations. Large iron and steel foundries would be required to comply with the same pollution prevention management practices as small foundries in addition to emissions limitations for melting furnaces and foundry operations. EPA is also co-proposing two alternatives. One alternative would set a higher size threshold for large foundries. The second alternative proposes that all iron and steel foundries comply with the pollution prevention management practices for metallic scrap, the removal of mercury switches, and binder formulations. The proposed standards reflect the generally achievable control technology and/or management practices for each subcategory.

DATES: Comments must be received on or before October 17, 2007, unless a public hearing is requested by September 27, 2007. If a hearing is requested on this proposed rule, written comments must be received by November 1, 2007. Under the Paperwork Reduction Act, comments on the information collection provisions must be received by OMB on or before October 17, 2007.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–HQ–OAR–2006–0359, by one of the following methods:

- *www.regulations.gov:* Follow the on-line instructions for submitting comments.
- *E-mail: a-and-r-Docket@epa.gov.*
- *Fax:* (202) 566–9744.
- *Mail:* Area Source NESHAP for Iron and Steel Foundries Docket, Environmental Protection Agency, Air and Radiation Docket and Information Center, Mailcode: 2822T, 1200 Pennsylvania Ave., NW., Washington, DC 20460. Please include a total of two copies. In addition, please mail a copy of your comments on the information collection provisions to the Office of Information and Regulatory Affairs, Office of Management and Budget (OMB), Attn: Desk Officer for EPA, 725 17th St., NW., Washington, DC 20503.
- *Hand Delivery:* EPA Docket Center, Public Reading Room, EPA West, Room 3334, 1301 Constitution Ave., NW., Washington, DC 20460. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to Docket ID No. EPA–HQ–OAR–2006–0359. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at *http://www.regulations.gov,* including any personal information provided, unless the comment includes information claimed to be confidential business information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through *www.regulations.gov* or e-mail. The *www.regulations.gov* Web site is an ''anonymous access'' system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through *www.regulations.gov,* your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD–ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

Docket: All documents in the docket are listed in the *www.regulations.gov* index. Although listed in the index, some information is not publicly available, e.g., CBI 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 NESHAP for Iron and Steel Foundries Area Sources Docket, at the EPA Docket and Information Center, 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.

FOR FURTHER INFORMATION CONTACT: Mr. Conrad Chin, Sector Policies and Programs Division, Office of Air Quality Planning and Standards (D243–02), Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone number: (919) 541–1512; fax number: (919) 541–3207; e-mail address: *chin.conrad@epa.gov.*

SUPPLEMENTARY INFORMATION:

Outline. The information in this preamble is organized as follows:

I. General Information

A. Does this action apply to me?

The regulated category and entities potentially affected by this proposed action 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).

[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 63.10880 of subpart ZZZZZ (National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources). 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. What should I consider as I prepare my comments to EPA?

Do not submit information containing CBI to EPA through *www.regulations.gov* or e-mail. Send or deliver information identified as CBI only to the following address: Roberto Morales, OAQPS Document Control Officer (C404–02), Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina 27711, Attention Docket ID EPA–HQ–OAR–2006–0359. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD ROM that you mail to EPA, mark the outside of the disk or CD ROM as CBI and then identify electronically within the disk or CD ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

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

In addition to being available in the docket, an electronic copy of this proposed action will also be available on the Worldwide Web (WWW) through EPA's Technology Transfer Network (TTN). A copy of this proposed 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.

D. When would a public hearing occur?

If anyone contacts EPA requesting to speak at a public hearing concerning this proposed rule by September 27, 2007, we will hold a public hearing on October 2, 2007. If you are interested in attending the public hearing, contact Ms. Pamela Garrett at (919) 541–7966 to verify that a hearing will be held. If a public hearing is held, it will be held at 10 a.m. at the EPA's Environmental Research Center Auditorium, Research Triangle Park, NC, or an alternate site nearby.

II. Background Information for This Proposed Rule

A. What is the statutory authority for NESHAP?

Section 112(d) of the Clean Air Act (CAA) requires us to establish national emission standards for hazardous air pollutants (NESHAP) for both major and area sources of hazardous air pollutants (HAP) that are listed for regulation under CAA section 112(c). A major source emits or has the potential to emit 10 tons per year (tpy) or more of any single HAP or 25 tpy or more of any combination of HAP. An area source is a stationary source that is not a major source.

Section 112(k)(3)(B) of the CAA calls for EPA to identify at least 30 air toxics that pose the greatest potential health threat in urban areas, and section 112(c)(3) requires EPA to regulate the area source categories that represent 90 percent of the emissions of the 30 ''listed'' air toxics. We implement these requirements through the Integrated Urban Air Toxics Strategy (64 FR 38715, July 19, 1999). A primary goal of the Strategy is to achieve a 75 percent reduction in cancer incidence attributable to HAP emitted from stationary sources.

We added iron foundries and steel foundries to the Integrated Urban Air Toxics Strategy Area Source Category List on June 26, 2002 (67 FR 43113). The inclusion of these two source categories to the section 112(c)(3) area source category list is based on EPA's use of 1990 as the baseline year for that listing. Both of these source categories were listed as contributing a percentage of the total area source emissions for the following ''urban'' HAP: Compounds of chromium, lead, manganese, and nickel.

Under CAA section 112(d)(5), we may elect to promulgate standards or requirements for area sources ''which provide for the use of generally available control technologies or management practices by such sources to reduce emissions of hazardous air pollutants.'' Additional information on the definition of generally available control technology (GACT) is found in the Senate report on the legislation (Senate Report Number 101–228, December 20, 1989), which indicates GACT means:

> * * * methods, practices and techniques which are commercially available and appropriate for application by the sources in the category considering economic impacts and the technical capabilities of the firms to operate and maintain the emissions control systems.

Consistent with the legislative history, we can consider costs and economic impacts in determining GACT, which is particularly important when developing regulations for source categories that may have few establishments and many small businesses.

Determining what constitutes GACT involves considering the control technologies and management practices that are generally available to the area sources in the source category. We also consider the standards applicable to major sources in the same industrial sector to determine if the control technologies and management practices are transferable and generally available to area sources. In appropriate circumstances, we may also consider technologies and practices at area and major sources in similar categories to determine whether such technologies and practices could be considered generally available for the area source category at issue. Finally, as noted above, in determining GACT for a particular area source category, we consider the costs and economic impacts of available control technologies and management practices on that category.

Iron and steel foundries may emit small quantities of mercury compounds, dioxins, and HAP organics from furnaces that melt scrap containing tramp materials such as mercury switches and chlorinated plastics. Organic HAP emissions also result from the use of binder and coating formulations that contain HAP components. As a result, we are proposing pollution prevention management practices for the control of HAP (organics, metal compounds, and mercury) in the charge materials used by iron and steel foundries. Another pollution prevention management practice would require the use of non-methanol binder formulations in certain applications. We are also proposing that foundries keep a record of the annual quantity and composition of each HAP-containing chemical binder or coating material used to make molds and cores. These records may assist area source foundry owners or operators in their pursuit of pollution prevention opportunities.

We are proposing these national emission standards in response to a court-ordered deadline that requires EPA to issue standards for 10 source categories listed pursuant to section 112(c)(3) and (k) by December 15, 2007 (*Sierra Club* v. *U.S. Environmental Protection Agency,* no. 01–1537, D.D.C., March 2006). Other rulemakings will include standards for the remaining source categories.

B. What area source categories are affected by the proposed NESHAP?

The Iron Foundries area source category includes any facility engaged in the production of final shape castings from grades of iron. The Steel Foundries area source category includes any facility engaged in producing final shape steel castings by the melting, alloying, and molding of pig iron and steel scrap. The proposed area source NESHAP combines the requirements for both area source categories into one rule because the processes are similar and many foundries produce both iron and steel castings.

The U.S. Census Bureau industry statistics indicate that there were 1,015 ferrous foundries operating in the U.S. in 2002. In 1998, we conducted a detailed survey of all known iron and steel foundries and received responses from approximately 600 foundries. This list of 600 foundries was updated in 2006 based on information received from the industry trade organization and through direct contact with foundry owners and operators; numerous foundries closed between 1998 and 2006. Based on this information, we have detailed, process-specific information on approximately 510 iron and steel foundries that are currently operating in the United States. Approximately 80 of these facilities are major sources subject to the NESHAP for Iron and Steel Foundries in 40 CFR part 63, subpart EEEEE. We have identified a total of 427 iron and steel foundries that are area sources and for which we have detailed data.

Based on a comparison of the Census Bureaus statistics, the detailed industry survey responses, and the trends in the iron and steel foundry industry, we estimate that there may be up to 300 additional iron and steel foundries operating in the United States for which we do not have information regarding their process operations. We expect that the vast majority of these foundries are small operations with melt production less than 10,000 tpy.

Based on the updated industry database, area source iron and steel foundries are located in 43 of the contiguous 48 States; 27 of these States have at least 5 iron and steel foundries. The States that have the greatest number of area source iron and steel foundries include Ohio, Pennsylvania, Wisconsin, and California; each of these States has more than 30 iron and steel foundries. A few of the States have regulations for particulate matter (PM) that impact iron and steel foundry operations. The State and local regulations often have a sliding scale that allows small melting capacity furnaces to have much higher PM emission per ton of metal melted than larger furnaces.

C. What are the processes and emissions sources at iron and steel foundries?

Iron and steel foundries manufacture castings by pouring molten iron or steel melted in a furnace into a mold of a desired shape. The primary processing units of interest at iron and steel foundries, because of their potential to generate metal HAP emissions, are metal melting furnaces. HAP metal compounds may also be emitted from a variety of ancillary sources at the foundry such as metal inoculation, pouring, and grinding stations. Iron and steel foundries may also release organic HAP from cooling and shakeout lines, mold and core making lines, and mold and core coating lines, depending on the type of molding system and chemical binders used.

There are three primary types of furnaces used to melt scrap metal at iron and steel foundries—cupolas, electric arc furnaces (EAF), and electric induction furnaces (EIF). Cupolas are used exclusively to produce molten iron; EAF are used predominately to produce molten steel, but are used at a few iron and steel foundries to produce molten iron. EIF are used to produce either molten iron or molten steel. Cupolas and EAF typically have larger melting capacities than EIF; the vast majority of area source iron and steel foundries use EIF.

Cupolas are continuous blast furnaces. Almost all emissions from a cupola are contained in the flow of air exiting the stack of the furnace, which contains PM and organic compounds in addition to carbon monoxide (CO). The metal HAP in PM emissions from cupolas are primarily compounds of lead and manganese, with other HAP such as compounds of cadmium, chromium, mercury, and nickel present in lesser amounts. These HAP originate as impurities or trace elements in the scrap metal fed to the furnace. Most cupolas control PM emissions by dedicated baghouses or wet scrubbers.

EAF and EIF metal melting furnaces operate in batch mode; an operating cycle consisting of charging, melting, backcharging (in some cases), and tapping. PM emissions from EAF and EIF contain similar HAP metal compounds as cupola furnaces, but may also contain significant amounts of compounds of chromium or nickel if stainless steel or nickel alloy castings are produced. Emissions from EIF are often uncontrolled, but baghouses, cyclones, and wet scrubbers are used to control PM emissions from EIF at

certain iron and steel foundries. PM emissions from EAF are typically controlled by baghouses.

Other potential emission sources of HAP metals at iron and steel foundries include inoculation, pouring, and grinding stations. The total quantity of metal HAP emitted from these sources is small in comparison with the emissions from the metal melting furnaces. Capture and control of inoculation and pouring emissions are difficult due to the need to access the molten metal during these operations. Consequently, inoculation and pouring emissions are typically fugitive emission sources within the foundry. Metal grinding typically generates coarse PM emissions, which are often captured and controlled to improve the workplace environment. This coarse PM does not pose a significant air emission source, as these particles do not generally transport from the foundry building.

The majority of organic HAP emissions from iron and steel foundry operations are organic HAP contained in either chemical binder or coating formulations that may partially evaporate or are otherwise emitted during the chemical application process. Organic HAP are also generated by incomplete combustion of organic material in the mold and core sand, such as binder chemicals and seacoal, when molten metal comes into contact with organic materials.

III. Summary of This Proposed Rule

This section presents a summary of the requirements of this proposed rule and proposed regulatory alternatives. Additional details and the rationale for the proposed requirements are provided in section IV of this preamble.

A. What are the applicability provisions and compliance dates?

The NESHAP would apply to each new and existing iron and steel foundry that is an area source. The compliance dates for existing area source standards would depend on whether the foundry is determined to be small or large. We are proposing to define a ''small iron and steel foundry'' as an iron and steel foundry that has an annual metal melt production of 10,000 tons or less. An iron and steel foundry that has an annual metal melt production greater than 10,000 tons would be classified as a large foundry.

Each foundry would determine its initial classification as a small or large foundry using production data for calendar year 2008. All foundries would be required to comply with the pollution prevention management practices for metallic scrap, removal of mercury switches, and binder formulations no later than 1 year after the date of publication of the final rule in the **Federal Register**. A large foundry would be required to comply with applicable emissions limitations and operation and maintenance requirements no later than 2 years after initial classification.[1] The owner or operator of a new area source foundry would be required to comply with the rule requirements by the date of publication of the final rule in the **Federal Register** or upon startup, whichever is later.

After the initial classification, a small foundry that exceeds the 10,000 ton annual production threshold during the preceding calendar year must notify the Administrator and comply with the applicable requirements for a large foundry within 2 years. For example, if a small foundry produces more than 10,000 tons of melted metal from January 1 through December 31, 2009, that foundry would be required to comply with the requirements for a large foundry by January 2012. If a facility is initially classified as a large foundry (or a small foundry becomes a large foundry), that facility must meet the applicable requirements for a large foundry for at least 3 years, even if its annual production falls below 10,000 tons of melted metal. After 3 years, the foundry may reclassify the facility as a small foundry provided the annual production for the preceding calendar year was 10,000 tons of melted metal or less. A large foundry that becomes small must notify the Administrator and comply with the applicable requirements for small foundries immediately. If a large foundry becomes small and then its production exceeds 10,000 for a subsequent calendar year, the foundry must notify the Administrator and comply with the applicable requirements for large foundries immediately.

We are also co-proposing an alternative plant size threshold that would define a ''small iron and steel foundry'' as an iron and steel foundry that has an annual metal melt production of 15,000 tons or less. An iron and steel foundry that has an annual metal melt production greater than 15,000 tons would be classified as a large foundry. The proposed rule requirements under this alternative plant size threshold would not differ from the proposed rule requirements described above.

[1] If additional time is needed to install controls, the owner or operator of an existing source can, pursuant to 40 CFR 63.6(i)(4), request from the permitting authority up to a 1-year extension of the compliance date. See CAA section 112(i)(3)(B).

B. What emissions standards are in the form of pollution prevention management practices?

1. Metallic Scrap

The proposed material specification requirements are based on pollution prevention and require removal of HAP-generating materials from metallic scrap before melting. All foundries would prepare and operate according to written material specifications for one of two equivalent compliance options.

One compliance option would require foundries to prepare and operate pursuant to written material specifications for the purchase and use of only metal ingots, pig iron, slitter, or other materials that do not include metallic scrap from motor vehicle bodies, engine blocks, oil filters, oily turnings, lead components, chlorinated plastics, or free liquids. The term ''free liquids'' is defined as material that fails the paint filter test by EPA Method 9095B (incorporated by reference—see 40 CFR 63.14) in EPA Publication SW–846, ''Test Methods for Evaluating Solid Waste, Physical/Chemical Methods''.

The second compliance option would require foundries to prepare and operate pursuant to written material specifications for the purchase and use of scrap that has been depleted (to the extent practicable) of organics and HAP metals in the charge materials used by the foundry. For scrap charged to a scrap preheater or metal melting furnace that is not equipped with an afterburner, the materials specifications must include requirements for metal scrap to be depleted (to the extent practicable) of used oil filters, chlorinated plastic parts, accessible lead-containing components, and free liquids. For scrap charged to a cupola metal melting furnace that is equipped with an afterburner, the material specifications must include requirements for metal scrap to be depleted (to the extent practicable) of chlorinated plastics, accessible lead-containing components, and free liquids.

Either material specification option will achieve a similar HAP reduction impact. Foundries may have certain scrap subject to one option and other scrap subject to another option provided the metallic scrap remains segregated until charge make-up.

2. Mercury Switch Removal

The proposed standards for mercury are based on pollution prevention and require a foundry owner or operator who melts scrap from motor vehicles

either to purchase (or otherwise obtain) the motor vehicle scrap only from scrap providers participating in an EPA-approved program for the removal of mercury switches or to fulfill the alternative requirements described below. Foundries participating in an approved program must maintain records identifying each scrap provider and documenting the scrap provider's participation in the EPA-approved mercury switch removal program. A proposed equivalent compliance option is for the foundry to prepare and operate pursuant to an EPA-approved site-specific plan that includes specifications to the scrap provider that mercury switches must be removed from motor vehicle bodies at an efficiency comparable to that of the EPA-approved mercury switch removal program (see below). An equivalent compliance option is provided for facilities that do not use motor vehicle scrap that contains mercury switches.

We expect most facilities that use motor vehicle scrap will choose to comply by purchasing motor vehicle scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the Administrator. The National Vehicle Mercury Switch Recovery Program (NVMSRP) [2] would be an approved program under this proposed standard. Facilities choosing to use the NVMSRP as a compliance option would have to assume all of the responsibilities for steelmakers as described in the Memorandum of Understanding.

Foundries could also obtain scrap from scrap providers participating in other programs. To do so, the facility owner or operator would have to submit a request to the Administrator for approval to comply by purchasing scrap from scrap providers that are participating in another switch removal program and demonstrate to the Administrator's satisfaction that the program meets the following specified criteria: (1) There is an outreach program that informs automobile dismantlers of the need for removal of mercury switches and provides training and guidance on switch removal, (2) the program has a goal for the removal of at least 80 percent of the mercury switches, and (3) the program sponsor must submit annual progress reports on the number of switches removed and the estimated number of motor vehicle bodies processed (from which a percentage of switches removed is easily derivable).

Facilities that purchase motor vehicle scrap from scrap providers that do not participate in an EPA-approved mercury switch removal program would have to prepare and operate pursuant to and in conformance with a site-specific plan for the removal of mercury switches, and the plan must include provisions for obtaining assurance from scrap providers that mercury switches have been removed. The plan would be submitted to the Administrator for approval and would demonstrate how the facility will comply with specific requirements that include: (1) A means of communicating to scrap purchasers and scrap providers the need to obtain or provide motor vehicle scrap from which mercury switches have been removed and the need to ensure the proper disposal of the mercury switches, (2) provisions for obtaining assurance from scrap providers that motor vehicle scrap provided to the facility meets the scrap specifications, (3) provisions for periodic inspection, site visits, or other means of corroboration to ensure that scrap providers and dismantlers are implementing appropriate steps to minimize the presence of mercury switches in motor vehicle scrap, (4) provisions for taking corrective actions if needed, and (5) requiring each motor vehicle scrap provider to provide an estimate of the number of mercury switches removed from motor vehicle scrap sent to the facility during the previous year and the basis for the estimate. The Administrator would be able to request documentation or additional information from the owner or operator at any time. The site-specific plan must establish a goal for the removal of at least 80 percent of the mercury switches. All documented and verifiable mercury-containing components removed from motor vehicle scrap would count towards the 80 percent goal.

An equivalent compliance option would be provided for foundries that do not utilize motor vehicle scrap that contains mercury. The option would require the facility to certify that the only materials they are charging from motor vehicle scrap are materials recovered for their specialty alloy content, such as chromium in certain exhaust systems, and these materials are known not to contain mercury.

Records would be required to document conformance with the material specifications for metallic scrap, restricted scrap, and mercury switches. Each foundry would be required to submit semiannual reports that clearly identify any deviation from the scrap management requirements. These reports can be submitted as part of the semiannual reports required by 40 CFR 63.10 of the general provisions.

3. Binder Formulations

For each furfuryl alcohol warm box mold or core making line, new and existing foundries would be required to use a binder chemical formulation that does not use methanol as a specific ingredient of the catalyst formulation. This requirement would not apply to the resin portion of the binder system. This proposed rule includes recordkeeping requirements to document conformance with this requirement.

C. What are the requirements for small iron and steel foundries?

This proposed rule requires small iron and steel foundries to comply with the pollution prevention management practices for metallic scrap, mercury switches, and binder formulations described above. The owner or operator would be required to submit an initial notification of applicability no later than 120 calendar days after the final rule is published in the **Federal Register** (or within 120 days after the foundry becomes subject to the standard; see 40 CFR 63.9(b)(2)). The foundry would also be required to submit an initial written notification to the Administrator that identifies their facility as a small (or large) foundry; this notification would be due no later than 1 year after the date of publication of the final rule in the **Federal Register**. Subsequent notifications would be required within 30 days for a change in process or operations that reclassifies the status of the facility and its compliance obligations. A small foundry would also be required to submit a notification of compliance status according to the requirements in 40 CFR 63.9(h) of the General Provisions (40 CFR part 63, subpart A). The notification of compliance status would include certifications of compliance for the pollution prevention management practices. This proposed rule also requires small foundries to keep records of monthly metal melt production and report any deviation from the pollution prevention management practices in the semiannual report required by 40 CFR 63.10 of the NESHAP general provisions.

We are also proposing to require small foundries to keep a record of the annual quantity and composition of each HAP-containing chemical binder or coating material used to make molds and cores. These records must be copies of

[2] For details see: *http://www.epa.gov/mercury/switch.htm*. In particular, see the signed Memorandum of Understanding.

purchasing records, Material Data Safety Sheets, or other documentation that provide information on binder materials. The purpose of this requirement is to encourage foundries to investigate and use nonHAP binder and coating materials wherever feasible.

D. What are the requirements for large iron and steel foundries?

This proposed NESHAP requires large iron and steel foundries to comply with the pollution prevention management practices described in section III.B of this preamble. In addition, large iron and steel foundries would be required to operate capture and collection systems for metal melting furnaces and comply with emissions limitations, operation and maintenance, monitoring, testing, and recordkeeping and reporting requirements. We are also co-proposing an alternative under which we would not subcategorize between large and small foundries. Under this alternative, all foundries would be required to comply with the pollution prevention management practices described in section III.B of this preamble, but no foundries would be subject to the requirements described in section III.D of this preamble, such as the requirements for capture and collection systems, emissions limitations, and associated monitoring, recordkeeping, and reporting.

1. Emissions Limitations

Large foundries would be required to comply with emissions limits for metal melting furnaces. A metal melting furnace includes cupolas, EAF, EIF, or other similar devices (excluding holding furnaces, argon oxygen decarburization vessels, or ladles that receive molten metal from a metal melting furnace, to which metal ingots or other materials may be added to adjust the metal chemistry). The proposed emissions limits for metal melting furnaces are:

- 0.8 pounds of PM per ton of metal melted (lb/ton of PM) or 0.06 pounds of total metal HAP per ton of metal melted (lb/ton of total metal HAP) for each metal melting furnace at an existing iron and steel foundry.
- 0.1 lb/ton of PM or 0.008 lb/ton of total metal HAP for each metal melting furnace at a new iron and steel foundry.

The owner or operator of a foundry may choose to comply with these emissions limits utilizing emissions averaging as specified in this proposed rule so that the production-weighted average emissions from all metal melting furnaces at the foundry for any calendar month meet the applicable emissions limit.

Operating parameter limits would apply to the control device applied to emissions from a metal melting furnace. For a wet scrubber, a foundry would maintain the 3-hour average pressure drop and scrubber water flow rate at or above the minimum levels established during the initial or subsequent performance test. For an electrostatic precipitator, a foundry would maintain the voltage and secondary current (or total power input) to the control device at or above the level established during the initial or subsequent performance test. For a baghouse, a foundry would maintain the pressure drop across each baghouse cell within the range established during the initial or subsequent performance test.

The proposed NESHAP also includes a fugitive emissions opacity limit of 20 percent for each building or structure housing iron and steel foundry operations. Foundry operations covered by the fugitive emissions opacity limit would include all process equipment and practices used to produce metal castings for shipment including mold or core making and coating; scrap handling and preheating; metal melting and inoculation; pouring, cooling, and shakeout; shotblasting, grinding and other metal finishing operations; and sand handling.

2. Operation and Maintenance Requirements

The owner or operator would be required to prepare and operate by an operation and maintenance (O&M) plan for each control device used to comply with the standards. Any other O&M, preventative maintenance, or similar plan which satisfies the specified requirements could be used to comply with the requirements for an O&M plan.

3. Monitoring Requirements

We are proposing that large iron and steel foundries install and operate continuous parameter monitoring systems (CPMS) to measure and record operating parameters of wet scrubbers used to comply with PM or total metal HAP emissions limit. For electrostatic precipitators, the owner or operator may measure and record the voltage and secondary current (or total power input) using a CPMS or manually record the parameter(s) at least once a shift. For baghouses, the owner or operator of an existing foundry would conduct periodic baghouse inspections and manually check and record the pressure drop across each baghouse cell at least once a day or measure and record the pressure drop using a CPMS. All CPMS would be operated and maintained according to the O&M plan.

As an alternative means of compliance, the owner or operator of an existing area source can use a bag leak detection system to demonstrate continuous compliance with a PM or total metal HAP emissions limit. Bag leak detection systems are required for positive or negative pressure baghouses at a new area source foundry. If a bag leak detection system is used, the owner or operator must prepare and operate pursuant to a monitoring plan for each bag leak detection system; specific requirements for the plan are included in this proposed rule. For additional information on bag leak detection systems that operate on the triboelectric effect, see ''Fabric Filter Bag Leak Detection Guidance'', U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, September 1997, EPA–454/R–98–015, National Technical Information Service (NTIS) publication number PB98164676. This document is available from the NTIS, 5385 Port Royal Road, Springfield, VA 22161.

Monthly inspections of the equipment that is important to the performance of the capture system are also required. The owner or operator must repair any defect or deficiency in the capture system before the next scheduled inspection and record the results of each inspection and the date of any repair.

If a large foundry complies with the emissions limits for furnaces using emissions averaging, the proposed NESHAP requires the owner or operator to demonstrate compliance on a monthly basis. The facility would determine the weighted average emissions from all metal melting furnaces at the foundry using an equation included in this proposed rule. The owner or operator would maintain records of the monthly calculations and report any exceedance in the semiannual report.

4. Performance Tests

We propose that each large foundry conduct a performance test to demonstrate initial compliance with the PM or total metal HAP emissions limit and the opacity limit for fugitive emissions within 180 days of promulgation and submit the results in the notification of compliance status. In lieu of conducting an initial performance test to demonstrate compliance with the applicable PM or total metal HAP limit for metal melting furnaces, the owner or operator of an existing foundry would be allowed to submit the results of a previous performance test provided the test was conducted within the last 5 years using the methods and procedures specified

in the rule and either no process changes have been made since the test, or the test results reliably demonstrate compliance despite process changes. If the owner or operator does not have a previous performance test that meets the rule requirements, a test must be conducted within 180 days of the compliance date. Performance tests would be required for all new area source foundries. Subsequent tests for furnaces would be required every 5 years and each time an operating limit is changed or a process change occurs that is likely to increase metal HAP emissions from the furnace. Provisions are included in this proposed rule for determining compliance with PM or total metal HAP emissions limits in a lb/ton of metal melted format and for establishing control device operating parameter limits. This proposed rule also includes requirements to perform visual opacity testing every 6 months. This proposed rule describes the methods and requirements for these semiannual opacity observations.

5. Recordkeeping and Reporting Requirements

The owner or operator would be required to submit an initial notification that identifies the facility as a large (or small) foundry. In addition, the owner or operator would be required to comply with certain requirements of the General Provisions (40 CFR part 63, subpart A), which are identified in Table 3 of this proposed rule. The General Provisions include specific requirements for notifications, recordkeeping, and reporting, including provisions for a startup, shutdown, and malfunction plan/reports required by 40 CFR 63.6(e). In addition to the records required by 40 CFR 63.10, all foundries would be required to maintain records to document conformance with the pollution prevention management practice emissions standards for metallic scrap, mercury switch removal, and binder formulations as well as to maintain records of annual melt production and corrective action(s). Large foundries must also prepare and operate according to the O&M plan and record monthly compliance calculations for metal melting furnaces that comply using emissions averaging, if applicable. The owner or operator would submit semiannual reports that provide summary information on excursions or exceedances (including the corrective action taken), monitor downtime incidents, and deviations from management practices or O&M requirements according to the requirements in 40 CFR 63.10.

We are also proposing to require all foundries to keep a record of the annual quantity and composition of each HAP-containing chemical binder or coating material used to make molds and cores. These records must be copies of purchasing records, Material Data Safety Sheets, or other documentation that provide information on binder materials. The purpose of this requirement, among other things, is to encourage foundries to investigate and use nonHAP binder and coating materials wherever feasible.

IV. Rationale for This Proposed Rule

A. How did EPA subcategorize iron and steel foundries?

As part of the GACT analysis, we considered whether there were differences in processes, sizes, or other factors affecting emissions and control technologies that would warrant subcategorization. Under section 112(d)(1) of the CAA, EPA ''may distinguish among classes, types, and sizes within a source category or subcategory in establishing such standards * * *''. In our review of the available data, we observed significant differences between iron and steel foundries based on the total melt production capacities of the foundry. For example, foundries with melt production quantities of 10,000 tpy or less represented over 70 percent of the facilities, but only 25 percent of the nationwide emissions. Small foundries are much more likely to use EIF; 77 percent of all area source EIF are at foundries with production of 10,000 tpy or less. On the other hand, only 37 percent of the cupolas and 28 percent of the EAF at area sources are at foundries with production of 10,000 tpy or less. Based on these differences, we determined that subcategorization of iron and steel foundries by size was justified.

We evaluated the impacts of requiring all metal melting furnaces to operate with either a wet scrubber or baghouse control system. Under this scenario, foundries with melt capacities of 10,000 tpy or less incurred 74 percent of the annualized control costs and represented over 99 percent of the foundries with annualized costs that exceeded 3 percent of sales; however, these foundries represented only 31 percent of the air emission reductions. We also evaluated the relative proportion of costs and emission reductions at size thresholds of 5,000, 15,000, and 20,000 tpy melting capacity. At lower capacity thresholds, the control costs for foundries above the threshold increased significantly while the emission reductions increased only slightly. At higher capacity thresholds, the control costs for foundries above the threshold decreased but the emissions reductions also decreased significantly. Detailed information about the costs and emission reductions at these other size thresholds is available in the docket (EPA–HQ–OAR–2006–0359). In light of the relative emissions reductions and costs for various thresholds, we determined that a 10,000 tpy facility-wide melting capacity was the appropriate threshold for subcategorizing large and small foundries.

Consequently, we are proposing to subcategorize the iron and steel foundry industry into ''small'' and ''large'' foundries. A ''small iron and steel foundry'' would be defined as an iron and steel foundry that has an annual melt production of 10,000 tpy or less. A ''large iron and steel foundry'' would be defined as an iron and steel foundry that has an annual melt production greater than 10,000 tpy. It should be noted that this designation of small and large foundries is in no way related to the definition of ''small entity'' under the Regulatory Flexibility Act. Furthermore, the term ''large'' is relative; large area source foundries may be quite small compared to foundries that are subject to the major source rule (40 CFR part 63, subpart EEEEE).

In light of limits on our information about costs, HAP emissions reductions, and foundry operations, EPA is evaluating whether, and how, to subcategorize the source categories, and what GACT is for the source categories or subcategories. Therefore, EPA is co-proposing two alternatives along with the 10,000 tpy threshold for large foundries. Under the first alternative, the threshold for large foundries would be set at 15,000 tpy. Under the second alternative, there would be no subcategorization, and all sources would be required to comply with the pollution prevention management practices described in section III.B of this preamble.

We also evaluated the different types of furnaces and are considering subcategorization based on furnace type. As the different types of melting furnaces operate differently and have their own emission characteristics, subcategorization by the type of furnace would also be justified. We subcategorized by furnace type when we promulgated the major source Iron and Steel Foundries NESHAP (40 CFR part 63 subpart EEEEE). EAF and cupolas tend to be used at the larger foundries, whereas EIF are prevalent at the smaller foundries. Additionally, EAF and

cupolas tend to have higher melting capacities than EIF, especially at the larger foundries. For example, 88 percent of all cupolas and EAF at foundries with melt production greater than 10,000 tpy have metal melting capacities of 4 tons per hour (tph) or greater, whereas only 36 percent of EIF at these large foundries have metal melting capacity of 4 tph or greater. Based on the abundance of very small EIF melting furnaces, even at large foundries, we are also considering subcategorizing the EIF metal melting furnaces into ''low capacity EIF'' and ''high capacity EIF.'' High capacity EIF would be subject to requirements similar to the large foundry requirements in section III.D of this preamble, and low capacity EIF would be treated similarly to small foundries under this proposal. The threshold for classification as a high capacity EIF would be 4 or 5 tph.

We request comment, along with supporting documentation, on these and other possible alternative subcategories based on plant size or furnace type. Supporting documentation must be provided in sufficient detail to allow characterization of the quality and representativeness of the data. We specifically request comment on the appropriateness of using a 5,000, 10,000, 15,000, or 20,000 tpy melting capacity as the plant size threshold for subcategorization. We also request comment on subcategorizing the melting furnaces by furnace type and size. Specifically, we request comment along with supporting documentation on subcategorizing EIF into low and high capacity furnaces using either a 4 or 5 tph melting capacity threshold. Based on the comments received, we may elect to subcategorize between large and small iron and steel foundries, between furnaces using alternative size thresholds, a combination of foundry size and furnace type, or we may elect not to subcategorize at all.

B. What is the performance of control technologies for metal melting furnaces?

Facility-specific and process-specific data were available for iron and steel foundries from a survey of the industry conducted in 1998. A total of 595 survey responses were originally received; the responses included the types of process units used at each foundry, the type of control device used for each process, and key design parameters of the processes and control systems. These data were updated based on additional data collected through direct facility contacts and through information provided by the industry trade organizations. After updating the data base, we have detailed information for 427 iron and steel foundries that are currently operating and that are area sources (i.e., that are not subject to the NESHAP for Iron and Steel Foundries in 40 CFR part 63, subpart EEEEE, which applies to major sources). Although this data base likely does not include every foundry in the United States, it includes a significant majority of the foundries, especially those foundries with melt production quantities of 5,000 tpy or more, and we believe it is reasonably representative of the industry's current practices and controls.

In addition to the process design information, we requested foundries that had conducted emissions tests on their foundry processes and/or control systems to submit the source test results and supporting information. Performance data were available for over 70 furnaces. Although most of these data are for larger (often major source) iron and steel foundries, these data provide a reasonable basis for assessing the performance of various control approaches for metal melting furnaces.

Metal HAP compounds from iron and steel foundries are emitted primarily from metal melting furnaces. These metal HAP compounds are released as filterable PM emissions, and conventional PM control systems can be used to significantly reduce the metal HAP emissions from iron and steel foundries. Fabric filters (baghouses or cartridge filters) and wet scrubbers are the predominant technologies used to control PM from metal melting furnaces. Fabric filter systems generally achieve higher PM emissions reductions than wet scrubbers, as applied in the iron and steel foundry industry. Fabric filter systems generally achieve 98 to 99.9 percent control efficiency. PM wet scrubbers as used in the iron and steel foundry industry are typically venturi-type wet scrubbers that achieve a PM reduction efficiency of 85 to 95 percent. Electrostatic precipitators and cyclone separators are also used at some iron and steel foundry operations to control metal melting furnace emissions. We have test data for only one ESP; its performance is comparable to the performance of wet scrubbers. Cyclone separators are used in limited applications, primarily for EIF; emission reduction efficiencies of cyclone separators are expected to be between 40 and 70 percent.

Our review of the emissions test data for metal melting furnaces showed that although the different types of melting furnaces have widely different uncontrolled emissions, the controlled emissions from the different types of metal melting furnaces were consistent between the different types of furnaces when expressed in terms of pounds of PM emitted per ton of metal charged (lb/ton). After considering the control technologies in use at area source foundries, we considered setting an emission limit at 0.8 or 0.3 lb/ton of PM (see section IV.D of this preamble for our analysis of these emission limit options). The 0.8 lb/ton of PM limit is based on the performance of a well-designed and operated wet scrubber system at area source iron and steel foundries, taking into account process and control system variability. The 0.3 lb/ton of PM limit is based on the performance of a reasonably-designed and operated fabric filter control system at area source iron and steel foundries, taking into account process and control system variability. For new sources, we also considered a PM emission limit of 0.1 lb/ton based on the performance of the best fabric filter control systems at existing large area source iron and steel foundries, taking into account process and control system variability.

In addition to these control options that are based on add-on control systems, we identified scrap management practices as a potential means of reducing HAP emissions from the metal melting furnaces. This is a pollution prevention measure that can either be applied in conjunction with add-on controls or be applied when no add-on controls are used. By reducing the amount of tramp metals and other materials in the scrap feed to the furnace, emissions of both metal HAP compounds and organic HAP can be reduced. However, it should be noted that the emissions reductions achievable by implementing scrap management as the primary HAP reduction activity are not as great as when applied in conjunction with add-on controls.

C. How did EPA determine the GACT requirements for metal HAP from small iron and steel foundries?

Based on the considerations of what constitutes GACT as described in section II.A of this preamble, we identified and evaluated three emissions control options for small iron and steel foundries. Option 1 is the use of scrap management practices alone. Option 2 is the use of a management system that includes scrap management practices and developing and implementing operation and maintenance plans, and meeting building opacity limits. Thus, Option 2 is aimed at reducing emissions of ancillary sources at the iron and steel foundry in addition to the metal melting furnaces. Option 3 is the enhanced management system in conjunction with

a PM emissions limit of 0.8 lb/ton for the metal melting furnaces. Table 1 of this preamble summarizes the impacts of these candidate control options for iron and steel foundries having a production capacity of 10,000 tpy or less.

TABLE 1.—NATIONAL IMPACTS OF GACT OPTIONS FOR EXISTING IRON AND STEEL FOUNDRIES WITH ANNUAL MELT PRODUCTION OF 10,000 TPY OR LESS [1]

Option	Total capital cost, $ (millions)	Total annual cost, $/yr (millions)	Emissions reduction, (tons PM/yr)	Cost effectiveness ($/ton PM)		Number of foundries impacted greater than 3% of revenues
				Overall	Incremental	
(A) Impacts in terms of metal HAP emissions reduction						
1	.....	0.19	0.75	250,000	.....	0
2	.....	0.50	1.35	370,000	520,000	8
3	135	29.3	22.6	1,300,000	1,400,000	148

Option	Total capital cost, $ (millions)	Total annual cost, $/yr (millions)	Emission reductions, (tons metal HAP/year)	Cost effectiveness ($/ton mental HAO)		Number of foundaries impacted greater than 3% of revenues
				Overall	Incremental	
(B) Impacts in terms of PM emissions reduction						
1	.....	0.19	16	12,000	.....	0
2	.....	0.50	36	14,000	16,000	8
3	135	29.3	480	61,000	65,000	148

[1] Costs are in 2005 dollars.

The results for Option 3, as presented in Table 1 of this preamble, indicate that add-on controls are not cost-effective and impose undue economic burden for the small iron and steel foundry subcategory. While the cost-effectiveness values for the two management practice options are similar, eight foundries (all of which are small entities) have cost impacts greater than 3 percent of their revenue under Option 2. Although not presented in Table 1 of this preamble, the management practices represented by Option 2 also impose compliance costs that are between 1 and 3 percent of sales for an additional 13 iron and steel foundries, whereas the scrap management practices represented by Option 1 do not result in any impacts that exceed 1 percent of revenue. Furthermore, the PM emitted from the ancillary sources has lower content of HAP metal compounds than the PM associated with the metal melting furnaces. Therefore, the management practices in Option 2 are relatively less effective at reducing emissions of HAP metal compounds as compared to Option 1. The additional emissions reductions achieved by the management system under Option 2 do not justify the additional costs and economic burden. Therefore, we are proposing GACT for emissions of metal HAP compounds from small area source foundries is scrap management practices. See section III.B of this preamble for a summary of proposed scrap management practices.

D. How did EPA determine the GACT requirements for metal HAP from large iron and steel foundries?

1. Existing Sources

Based on the considerations of what constitutes GACT as described in section II.A of this preamble, we identified and evaluated four control options for existing large iron and steel foundries. Option 1 is the use of a management system that includes scrap management practices, developing and implementing operation and maintenance plans and start-up, shutdown, and malfunction plans, and meeting building opacity limits. Option 2 is the management system in conjunction with a PM emissions limit of 0.8 lb/ton for the metal melting furnaces. Option 3 is the management practices in conjunction with a PM emissions limit of 0.3 lb/ton. Table 2 of this preamble presents the national impacts of control options for existing large iron and steel foundries with a production capacity greater than 10,000 tpy.

TABLE 2.—NATIONAL IMPACTS OF GACT OPTIONS FOR EXISTING IRON AND STEEL FOUNDRIES WITH ANNUAL MELT PRODUCTION GREATER THAN 10,000 TPY [1]

Option	Total capital cost, $ (millions)	Total annual cost, $/yr (millions)	Emissions reduction, (tons PM/yr)	Cost effectiveness ($/ton PM)		Number of foundries impacted greater than 3% of revenues
				Overall	Incremental	
(A) Impacts in terms of metal HAP emissions reduction						
1	.....	0.90	3.7	240,000	.....	0
2	47	10.3	34	300,000	310,000	1
3	91	15.5	43	360,000	580,000	2

Option	Total capital cost, $ (millions)	Total annual cost, $/yr (millions)	Emissions reduction, (tons metal HAP/yr)	Cost effectiveness ($/ton metal HAP)		Number of foundries impacted greater than 3% of revenues
				Overall	Incremental	
(B) Impacts in terms of PM emissions reduction						
1	.....	0.90	88	10,000	.....	0
2	47	10.3	1,060	9,700	9,700	1
3	91	15.5	1,210	12,800	35,000	2

[1] Costs are in 2005 U.S. dollars.

As seen in Table 2 of this preamble, none of the control options evaluated for the large iron and steel foundry subcategory resulted in a substantial number of foundries with economic impacts exceeding 3 percent of revenues. The management practices represented in Option 1 are cost-effective for large iron and steel foundries; however, Option 1 effects minimal emissions reductions. Option 2 (an emissions limit of 0.8 lb/ton) has similar cost-effectiveness as Option 1, but achieves much greater emissions reductions, primarily by requiring controls on previously uncontrolled furnaces. The incremental cost-effectiveness when going from Option 2 to Option 3 is poor, indicating that it is not cost-effective to require existing large iron and steel foundries to achieve a 0.3 lb/ton or lower PM emission limit. This poor incremental cost-effectiveness results because a significant percentage of foundries would have to retrofit their existing control system under Option 3, and the cost-effectiveness of this retrofit is very poor. Consequently, when subcategorizing foundries by production thresholds, we are proposing Option 2 (management systems and PM emissions limit of 0.8 lb/ton) as GACT for existing large iron and steel foundries.

2. New Sources

The available emissions data for existing large area source iron and steel foundries were reviewed. The best-performing metal melting controls for this subcategory were all baghouses, regardless of furnace type. For each type of metal melting furnace, the best-performing baghouse control systems achieved a PM emission limitation of 0.1 lb/ton. Therefore, when subcategorizing foundries by production thresholds, we are proposing that GACT is a PM emission limit of 0.1 lb/ton for new large iron and steel foundries.

E. How did EPA determine the GACT requirements for organic HAP from iron and steel foundries?

Iron and steel foundries were not specifically listed under the Integrated Urban Air Toxics Strategy for any organic HAP. However, iron and steel foundries have the potential to emit organic HAP from a variety of sources at the facility, including the metal melting furnace; pouring, cooling, and shake-out lines; mold and core making, and mold and core coating. Reductions in the organic content of binder systems, for example, can reduce emissions from both mold and core making as well as from pouring, cooling, and shake-out.

We reviewed pollution prevention measures applicable to reduce organic HAP. Preventing pollution before it is generated is environmentally sound and preferable to controlling emissions after they are created. Low emitting binders and other pollution prevention technologies have demonstrated reductions in organic HAP emissions. However, there is no pollution prevention technology that is universally applicable for all iron and steel foundries due to the vast variety of casting production requirements encountered by the industry. Each technology must be evaluated on a case-by-case basis.

This proposed area source rule provides an opportunity for EPA to promote pollution prevention. We identified several pollution prevention measures which are feasible and appropriate for this industry. For example, the proposed scrap management program can also reduce emissions of organic HAP by ensuring that the scrap is depleted of chlorinated plastics at all times and that the scrap is depleted, to the extent practicable, of post-consumer oil filters and other oily material unless an adequate organic control system is used (e.g., an afterburner on a cupola). Additionally, we identified an alternative furfuryl alcohol warm box catalyst system that does not contain methanol. This alternative catalyst formulation requires no equipment re-tooling and provides performance comparable to the methanol-containing formulation. Therefore, we are proposing that GACT for iron and steel foundries include the organic-related provisions in the scrap management program for all iron and steel foundries and the use of a furfuryl

alcohol warm box catalyst system that does not contain methanol for foundries that use a furfuryl alcohol warm box binder system.

EPA encourages the area source foundries to learn about and investigate pollution prevention (P2) methods and technologies that may reduce or eliminate organic HAP emissions, while maintaining their quality, productivity, and competitiveness. Therefore, as part of this proposed rule, EPA is also requiring foundries to keep copies of purchasing records, Material Safety Data Sheets, or other documentation that provides information on liquid or solid binder materials. Among other things, these records may assist area source foundry owners or operators in their pursuit of cost-effective pollution prevention opportunities.

F. How did EPA select the proposed compliance requirements?

We are proposing testing, monitoring, notification, and recordkeeping requirements needed to ensure compliance with the rule requirements. These provisions include scaled-down versions of requirements that have been applied to several industries, including larger iron and steel foundries that are subject to the standards for major sources in 40 CFR part 63, subpart EEEEE. In selecting these requirements, we identified the minimum information necessary to ensure emissions controls are maintained and operated properly on a continuing basis (Option 1). We also evaluated more enhanced monitoring requirements, such as the use of bag leak detection systems, that were required in 40 CFR part 63, subpart EEEEE (Option 2). The enhanced monitoring requirements under Option 2 increased by three the number of foundries impacted greater than 1 percent of revenue and caused one additional small business foundry to have compliance costs that exceed 3 percent of revenue. In light of the additional burdens that enhanced monitoring would pose for small foundries, we are not proposing enhanced monitoring requirements. The selected monitoring option ensures compliance with the requirements of this proposed rule without posing a significant additional burden for foundries that must implement them.

We are allowing up to 1 year for all existing area source foundries to comply with the pollution prevention management practices and up to 2 years after initial classification for large foundries to comply with the emissions limitations, and operation and maintenance requirements. If a small foundry exceeds the annual metal melt production threshold for a large foundry for the first time, the foundry would be required to submit a notification of reclassification within 30 days and comply with the requirements for large iron and steel foundries within 2 years. A facility that is classified as a large foundry must comply with the requirements for a large foundry for at least 3 years before reclassifying the facility as a small facility, even if the annual production falls below 10,000 tons of melted metal. All foundries would be required to provide written notification to the Administrator of a change in compliance status.

Because of the uncertainty in the emissions control status of existing facilities, we are proposing that each foundry conduct a performance test for each metal melting furnace (or group of all metal melting furnaces) subject to the PM or total metal HAP emissions limit and each building or structure subject to the opacity limit for fugitive emissions. Existing foundries may choose to use the results of a previous performance test that demonstrates compliance with the applicable PM or total metal HAP emissions limit for a metal melting furnace or group of all metal melting furnaces instead of conducting a new test, provided the previous test meets the rule requirements. This proposed rule requires the owner or operator to provide written notification of the intent to use the previous test data, including (if applicable) information demonstrating that the test data is representative of current operations and processes. This notification would be submitted no later than 60 days after the compliance date for an existing foundry in order that the foundry could still conduct a test within 180 days of the compliance date if the regulatory agency determines a new test is needed. Subsequent performance tests would be required every 5 years and each time the foundry changed an operating limit or made a process change likely to increase metal HAP emissions. We are proposing subsequent tests because the proposed monitoring requirements do not provide a direct measurement of emissions.

We are proposing opacity observations every 6 months to demonstrate compliance with the fugitive emissions limit. We evaluated alternative requirements, including equipment inspection and visible emission observations. These alternatives were not well correlated with the 20 percent building opacity emissions limit, and were therefore rejected. We request comment on alternative compliance requirements for the building opacity limit and the appropriate frequency of these observations. Alternatives to Method 9 observations must indicate how the suggested alternative can be related to the 20 percent opacity limit.

The proposed NESHAP allows CPMS for the control devices. We are proposing to require bag leak detection systems for baghouses used at new area sources; these are typical monitoring requirements at facilities of the size and complexity of iron and steel foundries area sources. Inspection and repair requirements are also proposed to ensure proper operation and maintenance of capture systems.

We are also proposing to apply the notification, testing, monitoring, operation and maintenance, recordkeeping, and reporting requirements in the part 63 General Provisions (40 CFR part 63, subpart A). The General Provisions are necessary for effective application of the standard for existing and new area sources. In the notification of compliance status required by 40 CFR 63.9(h), the owner or operator would certify that specified equipment has been installed and is operating for each regulated emissions source, the facility has complied with specific equipment standards and management practices, written plans have been prepared, and whether the plant is certifying compliance with emissions limits based on a previous performance test. Periodic startup, shutdown, and malfunction reports must be submitted as required by 40 CFR 63.6, and semiannual reports must be submitted as required by 40 CFR 63.10. The proposed NESHAP also includes recordkeeping requirements to supplement the requirements in 40 CFR 63.10. These records are needed for EPA to determine compliance with specific rule requirements. The testing, monitoring, notification, recordkeeping, and reporting requirements are necessary and sufficient to ensure compliance with the proposed requirements for existing and new area sources.

V. Summary of Impacts of This Proposed Rule

We estimate that the proposed standard (10,000 tpy production capacity threshold) will reduce emissions of HAP metal compounds by 35 tpy and will reduce PM emissions by 1,074 tpy from the baseline. Additionally, the proposed standard is expected to reduce emissions of organic HAP by 32 tpy. The total capital cost of the proposed standard is estimated at $47 million. The annual operating, maintenance, monitoring, recordkeeping, and reporting costs of the proposed standard are estimated at

$6.1 million per year. The total annualized cost of the proposed standard, including the annualized cost of capital equipment, is estimated at $10.5 million. Under the co-proposed alternative that sets a higher size threshold for large foundries, the estimated emission reductions from baseline are 29 tpy of metal HAP, 32 tpy of organic HAP, and 905 tpy of PM; the total capital cost of this alternative is estimated at $34 million and the total annualized cost of this alternative, including the annualized cost of capital equipment, is estimated at $7.9 million. Under the co-proposed alternative that does not subcategorize large foundries, the estimated emission reductions from baseline are 3.4 tpy of metal HAP, 32 tpy of organic HAP, and 64 tpy of PM; there are no capital costs under this alternative and the total annualized cost is estimated at $1.0 million. Additional information on our impact estimates on the sources is available in the docket. (See Docket Number EPA–HQ–OAR–2006–0359.)

The proposed standard is estimated to impact a total of 427 area source iron and steel foundries. When subcategorizing foundries by production thresholds, we estimate that 96 to 124 of these foundries will be large iron and steel foundries and 303 to 331 foundries will be small iron and steel foundries (depending on the production threshold). Approximately 45 percent of the large iron and steel foundries are owned by small entities whereas 85 percent of the small iron and steel foundries are owned by small entities.

The secondary impacts would include solid waste generated as a result of the PM emissions collected and energy impacts associated with operation of control devices. At a 10,000 tpy production capacity threshold, we estimate that 1,110 tpy of solid waste would be generated and an additional 4,490 megawatts per hour (MW-hr) of electrical energy would be consumed each year as a result of the proposed standard. Under the co-proposed alternative that sets a higher size threshold for large foundries, we estimate that 930 tpy of solid waste would be generated and an additional 3,680 megawatts per hour (MW-hr) of electrical energy would be consumed each year. Under the co-proposed alternative that does not subcategorize large foundries, there are no secondary impacts.

VI. Proposed Exemption From Title V Permit Requirements

Section 502(a) of the CAA provides that the Administrator may exempt an area source category from title V if he determines that compliance with title V requirements is ''impracticable, infeasible, or '' on the area source category. In December 2005, in a national rulemaking, EPA interpreted the term ''unnecessarily burdensome'' in CAA section 502 and developed a four-factor test for determining whether title V is unnecessarily burdensome for a particular source category, such that an exemption from title V is appropriate. See 70 FR 75320, December 19, 2005 (''Exemption Rule'').

The four factors that EPA identified in the Exemption Rule for determining whether title V is ''unnecessarily burdensome'' on a particular source category include: (1) Whether title V would result in significant improvements to the compliance requirements, including monitoring, recordkeeping, and reporting, that are proposed for an area source category (70 FR 75323); (2) whether title V permitting would impose significant burdens on the area source category and whether the burdens would be aggravated by any difficulty the sources may have in obtaining assistance from permitting agencies (70 FR 75324); (3) whether the costs of title V permitting for the area source category would be justified, taking into consideration any potential gains in compliance likely to occur for such sources (70 FR 75325); and (4) whether there are implementation and enforcement programs in place that are sufficient to assure compliance with the NESHAP for the area source category, without relying on title V permits (70 FR 75326).

In discussing the above factors in the Exemption Rule, we explained that we considered on ''a case-by-case'' basis the extent to which one or more of the four factors supported title V exemptions for a given source category, and then we assessed whether considered together those factors demonstrated that compliance with title V requirements would be 'unnecessarily burdensome' on the category, consistent with section 502(a) of the CAA. See 70 FR 75323. Thus, in the Exemption Rule, we explained that not all of the four factors must weigh in favor of exemption for EPA to determine that title V is unnecessarily burdensome for a particular area source category. Instead, the factors are to be considered in combination, and EPA determines whether the factors, taken together, support an exemption from title V for a particular source category. In the Exemption Rule, EPA also indicated that, consistent with the guidance provided by the legislative history of section 502(a), EPA would consider whether exempting the area source category would adversely affect public health, welfare or the environment in deciding whether to exempt an area source category. See 70 FR 15254–15255.

We applied the four-factor test to determine whether title V is unnecessarily burdensome on the Iron Foundries and Steel Foundries area source categories. Starting with the first factor, which is to determine whether permits would result in significant improvements to the compliance requirements for the area source categories, we compared the title V monitoring, recordkeeping, and reporting requirements of title V permitting rules (40 CFR 70.6 and 40 CFR 71.6) to those requirements in the proposed NESHAP. As noted above (see section III of this preamble), this proposed rule establishes different monitoring, recordkeeping, and reporting requirements for small and large foundries.

Specifically, this proposed rule requires all foundries to comply with the pollution prevention management practices for metallic scrap, mercury switches, and binder formulations. All foundries would be required to keep records of information that demonstrate compliance with the management practices for metallic scrap and mercury switch removal requirements. Records to document the use of binder chemical formulations that do contain methanol as a specific ingredient of the catalyst formulation for each furfuryl alcohol warm box or core making line may be the Material Data Safety Sheet (provided it contains appropriate information), a certified product data sheet, or a manufacturer's HAP data sheet. We are proposing that the area source facilities keep records of the annual quantity and composition of each HAP-containing chemical binder or coating material used to make molds and cores. This proposed rule also requires all foundries to keep monthly production records to document annual metal melt production.

In addition to the pollution prevention management practices, large foundries would be required to comply with emissions limits, control device parameter operating limits, monitoring requirements, and operating and maintenance requirements. A CPMS would be required to measure and record operating parameters for a wet scrubber every 15 minutes and determine and record the 3-hour average pressure drop and water flow rate. If an electrostatic precipitator is used, the owner or operator would be required to measure the hourly average voltage and secondary current (or total power input)

using a CPMS or check and record the secondary current (or total power input) at least once a shift. For a baghouse, this proposed rule requires a CPMS to measure and record the baghouse pressure drop across each cell using a CPMS or by checking the pressure drop once a day and recording the results. Foundries would also make periodic inspections of each baghouse and record the results of each inspection. Alternatively, the owner or operator of an existing foundry may install and operate bag leak detection systems. Bag leak detection systems would be required for any new foundry. Large foundries would be required to make monthly inspections of capture systems. Performance tests for furnaces would be required every 5 years and every 6 months for fugitive emissions from buildings and structures housing foundry operations; the results would be reported in the next semiannual report. The proposed NESHAP also requires foundries to prepare and follow an operation and maintenance plan that identifies monitoring procedures and schedules. If a facility elected to use emissions averaging to demonstrate compliance, the foundry would be required to demonstrate compliance once each calendar month by calculating the weighted average emissions for the group of all metal melting furnaces at the foundry using an equation in the rule. This proposed rule requires records of the monthly calculations. This proposed rule, therefore, contains both continuous and noncontinuous monitoring requirements, which constitute periodic monitoring that will assure compliance with the proposed rule.

We also considered the extent to which title V could enhance compliance through additional recordkeeping or reporting, including title V requirements in 40 CFR 70.6 and 40 CFR 71.6 for a semiannual report, deviation reports, and an annual compliance certification. All foundries would be required to record specific information to demonstrate conformance with the pollution prevention management practices and keep records of monthly production data. All foundries also would be required to submit a notification that classifies the facility as a small foundry or a large foundry and to submit subsequent notifications for any change in classification.

Small foundries would be required to submit an initial notice of applicability and a notification of compliance status. Records would be required to demonstrate conformance with the pollution prevention management standards for metallic scrap, mercury switches, and binder formulations. Small foundries also would be required to report any deviation from the pollution prevention management practices in the semiannual report required by 40 CFR 63.10.

In addition to the records required by 40 CFR 63.10 of the general provisions, large foundries would be required to keep records to demonstrate conformance with the pollution prevention management standards for metallic scrap, mercury switches, and binder formulations; operation and maintenance plans; capture system inspections and repairs; control device monitoring and inspections; emissions averaging (if applicable); bag leak detection system settings and alarms (if applicable); and corrective actions. The semiannual report submitted by large foundries would include summary information on the number, duration, and cause of excursions or exceedances and the corrective action taken, on monitor downtime incidents, and deviations from pollution prevention management practices or operation and maintenance requirements. The proposed NESHAP requires large foundries to comply with applicable notification, recordkeeping, and reporting requirements in the general provisions (40 CFR part 63, subpart A) including requirements for startup, shutdown, and malfunction plans, reports, and records in 40 CFR 63.6(e)(3); see Table 3 of this proposed rule. When a startup, shutdown, and malfunction report must be submitted, it must consist of a letter containing the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy. The information in the reports required for area source foundries (both large and small) is similar to the information that must be provided in the semiannual reports required under 40 CFR 70.6(a)(3) and 40 CFR 71.6(a)(3).

This proposed rule does not require an annual compliance certification report, which is a requirement of a title V permit. See 40 CFR 70.5(c)(9)(iii) and 40 CFR 71.6(c)(5)(i). EPA believes that the annual certification reporting requirement is not necessary because the initial compliance certifications, recordkeeping requirements, and semiannual reports are adequate to determine compliance for new or existing sources.

The monitoring, recordkeeping, and reporting requirements in the proposed NESHAP for the Iron Foundries and Steel Foundries area source categories are substantially equivalent to such requirements under title V. Therefore, we conclude that title V would not result in significant improvements to the compliance requirements we are proposing for these area source categories.

We evaluated factor two to determine whether title V permitting would impose a significant burden on the area source categories and whether that burden would be aggravated by any difficulty the source may have in obtaining assistance from the permitting agency. Subjecting any source to title V permitting imposes certain burdens and costs that do not exist outside of the title V program. EPA estimated that the average annual cost of obtaining and complying with a title V permit was $7,700 per year per source, including fees, or $38,000 per source for a (5-year) permit period. See Information Collection Request (ICR) for Part 70 Operating Permit Regulations, January 2000, EPA ICR Number 1587.05. There are certain activities associated with the part 70 and 71 rules that are mandatory and impose burdens on the source. They include reading and understanding permit program guidance and regulations; obtaining and understanding permit application forms; answering follow-up questions from permitting authorities after the application is submitted; reviewing and understanding the permit; collecting records; preparing and submitting monitoring reports on a 6-month or more frequent basis; preparing and submitting prompt deviation reports, as defined by the State, which may include a combination of written, verbal, and other communications methods; collecting information, preparing, and submitting the annual compliance certification; preparing applications for permit revisions every 5 years; and, as needed, preparing and submitting applications for permit revisions. In addition, although not required by the permit rules, many sources obtain the contractual services of professional scientists and engineers (consultants) to help them understand and meet the permitting program's requirements. The ICR for part 70 provides information on the overall burdens and costs, as well as the relative burdens of each activity described here. Also, for a more comprehensive list of requirements imposed on part 70 sources (hence, burden on sources), see the requirements of 40 CFR 70.3, 70.5, 70.6, and 70.7.

In considering the second factor for the 427 existing iron and steel foundries (319 of which are owned by small entities), we examined the potential economic implications for the source category. At a cost of $38,000 per source, the cost to the area source

category would be about $16.2 million. The cost of permits for this area source category would exceed the estimated total annualized cost of the standards ($10.5 million). Although our economic analysis of the impacts of this proposed rule on small entities does not include the cost of title V permitting, we believe that such additional costs would result in adverse impacts for many small entities and perhaps on the industry as a whole. We believe an additional cost of $38,000 would create a significant risk of closure for approximately 110 foundries, nearly all of which are owned by small entities, as the $38,000 cost of title V permitting alone would exceed 3 percent of revenues for these foundries. We also looked at the economic resources of facilities in this source category. While some facilities are large, sophisticated operations with expertise in regulatory and permitting requirements, the majority of facilities in this area source category are small entities which may not have this expertise. Due to the sheer number of facilities, we suspect that the cost impact could be aggravated by difficulties in obtaining assistance from overburdened permitting authorities.

The third factor, which is closely related to the second factor, is whether the costs of title V permitting for these area sources would be justified, taking into consideration any potential gains in compliance likely to occur for such sources. We explained above under the second factor that the economic and non-economic costs of compliance with title V would impose a significant burden on approximately 110 area source iron and steel foundries. In addition, we do not think the costs for the existing or new sources would lead to any gains in compliance within the category. As discussed above for factor one, we determined that the compliance requirements of this NESHAP are substantially equivalent to the requirements of title V. Furthermore, as discussed below for factor four, there are adequate implementation and enforcement programs in place that are sufficient to assure compliance with the NESHAP. We conclude, therefore, that the costs of title V are not justified for the existing and new sources in this category.

The fourth factor we considered is whether there are implementation and enforcement programs in place that are sufficient to assure compliance with this NESHAP without relying on title V permits. We believe that the State programs are sufficient to assure compliance with these NESHAP. We also note that EPA retains authority to enforce these NESHAP at any time under CAA sections 112, 113 and 114.

We conclude that title V permitting is ''unnecessary'' to assure compliance with this proposed NESHAP because the statutory requirements for implementation and enforcement of the NESHAP by the delegated States and EPA are sufficient to assure compliance without title V permits. We also note that small business assistance programs required by CAA section 507 may be used to assist area sources that have been exempted from title V permitting. In addition, States and EPA often conduct voluntary compliance assistance, outreach, and education programs (compliance assistance programs), which are not required by statute. These additional programs can be used to supplement and enhance the success of compliance with this area source NESHAP. In light of all of the above, we conclude that there are implementation and enforcement programs in place that are sufficient to assure compliance with the NESHAP without relying on title V permitting.

In applying this factor in the Exemption Rule, where EPA had deferred action on the title V exemption for several years, we had enforcement data available to demonstrate that States were not only enforcing the provisions of the area source NESHAP that we exempted, but that the States were also providing compliance assistance to ensure that the area sources were in the best position to comply with the NESHAP. See 70 FR 75325–75326. We do not have similar data available for this proposed rule, but we have no reason to think that States will be less diligent in enforcing this NESHAP. See 70 FR 75326. In fact, States must have adequate programs to enforce the HAP regulations and provide assurances that they will enforce all NESHAP before EPA will delegate the program. See 40 CFR part 63, subpart E. In light of the above, we conclude that there are implementation and enforcement programs in place that are sufficient to assure compliance with the final rule without relying on title V permitting.

Considering the factors in combination supports our proposed finding that title V is unnecessarily burdensome on these area source categories. We conclude that title V would not result in significant improvements to the compliance requirements applicable to these area source categories and that there are adequate implementation and enforcement programs in place to assure compliance with the NESHAP. We also conclude that the cost of title V permitting would be burdensome; we also find that the cost is not justified because there would be little to no potential gains in compliance within the category if title V was required. Thus, we conclude that title V permitting is ''unnecessarily burdensome'' for the iron foundries and steel foundries area source categories.

In addition to evaluating whether compliance with title V requirements is ''unnecessarily burdensome'', EPA also considered, consistent with guidance provided by the legislative history of CAA section 502(a), whether exempting these area source categories from title V requirements would adversely affect public health, welfare, or the environment. We see no reason to believe that exemption of this area source category from title V requirements would adversely affect public health, welfare, or the environment because these national standards would achieve a significant reduction in HAP and other emissions that would improve public health, welfare, and the environment. For the foregoing reasons, we propose to exempt iron foundries and steel foundries area source categories from title V permitting requirements.

VII. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is a ''significant regulatory action'' because it may ''raise novel legal or policy issues.'' Accordingly, EPA submitted this action to the Office of Management and Budget (OMB) for review under Executive Order 12866 and any changes made in response to OMB recommendations have been documented in the docket for this action.

B. Paperwork Reduction Act

The information requirements in this proposed rule have been submitted for approval to OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* The information collection request (ICR) document prepared by EPA has been assigned EPA ICR number 2267.01

The recordkeeping and reporting requirements in this proposed rule are based on the requirements in EPA's National Program for Mercury Switch Removal (a voluntary agreement with participating industries) and the NESHAP General Provisions (40 CFR part 63, subpart A). The recordkeeping and reporting requirements in the General Provisions are mandatory pursuant to section 114 of the CAA (42

U.S.C. 7414). All information (other than emissions data) submitted to EPA pursuant to the information collection requirements for which a claim of confidentiality is made is safeguarded according to CAA section 114(c) and the Agency's implementing regulations at 40 CFR part 2, subpart B.

All foundries would be required to submit an initial notification that classifies their facility as a small or large foundry and a subsequent notification for any change in classification. All foundries also would be required to maintain monthly production data to support their classification as a large or small foundry.

The proposed NESHAP requires small area source foundries to submit an initial notification of applicability and a notification of compliance status according to the requirements in the General Provisions (40 CFR part 63, subpart A). Small area source foundries also report any deviation from the pollution prevention management standards in the semiannual report required by 40 CFR 63.10 of the general provisions. Large area source foundries would be required to prepare and follow an O&M plan, conduct initial performance tests and follow-up tests every 5 years, monitor control device operating parameters, conduct opacity tests every 6 months for fugitive emissions, inspect and repair capture systems, and keep records to document compliance with the rule requirements. The owner or operator of an existing affected source would be allowed to certify compliance with the emissions limits based on the results of prior performance tests that meet the rule requirements; the owner or operator would be required to provide advance notification of the intent to use a prior performance test instead of conducting a new test. If compliance with the emissions limits for metal melting furnaces is demonstrated through emissions averaging, the owner or operator would be required to demonstrate compliance for each calendar month using a calculation procedure in the rule. The owner or operator of a large iron and steel foundry would be subject to all requirements in the General Provisions (40 CFR part 63, subpart A), including the requirements in 40 CFR 63.6(e) for startup, shutdown, and malfunction records and reports and the recordkeeping and reporting requirements in 40 CFR 63.10. The semiannual report would include summary information on excursions or exceedances, monitor downtime incidents, and deviations from management practices and operation and maintenance requirements.

The annual burden for this information collection averaged over the first 3 years of this ICR is estimated to total 5,990 labor hours per year at a cost of $418,295 for the 427 area sources, with annualized capital costs of $8,490 and no O&M costs. No new area sources are estimated during the next 3 years. These estimates represent the maximum burden that would be imposed by the proposed standards (based on a subcategorization using a production capacity threshold of 10,000 tpy for the definition of ''small iron and steel foundry''). Because this proposal represents estimates of the maximum burden, we did not estimate the ICR burden associated with the co-proposed standards for this proposed rule.

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.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this action, which includes this ICR, under Docket ID number EPA–HQ–OAR–2006–0897. Submit any comments related to the ICR for this proposed rules to EPA and OMB. See ''Addresses'' section at the beginning of this notice for where to submit comments to EPA. Send comments to OMB at the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW., Washington, DC 20503, Attention: Desk Officer for EPA. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after September 17, 2007, a comment to OMB is best assured of having its full effect if OMB receives it by October 17, 2007. This final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

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 the proposed rule 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 the proposed rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. The proposed rule is estimated to impact a total of 427 area source iron and steel foundries; 319 of these foundries are small entities. We estimate that 124 of these foundries would be large iron and steel foundries (metal melt production greater than 10,000 tpy), and 303 foundries would be small iron and steel foundries (metal melt production of 10,000 tpy or less). Approximately 45 percent of the large iron and steel foundries are owned by small entities whereas 85 percent of the small iron and steel foundries are owned by small entities. Our analysis shows that small entity compliance costs, as assessed by the foundry's cost-to-sales ratio, are expected to range from 0.01 to 3.5 percent. The analysis also shows that of the 60 foundries owned by small entities subject to the requirements for large foundries (i.e., exceeding 10,000 tpy melt production), only one small entity may incur economic impacts exceeding 3 percent

of its revenue; see Table 2 of this preamble.

This proposed rule minimizes the impact on small entities by applying special provisions for small foundries that melt low quantities of metal (less than 10,000 tpy). Small iron and steel foundries would be required to prepare and follow pollution prevention management practices for metallic scrap and binder formulations, submit one-time notifications, monitor their metal melting rate on a monthly basis, report deviations if they occur, and keep certain records. Although this proposed rule contains requirements for new area sources, we are not specifically aware of any new area sources being constructed now or planned in the next 3 years, and consequently, we did not estimate any impacts for new sources.

We continue to be interested in the potential impacts of the proposed action on small entities and welcome comments on issues related to such impacts.

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 1 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 this proposed rule does 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. This proposed rule is not expected to impact State, local, or tribal governments. Thus, this proposed rule is not subject to the requirements of sections 202 and 205 of the UMRA. EPA has determined that this proposed rule contains no regulatory requirements that might significantly or uniquely affect small governments. This proposed rule contains no requirements that apply to such governments, and impose no obligations upon them. Therefore, this proposed rule is not subject to section 203 of the UMRA.

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'' is 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.''

This proposed rule does not have federalism implications. It would 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. This proposed rule does not impose any requirements on State and local governments. Thus, Executive Order 13132 does not apply to this proposed rule. In the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between EPA and State and local governments, EPA specifically solicits comment on this proposed rule from State and local officials.

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.'' This proposed rule does not have tribal implications, as specified in Executive Order 13175. It would not have substantial direct effects on tribal governments, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes, as specified in Executive Order 13175. This proposed rule imposes no requirements on tribal governments. Thus, Executive Order 13175 does not apply to this proposed rule. EPA specifically solicits additional comment on this proposed rule from tribal officials.

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. This proposed rule is not subject to the Executive Order because it is based on technology performance and not on health or safety risks.

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

This proposed rule is not a ''significant energy action'' as defined in Executive Order 13211, ''Actions Concerning Regulations That Significantly Affect Energy Supply,

Distribution, or Use'' (66 FR 28355, May 22, 2001) because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. We have concluded that this proposed rule is not likely to have any adverse energy effects because energy requirements would not be significantly impacted by the additional pollution controls or other equipment that are required by this proposed rule.

I. National Technology Transfer Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) of 1995 (Pub. L. 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.

This proposed rule involves technical standards. The proposal cites the following standards: EPA Methods 1, 1A, 2, 2A, 2C, 2D, 2F, 2G, 3, 3A, 3B, 4, 5, 5B, 5D, 5F, 5I, 9, and 29 in 40 CFR part 60, appendix A; and EPA Method 9095B, ''Paint Filter Liquids Test,'' in ''Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,'' EPA Publication SW–846 (incorporated by reference—see 40 CFR 63.14).

Consistent with the NTTAA, EPA conducted searches to identify VCS in addition to the EPA methods. No applicable VCS were identified for EPA Methods 1A, 2A, 2D, 2F, 2G, 5B, 5D, 5F, 9, 29, or 9095B. The search and review results are in the docket for this rule.

One VCS was identified as applicable to this proposed rule. The standard ASME PTC 19.10–1981, ''Flue and Exhaust Gas Analyses,'' (incorporated by reference—see 40 CFR 63.14) is cited in this proposed rule for its manual method for measuring the oxygen, carbon dioxide, and CO content of the exhaust gas. This part of ASME PTC 19.10–1981 is an acceptable alternative to EPA Method 3B.

The search for emissions measurement procedures identified 13 other VCS. EPA determined that these 13 standards identified for measuring emissions of the HAP or surrogates subject to emission standards in this proposed rule were impractical alternatives to EPA test methods for the purposes of this proposed rule. Therefore, EPA does not intend to adopt these standards for this purpose. The reasons for the determinations for the 13 methods are discussed in a memorandum in the docket for this proposed rule.

For the methods required or referenced by this proposed rule, 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 40 CFR 63.7(f) and 40 CFR 63.8(f) of subpart A of the general provisions. EPA welcomes comments on this aspect of the proposed rulemaking and, specifically, invites the public to identify potentially-applicable VCS and to explain why such standards should be used in this regulation.

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 this proposed rule will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because it increases the level of environmental protection for all affected populations without having any disproportionately high and adverse human health or environmental effects on any population, including any minority or low-income population. The nationwide standards would reduce HAP emissions and thus decrease the amount of emissions to which all affected populations are exposed.

List of Subjects in 40 CFR Part 63

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

Dated: September 6, 2007.

Stephen L. Johnson,

Administrator.

For the reasons stated in the preamble, title 40, chapter I, part 63 of the Code of Federal Regulations is proposed to be 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 revising paragraphs (i)(1) and (k)(1)(iii) to read as follows:

§ 63.14 Incorporations by reference.

* * * * *

(i) * * *

(1) ANSI/ASME PTC 19.10–1981, ''Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus],'' IBR approved for §§ 63.309(k)(1)(iii), 63.865(b), 63.3166(a)(3), 63.3360(e)(1)(iii), 63.3545(a)(3), 63.3555(a)(3), 63.4166(a)(3), 63.4362(a)(3), 63.4766(a)(3), 63.4965(a)(3), 63.5160(d)(1)(iii), 63.9307(c)(2), 63.9323(a)(3), 63.11148(e)(3)(iii), 63.11155(e)(3), 63.11162(f)(3)(iii) and (f)(4), 63.11163(g)(1)(iii) and (g)(2), 63.11410(j)(1)(iii), Table 5 to subpart DDDDD of this part, and Table 1 to subpart ZZZZZ of this part.

* * * * *

(k) * * *

(1) * * *

(iii) Method 9095B, ''Paint Filter Liquids Test,'' dated November 2004 and in Update III, IBR approved for §§ 63.7700(b) and 63.7765 of subpart EEEEE of this part and §§ 63.10885(a)(1) and 63.10906 of subpart ZZZZZ of this part.

* * * * *

3. Part 63 is amended by adding subpart ZZZZZ to read as follows:

Subpart ZZZZZ—National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources

Applicability and Compliance Dates

Sec.

Pollution Prevention Management Practices

Subpart ZZZZZ—National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources

Applicability and Compliance Dates

§ 63.10880 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate an iron and steel foundry that is an area source of hazardous air pollutant (HAP) emissions.

(b) This subpart applies to each new or existing affected source. The affected source is each iron and steel foundry.

(1) An affected source is existing if you commenced construction or reconstruction of the affected source before September 17, 2007.

(2) An affected source is new if you commenced construction or reconstruction of the affected source on or after September 17, 2007.

(c) On and after the date of publication of the final rule in the **Federal Register**, if your iron and steel foundry becomes a major source as defined in § 63.2, you must meet the requirements of 40 CFR part 63, subpart EEEEE.

(d) This subpart does not apply to research and development facilities, as defined in section 112(c)(7) of the Clean Air Act.

(e) You are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not otherwise required by law to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a). Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart.

(f) You must determine the initial applicability of the requirements of this subpart to a small foundry or a large foundry based on your facility's metal melt production for calendar year 2008. If the metal melt production for calendar year 2008 is 10,000 tons or less, your area source is a small foundry. If your metal melt production for calendar year 2008 is greater than 10,000 tons, your area source is a large foundry. You must submit a written notification to the Administrator that identifies your area source as a small foundry or a large foundry no later than 1 year after the date the final rule is published in the **Federal Register**.

§ 63.10881 What are my compliance dates?

(a) If you own or operate an existing affected source, you must achieve compliance with the applicable provisions of this subpart by the dates in paragraphs (a)(1) and (2) of this section.

(1) Except as provided in paragraph (d) of this section, not later than 1 year after the date of publication of the final rule in the **Federal Register** for the pollution prevention management practices in §§ 63.10885 and 63.10886.

(2) Except as provided in paragraph (d) of this section, not later than 2 years after the date of your large foundry's notification of the initial determination required in § 63.10880(f) for the standards and management practices in § 63.10895.

(b) If you have a new affected source for which the initial startup date is on or before the date of publication of the final rule in the **Federal Register**, you must achieve compliance with the provisions of this subpart not later than the date of publication of the final rule in the **Federal Register**.

(c) If you own or operate a new affected source for which the initial startup date is after the date of publication of the final rule in the **Federal Register**, you must achieve compliance with the provisions of this subpart upon startup of your affected source.

(d) Following the initial determination for a small foundry or large foundry required in § 63.10880(f),

(1) If the annual metal melt production of your small foundry exceeds 10,000 tons during the preceding calendar year, you must notify the Administrator within 30 days and comply with the requirements in paragraphs (d)(1)(i) or (ii) of this section, as applicable.

(i) If your small foundry has never been classified as a large foundry, you must comply with the requirements for a large foundry no later than 2 years after the date of your foundry's notification that the annual production exceeded 10,000 tons.

(ii) If your small foundry had previously been classified as a large foundry, you must comply with the requirements for a large foundry no later than the date of your foundry's most recent notification that the annual production exceeded 10,000 tons.

(2) If your facility is initially classified as a large foundry (or your small foundry subsequently becomes a large foundry), you must comply with the requirements for a large foundry for at least 3 years before reclassifying your facility as a small foundry, even if your annual production falls below 10,000 tons of melted metal. After 3 years, you may reclassify your facility as a small foundry provided your annual production for the preceding calendar year was 10,000 tons of melted metal or less. If you reclassify your large foundry as a small foundry, you must comply with the requirements for a small foundry no later than the date you notify the Administrator of the reclassification.

§ 63.10882 How does this subpart apply to small iron and steel foundries and large iron and steel foundries?

(a) If you own or operate a new or existing affected source that is a small iron and steel foundry as defined in § 63.10906, you must comply with the requirements in § 63.10890. The requirements in § 63.10890 include the pollution prevention management practices in §§ 63.10885 and 63.10886.

(b) If you own or operate a large iron and steel foundry as defined in § 63.10906, you must comply with the requirements in §§ 63.10895 through 63.10900. The requirements in § 63.10895 include the pollution prevention management practices in §§ 63.10885 and 63.10886.

Pollution Prevention Management Practices

§ 63.10885 What are my management practices for metallic scrap and mercury switches?

(a) *Metallic scrap management program.* For each segregated metallic scrap storage area, bin or pile, you must comply with the materials acquisition requirements in paragraph (a)(1) or (2) of this section. You must keep a copy of the material specifications onsite and readily available to all personnel with material acquisition duties, and provide a copy to each of your scrap vendors. You may have certain scrap subject to paragraph (a)(1) of this section and other scrap subject to paragraph (a)(2) of this section at your facility provided the metallic scrap remains segregated until charge make-up.

(1) *Restricted metallic scrap.* You must prepare and operate at all times according to written material specifications for the purchase and use of only metal ingots, pig iron, slitter, or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, post-consumer oil filters, oily turnings, lead components, chlorinated plastics, or free liquids. For the purpose of this subpart, ''free liquids'' is defined as material that fails the paint filter test by EPA Method 9095B, ''Paint Filter Liquids Test'' (Revision 2, November 2004), as published in EPA Publication SW–846 ''Test Methods for Evaluating Solid Waste, Physical/Chemical Methods'' (incorporated by reference—see § 63.14). The requirements of this paragraph (a)(1) do not apply to the routine recycling of baghouse bags or other internal process or maintenance materials in the furnace.

(2) *General iron and steel scrap.* You must prepare and operate at all times according to written material specifications for the purchase and use of only iron and steel scrap that has been depleted (to the extent practicable) of organics and HAP metals in the charge materials used by the iron and steel foundry. The materials specifications must include at minimum the information specified in paragraph (a)(2)(i) or (ii) of this section.

(i) For scrap charged to a scrap preheater or metal melting furnace that is not equipped with an afterburner, metallic scrap materials must be depleted (to the extent practicable) of the presence of used oil filters, chlorinated plastic parts, accessible lead-containing components (such as batteries and wheel weights), and free liquids.

(ii) For scrap charged to a cupola metal melting furnace that is equipped with an afterburner, metallic scrap materials must be depleted (to the extent practicable) of the presence of chlorinated plastics, accessible lead-containing components (such as batteries and wheel weights), and free liquids.

(b) *Mercury requirements.* For each scrap provider, contract, or shipment, you must procure all motor vehicle scrap pursuant to one of the alternatives in paragraphs (b)(1), (2), or (3) of this section. You may have one scrap provider, contract, or shipment subject to one alternative and others subject to another alternative.

(1) *Site-specific plan for mercury switches.* You must comply with the requirements in paragraphs (b)(1)(i) through (v) of this section.

(i) You must include a requirement in your scrap specifications for removal of mercury switches from vehicle bodies used to make the scrap.

(ii) You must prepare and operate according to a plan demonstrating how your facility will implement the scrap specification in paragraph (b)(1)(i) of this section for removal of mercury switches. You must submit the plan to the Administrator for approval. The Administrator may change the approval status of the plan upon 90-days written notice based upon the semiannual report or other information. The plan must include:

(A) A means of communicating to scrap purchasers and scrap providers the need to obtain or provide motor vehicle scrap from which mercury switches have been removed and the need to ensure the proper disposal of the mercury switches removed as required by the Resource Conservation and Recovery Act (RCRA);

(B) Provisions for obtaining assurance from scrap providers that motor vehicle scrap provided to the facility meets the scrap specification;

(C) Provisions for periodic inspection, site visits, or other means of corroboration to ensure that scrap providers and dismantlers are implementing appropriate steps to minimize the presence of mercury switches in motor vehicle scrap and that they are properly disposing of the mercury switches removed, including the minimum frequency such means of corroboration will be implemented; and

(D) Provisions for taking corrective actions if needed, based on the results of procedures implemented in paragraph (b)(1)(ii)(C) of this section.

(iii) You must require each motor vehicle scrap provider to provide an estimate of the number of mercury switches removed from motor vehicle scrap sent to the facility during the previous year and the basis for the estimate. The Administrator may request documentation or additional information at any time.

(iv) You must establish a goal for the removal of at least 80 percent of the mercury switches. Although a site-specific plan approved under paragraph (b)(1) of this section may require only the removal of convenience light switch mechanisms, the Administrator will credit all documented and verifiable mercury-containing components removed from motor vehicle scrap (such as sensors in anti-locking brake systems, security systems, active ride control, and other applications) when evaluating progress towards the 80 percent goal.

(v) You must submit semiannual progress reports to the Administrator that provide the number of mercury switches removed or the weight of mercury recovered from the switches, the number of vehicles processed, an estimate of the percent of mercury switches recovered, and certification that the recovered mercury switches were recycled at RCRA-permitted facilities. The Administrator may change the approval status of a site-specific plan following 90-days notice based on the progress reports or other information.

(2) *Alternative for approved mercury programs.* You must certify in your notification of compliance status that you participate in and purchase motor vehicle scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the Administrator based on the criteria in paragraphs (b)(2)(i) through (iii) of this section.

(i) There is an outreach program that informs the dismantlers of the need for removal of mercury switches and provides training and guidance for removing mercury switches;

(ii) The program has a goal for the removal of at least 80 percent of mercury switches. Although a program approved under paragraph (b)(2) of this section may require only the removal of convenience light switch mechanisms, the Administrator will credit all documented and verifiable mercury-containing components removed from motor vehicle scrap (such as sensors in anti-locking brake systems, security systems, active ride control, and other applications) when evaluating progress towards the 80 percent goal; and

(iii) The program sponsor agrees to submit progress reports to the Administrator no less frequently than once every year that provide the number of mercury switches removed or the

weight of mercury recovered from the switches, the number of vehicles processed, an estimate of the percent of mercury switches recovered, and certification that the recovered mercury switches were recycled at RCRA-permitted facilities. The Administrator may change the approval status of a program following 90-days notice based on the progress report or other information.

(3) *Alternative for specialty metal scrap.* You must certify in your notification of compliance status that the only materials from motor vehicles in the scrap are materials recovered for their specialty alloy (including, but not limited to, chromium, nickel, molybdenum, or other alloys) content (such as certain exhaust systems) and, based on the nature of the scrap and purchase specifications, that the type of scrap is not reasonably expected to contain mercury switches.

§ 63.10886 What are my management practices for binder formulations?

For each furfuryl alcohol warm box mold or core making line at a new or existing iron and steel foundry, you must use a binder chemical formulation that does not use methanol as a specific ingredient of the catalyst formulation. This requirement does not apply to the resin portion of the binder system.

Requirements for Small Iron and Steel Foundries

§ 63.10890 What are my management practices and compliance requirements?

(a) You must comply with the pollution prevention management practices for metallic scrap and mercury switches in § 63.10885 and binder formulations in § 63.10886.

(b) You must submit an initial notification of applicability according to § 63.9(b)(2).

(c) You must submit a notification of compliance status according to § 63.9(h)(1)(i). You must send the notification of compliance status before the close of business on the 30th day after the applicable compliance date specified in § 63.10881. The notification must include the following compliance certifications, as applicable:

(1) ''This facility has prepared, and will operate by, written material specifications for metallic scrap according to § 63.10885(a)(1)'' and/or ''This facility has prepared, and will operate by, written material specifications for general iron and steel scrap according to § 63.10885(a)(2).''

(2) ''This facility has prepared, and will operate by, written material specifications for the removal of mercury switches and a site-specific plan implementing the material specifications according to § 63.10890(b)(1)'' and/or ''This facility participates in and purchases motor vehicles scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the Administrator according § 63.10890(b)(2)'' and/or ''This facility complies with the alternative requirements in § 63.10890(b)(3) for specialty metal scrap and will recover only materials from motor vehicles for their specialty alloy content that are not reasonably expected to contain mercury switches.'' No mercury switch certification is required if your facility does not purchase any motor vehicles scrap.

(3) ''This facility complies with the no methanol requirement for the catalyst portion of each binder chemical formulation for a furfuryl alcohol warm box mold or core making line according to § 63.10886.''

(d) You must maintain records of the information specified in paragraphs (d)(1) through (7) of this section according to the requirements in § 63.10(b)(1).

(1) Records supporting your initial notification of applicability and your notification of compliance status according to § 63.10(b)(2)(xiv).

(2) Records of your written materials specifications according to § 63.10885(a) and records that demonstrate compliance with the requirements for restricted metallic scrap in § 63.10885(a)(1) or general scrap in § 63.10885(a)(2).

(3) If you are subject to the requirements for a site-specific plan for mercury switch removal in § 63.10885(b)(1), you must:

(i) Maintain records of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the number of vehicles processed, and an estimate of the percent of mercury switches recovered; and

(ii) Submit semiannual reports of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the number of vehicles processed, an estimate of the percent of mercury switches recovered, and certification that the recovered mercury switches were recycled at RCRA-permitted facilities. The semiannual reports must include certification that you have conducted inspections, site visits, or taken other means of corroboration as required under § 63.10885(b)(1)(ii)(C). You must identify which alternative in paragraph § 63.10885(b) applies to each scrap provider, contract, or shipment. You may include this information in the semiannual reports required under paragraph (d) of this section.

(4) If you are subject to the alternative for approved mercury programs under paragraph (b)(2) of this section, you must maintain records identifying each scrap provider and documenting the scrap provider's participation in an approved mercury switch removal program.

(5) Records to document use of binder chemical formulation that does not contain methanol as a specific ingredient of the catalyst formulation for each furfuryl alcohol warm box mold or core making line as required by § 63.10886. These records must be the Material Safety Data Sheet (provided that it contains appropriate information), a certified product data sheet, or a manufacturer's hazardous air pollutant data sheet.

(6) Records of the annual quantity and composition of each HAP-containing chemical binder or coating material used to make molds and cores. These records must be copies of purchasing records, Material Safety Data Sheets, or other documentation that provide information on the binder or coating materials used.

(7) Records of metal melt production for each calendar year.

(e) You must submit semiannual reports to the Administrator according to the requirements in § 63.10(e). The report must clearly identify any deviation from the pollution prevention management practices in §§ 63.10885 or 63.10886 and the corrective action taken.

(f) Beginning January 1, 2010, if the annual metal melt production for your small foundry exceeds 10,000 tons during the preceding year, you must submit a notification of foundry reclassification to the Administrator within 30 days and you must comply with the requirements for large foundries by the applicable dates in § 63.10881(d)(1)(i) or (d)(1)(ii).

(g) You must comply with the following requirements of General Provisions (40 CFR part 63, subpart A): §§ 63.1 through 63.5; § 63.6(a), (b), (c), and (e)(1); § 63.9; § 63.10(a), (b)(1), (b)(2)(xiv), (b)(3), (d)(1), (d)(4), and (f); and §§ 63.13 through 63.16.

Requirements for Large Iron and Steel Foundries

§ 63.10895 What are my standards and management practices?

(a) You must operate a capture and collection system for each metal melting furnace at a new or existing iron and steel foundry. Each capture and

collection system must meet accepted engineering standards, such as those published by the American Conference of Governmental Industrial Hygienists.

(b) You must not discharge to the atmosphere emissions from any metal melting furnace or group of all metal melting furnaces that exceed the applicable limit in paragraph (b)(1) or (2) of this section.

(1) For an existing iron and steel foundry, 0.8 pounds of particulate matter (PM) per ton of metal charged (lb/ton of PM) or 0.06 pounds of total metal HAP per ton of metal charged (lb/ton of total metal HAP).

(2) For a new iron and steel foundry, 0.1 lb/ton of PM or 0.008 lb/ton of total metal HAP.

(c) If you own or operate a new or existing iron and steel foundry, you must comply with each control device parameter operating limit in paragraphs (c)(1) through (3) of this section that applies to you.

(1) For each wet scrubber applied to emissions from a metal melting furnace, you must maintain the 3-hour average pressure drop and scrubber water flow rate at or above the minimum levels established during the initial or subsequent performance test.

(2) For each electrostatic precipitator applied to emissions from a metal melting furnace, you must maintain the voltage and secondary current (or total power input) to the control device at or above the level established during the initial or subsequent performance test.

(3) For each baghouse applied to emissions from a metal melting furnace that is subject to the monitoring and inspection requirements in § 63.10897(c), you must maintain the pressure drop across each baghouse cell within the range established during the initial or subsequent performance test.

(d) If you own or operate a new or existing iron and steel foundry, you must not discharge to the atmosphere fugitive emissions from a building or structure housing any iron and steel foundry operations that exhibit opacity greater than 20 percent (6-minute average).

(e) You must comply with the pollution prevention management practices in §§ 63.10885 and 63.10886.

§ 63.10896 What are my operation and maintenance requirements?

(a) You must prepare and follow a written operation and maintenance (O&M) plan for each control device used to comply with the requirements of this subpart. You must maintain a copy of the O&M plan at the facility and make it available for review upon request. At a minimum, each plan must contain the following information:

(1) General facility and contact information;

(2) Positions responsible for inspecting, maintaining, and repairing emissions control devices which are used to comply with this subpart;

(3) Description of items, equipment, and conditions that will be inspected, including an inspection schedule for the items, equipment, and conditions. For baghouses, the O&M plan must include:

(i) If the baghouse is subject to the monitoring requirements in § 63.10897(c), information on how the baghouse system will be operated and maintained, including monitoring of pressure drop across baghouse cells and frequency of visual inspections of the baghouse interior and baghouse components such as dust removal and bag cleaning mechanisms and fans; or

(ii) If the baghouse is subject to the monitoring requirements in § 63.10897(d), the site-specific monitoring plan for each bag leak detection system required in § 63.10897(d)(2).

(4) Identity and estimated quantity of the replacement parts that will be maintained in inventory; and

(5) Procedures for operating and maintaining a continuous parameter monitoring system (CPMS) in accordance with manufacturer's specifications.

(b) You may use any other O&M, preventative maintenance, or similar plan which addresses the requirements in paragraph (a)(1) through (5) of this section to demonstrate compliance with the requirements for an O&M plan.

§ 63.10897 What are my monitoring requirements?

(a) For each wet scrubber applied to emissions from a metal melting furnace, you must use a continuous parameter monitoring system (CPMS) to measure and record the 3-hour average pressure drop and scrubber water flow rate.

(b) For each electrostatic precipitator applied to emissions from a metal melting furnace, you must measure and record the hourly average voltage and secondary current (or total power input) using a CPMS or check and record the voltage and secondary current (or total power input) at least once a shift.

(c) Except as specified in paragraph (d) of this section, you must comply with the monitoring and inspection requirements in paragraphs (c)(1) through (8) of this section for each baghouse applied to emissions from a metal melting furnace. You must record the date and results of each inspection.

(1) Measure and record the pressure drop across each baghouse cell each day.

(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 inspection 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 (kneed or bent) or lying on their sides. You do not have to 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.

(d) If you own or operate an existing affected source, you may install, operate, and maintain a bag leak detection system for each negative pressure baghouse or positive pressure baghouse as an alternative to the baghouse monitoring and inspection requirements in paragraph (c) of this section. If you own or operate a new affected source, you must install, operate, and maintain a bag leak detection system for each negative pressure baghouse or positive pressure baghouse. You must install, operate, and maintain each bag leak detection system according to the requirements in paragraphs (d)(1) through (3) of this section.

(1) Each bag leak detection system must meet the requirements in paragraphs (d)(1)(i) through (vii) of this section.

(i) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.00044 grains per actual cubic foot) or less.

(ii) The bag leak detection system sensor must provide output of relative particulate matter loadings and the owner or operator shall continuously record the output from the bag leak detection system using a strip chart recorder, data logger, or other means.

(iii) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings

is detected over the alarm set point established in the operation and maintenance plan, and the alarm must be located such that it can be heard by the appropriate plant personnel.

(iv) The initial adjustment of the system must, at minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points. If the system is equipped with an alarm delay time feature, you also must adjust the alarm delay time.

(v) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set point, or alarm delay time. Except, once per quarter, you may adjust the sensitivity of the bag leak detection system to account for seasonable effects including temperature and humidity according to the procedures in the monitoring plan required by paragraph (d)(2) of this section.

(vi) For negative pressure baghouses, induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detector sensor must be installed downstream of the baghouse and upstream of any wet scrubber.

(vii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(2) You must prepare a site-specific monitoring plan for each bag leak detection system to be incorporated in your O&M plan. You must operate and maintain each bag leak detection system according to the plan at all times. Each plan must address all of the items identified in paragraphs (d)(2)(i) through (vi) of this section.

(i) Installation of the bag leak detection system.

(ii) Initial and periodic adjustment of the bag leak detection system including how the alarm set-point will be established.

(iii) Operation of the bag leak detection system including quality assurance procedures.

(iv) Maintenance of the bag leak detection system including a routine maintenance schedule and spare parts inventory list.

(v) How the bag leak detection system output will be recorded and stored.

(vi) Procedures for determining what corrective actions are necessary in the event of a bag leak detection alarm as required in paragraph (d)(3) of this section.

(3) In the event that a bag leak detection system alarm is triggered, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete corrective action as soon as practicable, but no later than 10 calendar days from the date of the alarm. You must record the date and time of each valid alarm, the time you initiated corrective action, the correction action taken, and the date on which corrective action was completed. Corrective actions may include, but are not limited to:

(i) Inspecting the bag house for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.

(ii) Sealing off defective bags or filter media.

(iii) Replacing defective bags or filter media or otherwise repairing the control device.

(iv) Sealing off a defective baghouse department.

(v) Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system.

(vi) Shutting down the process producing the particulate emissions.

(e) You must make monthly inspections of the equipment that is important to the performance of the total capture system (i.e., pressure sensors, dampers, and damper switches). This inspection must include observations of the physical appearance of the equipment (e.g., presence of holes in the ductwork or hoods, flow constrictions caused by dents or accumulated dust in the ductwork, and fan erosion). You must repair any defect or deficiency in the capture system before the next scheduled inspection. You must record the date and results of each inspection and the date of repair of any defect or deficiency.

(f) You must install, operate, and maintain each CPMS or other measurement device according to your O&M plan. You must record all information needed to document conformance with these requirements.

(g) In the event of an exceedance of an established emissions limitation (including operating limit), you must restore operation of the emissions source (including the control device and associated capture system) to its normal or usual manner or operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the exceedance. You must record the date and time correction action was initiated, the correction action taken, and the date corrective action was completed.

(h) If you choose to comply with an emissions limit in § 63.10895(b) using emissions averaging, you must calculate and record for each calendar month the pounds of PM or total metal HAP per ton of metal melted from the group of all metal melting furnaces at your foundry. You must calculate and record the weighted average pounds per ton emissions rate for the group of all metal melting furnaces at the foundry determined from the performance test procedures in § 63.10898(d) and (e).

(i) Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must conduct all continuous monitoring (or must collect data at all required intervals) at all times that the emissions source is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or quality control activities shall not be used for the purposes of this subpart, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, and not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

§ 63.10898 What are my performance test requirements?

(a) You must conduct a performance test to demonstrate initial compliance with the applicable emissions limits for each metal melting furnace or group of all metal melting furnaces that is subject to an emissions limit in § 63.10895(b) and for each building or structure housing foundry operations that is subject to the opacity limit for fugitive emissions in § 63.10895(d). You must conduct the test within 180 days of your compliance date and report the results in your notification of compliance status.

(1) If you own or operate an existing iron and steel foundry, you may choose to submit the results of a prior performance test for PM or total metal HAP that demonstrates compliance with the applicable emissions limit for a metal melting furnace or group of all metal melting furnaces provided the test

was conducted within the last 5 years using the methods and procedures specified in this subpart and either no process changes have been made since the test, or you can demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite such process changes.

(2) If you own or operate an existing iron and steel foundry and you choose to submit the results of a prior performance test according to paragraph (a)(1) of this section, you must submit a written notification to the Administrator of your intent to use the previous test data no later than 60 days after your compliance date. The notification must contain a full copy of the performance test and contain information to demonstrate, if applicable, that either no process changes have been made since the test, or that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite such process changes.

(b) You must conduct subsequent performance tests to demonstrate compliance with the applicable emissions limit § 63.10895(b) for a metal melting furnace or group of all metal melting furnaces no less frequently than every 5 years and each time you elect to change an operating limit or make a process change likely to increase HAP emissions.

(c) You must conduct each performance test according to the requirements in § 63.7(e)(1), Table 1 to this subpart, and paragraphs (d) through (g) of this section.

(d) To determine compliance with the applicable PM or total metal HAP emissions limit in § 63.10895(b) for a metal melting furnace in a lb/ton of metal charged format, compute the process-weighted mass emissions (E_p) for each test run using Equation 1 of this section:

$$E_p = \frac{C \times Q \times T}{P \times K} \qquad \text{(Eq. 1)}$$

Where:

E_p = Process-weighted mass emissions of PM or total metal HAP, lb/ton;
C = Concentration of PM or total metal HAP, gr/dscf;
Q = Volumetric flow rate of stack gas, dscf/hr;
T = Total time during a test run that a sample is withdrawn from the stack during melt production cycle, hr;
P = Total amount of metal charged during the test run, tons; and
K = Conversion factor, 7,000 grains per pound.

(e) To determine compliance with the applicable emissions limit in § 63.10895(b) for a group of all metal melting furnaces using emissions averaging,

(1) Determine and record the monthly average charge rate for each metal melting furnace at your iron and steel foundry for the previous calendar month; and

(2) Compute the mass-weighted PM or total metal HAP using Equation 2 of this section.

$$E_c = \frac{\sum_{i=1}^{n} (E_{pi} \times T_{ti})}{\sum_{i=1}^{n} T_{ti}} \qquad \text{(Eq. 2)}$$

Where:

E_C = The mass-weighted PM or total metal HAP emissions for the group of all metal melting furnaces at the foundry, lb/ton;
E_{pi} = Process-weighted mass emissions of PM or total metal HAP for individual emission unit i as determined from the performance test and calculated using Equation 1 of this section, lb/ton;
T_{ti} = Total tons of metal charged for individual emission unit i for the calendar month prior to the performance test, tons; and
n = The total number of metal melting furnaces at the iron and steel foundry.

(3) For an uncontrolled electric induction furnace that is not equipped with a capture system, you may assume an emissions factor of 3 pounds per ton of PM or 0.2 pounds per ton of total metal HAP per ton of metal melted in Equation 2 of this section instead of a measured test value. If the uncontrolled electric induction furnace is equipped with a capture system, you must use a measured test value.

(f) To determine compliance with the applicable PM or total metal HAP emissions limit for a metal melting furnace in § 63.10895(b) when emissions from one or more regulated furnaces are combined with other non-regulated emissions sources, you may demonstrate compliance using the procedures in paragraphs (f)(1) through (3) of this section.

(1) Determine the PM or total metal HAP process-weighted mass emissions for each of the regulated streams prior to the combination with other exhaust streams or control device.

(2) 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 3 of this section.

$$\%\ \text{reduction} = \frac{E_i - E_o}{E_i} \times 100\% \qquad \text{(Eq. 3)}$$

Where:

E_i = Mass emissions rate of PM or total metal HAP at the control device inlet, lb/hr;
E_o = Mass emissions rate of PM or total metal HAP at the control device outlet, lb/hr.

(3) Meet the applicable emissions limit based on the calculated PM or total metal HAP process-weighted mass emissions for the regulated emissions source using Equation 4 of this section:

$$E_{pl_{released}} = E_{pli} \times \left(1 - \frac{\%\ \text{reduction}}{100}\right) \qquad \text{(Eq. 4)}$$

Where:

$E_{p1released}$ = Calculated process-weighted mass emissions of PM (or total metal HAP) predicted to be released to the atmosphere from the regulated emissions source, lb/ton; and
E_{p1i} = Process-weighted mass emissions of PM (or total metal HAP) in the uncontrolled regulated exhaust stream, lb/ton.

(g) 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 (d) through (f) of this section, you must submit a site-

specific test plan to the Administrator for approval according to the requirements in § 63.7(c)(2) and (3).

(h) You must conduct each opacity test for fugitive emissions according to the requirements in § 63.6(h)(5) and Table 1 to this subpart.

(i) You must conduct subsequent performance tests to demonstrate compliance with the opacity limit in § 63.10895(d) no less frequently than every 6 months and each time you make a process change likely to increase fugitive emissions.

(j) In your performance test report, you must certify that the capture system operated normally during the performance test.

(k) You must establish operating limits during the initial performance test according to the requirements in Table 2 of this subpart. You may use a previous performance test conducted prior to September 17, 2007 to establish an operating limit provided the test meets the requirements in paragraph (a)(1) of this section.

(l) You may change the operating limits for a wet scrubber, electrostatic precipitator, or baghouse if you meet the requirements in paragraphs (l)(1) through (3) of this section.

(1) Submit a written notification to the Administrator of your plan to conduct a new performance test to revise the operating limit.

(2) Conduct a performance test to demonstrate compliance with the applicable emissions limitation in § 63.10895(b).

(3) Establish revised operating limits according to the applicable procedures in Table 2 to this subpart.

§ 63.10899 What are my recordkeeping and reporting requirements?

(a) In addition to the records required by 40 CFR 63.10, you must maintain records of the information specified in paragraphs (a)(1) through (12) of this section according to the requirements in § 63.10(b)(1).

(1) Records of your written materials specifications according to § 63.10885(a) and records that demonstrate compliance with the requirements for restricted metallic scrap in § 63.10885(a)(1) or general scrap in § 63.10885(a)(2).

(2) If you are subject to the requirements for a site-specific plan for mercury switch removal in § 63.10885(b)(1), you must:

(i) Maintain records of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the number of vehicles processed, and an estimate of the percent of mercury switches recovered; and

(ii) Submit semiannual reports of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the number of vehicles processed, an estimate of the percent of mercury switches recovered, and certification that the recovered mercury switches were recycled at RCRA-permitted facilities. The semiannual reports must include certification that you have conducted inspections, site visits, or taken other means of corroboration as required under § 63.10885(b)(1)(ii)(C). You must identify which alternative in § 63.10885(b) applies to each scrap provider, contract, or shipment. You may include this information in the semiannual reports required under paragraph (b) of this section.

(3) If you are subject to the alternative for approved mercury programs under § 63.10885(b)(2), you must maintain records identifying each scrap provider and documenting the scrap provider's participation in an approved mercury switch removal program.

(4) Records to document use of binder chemical formulation that does not contain methanol as a specific ingredient of the catalyst formulation for each furfuryl alcohol warm box mold or core making line as required by § 63.10886. These records must be the Material Safety Data Sheet (provided that it contains appropriate information), a certified product data sheet, or a manufacturer's hazardous air pollutant data sheet.

(5) Records of the annual quantity and composition of each HAP-containing chemical binder or coating material used to make molds and cores. These records must be copies of purchasing records, Material Safety Data Sheets, or other documentation that provide information on the binder or coating materials used.

(6) Records of monthly metal melt production for each calendar year.

(7) Operation and maintenance plan as required by § 63.10896(a) and records that demonstrate compliance with plan requirements.

(8) If you use emissions averaging, records of monthly metal melting rate for each furnace at your iron and steel foundry, and records of the calculated pounds of PM or total metal HAP per ton of metal melted for the group of all metal melting furnaces required by § 63.10897(h).

(9) Records of baghouse monitoring and inspections required by § 63.10897(c) or, if applicable, records for bag leak detection systems as follows:

(i) Records of the bag leak detection system output;

(ii) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and

(iii) The date and time of all bag leak detection system alarms, and for each valid alarm, the time you initiated corrective action, the corrective action taken, and the date on which corrective action was completed.

(10) Records of capture system inspections and repairs as required by § 63.10897(e).

(11) Records demonstrating conformance with your O&M plan and specifications for the operation of CPMS as required by § 63.10897(f).

(12) Records of corrective action(s) for exceedances and excursions as required by § 63.10897(h).

(b) You must submit semiannual reports to the Administrator according to the requirements in § 63.10(e). The reports must include, at a minimum, the following information as applicable:

(1) Summary information on the number, duration, and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective action taken;

(2) Summary information on the number, duration, and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other calibration checks, if applicable); and

(3) Summary information on any deviation from the pollution prevention management practices in §§ 63.10885 and 63.10886 and the operation and maintenance requirements in § 63.10896 and the corrective action taken.

§ 63.10900 What parts of the General Provisions apply to me?

(a) If you own or operate a new or existing affected source, you must comply with the requirements of the General Provisions (40 CFR part 63, subpart A) according to Table 3 of this subpart.

(b) Your notification of compliance status required by § 63.9(h) must include each applicable certification of compliance, signed by a responsible official, in Table 4 of this subpart.

Other Requirements and Information

§ 63.10905 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by EPA or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State,

local, or tribal agency, then that agency, in addition to the EPA, has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency.

(c) The authorities that cannot be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of an alternative non-opacity emissions standard under 40 CFR 63.6(g).

(2) Approval of an alternative opacity emissions standard under § 63.6(h)(9).

(3) Approval of a major change to test methods under § 63.7(e)(2)(ii) and (f). A ''major change to test method'' is defined in § 63.90.

(4) Approval of a major change to monitoring under § 63.8(f). A ''major change to monitoring'' under is defined in § 63.90.

(5) Approval of a major change to recordkeeping and reporting under § 63.10(f). A ''major change to recordkeeping/reporting'' is defined in § 63.90.

§ 63.10906 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, in § 63.2, and in this section.

Bag leak detection system means a system that is capable of continuously monitoring relative particulate matter (dust) loadings in the exhaust of a baghouse to detect bag leaks and other upset conditions. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, electrodynamic, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

Binder chemical means a component of a system of chemicals used to bind sand together into molds, mold sections, and cores through chemical reaction as opposed to pressure.

Capture system means the collection of components used to capture gases and fumes released from one or more emissions points and then convey the captured gas stream to a control device or to the atmosphere. A capture system may include, but is not limited to, the following components as applicable to a given capture system design: duct intake devices, hoods, enclosures, ductwork, dampers, manifolds, plenums, and fans.

Cupola means a vertical cylindrical shaft furnace that uses coke and forms of iron and steel such as scrap and foundry returns as the primary charge components and melts the iron and steel through combustion of the coke by a forced upward flow of heated air.

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), management practice, 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 management standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Electric arc furnace means a vessel in which forms of iron and steel such as scrap and foundry returns are melted through resistance heating by an electric current flowing through the arcs formed between the electrodes and the surface of the metal and also flowing through the metal between the arc paths.

Electric induction furnace means a vessel in which forms of iron and steel such as scrap and foundry returns are melted though resistance heating by an electric current that is induced in the metal by passing an alternating current through a coil surrounding the metal charge or surrounding a pool of molten metal at the bottom of the vessel.

Exhaust stream means gases emitted from a process through a conveyance as defined in this subpart.

Foundry operations means all process equipment and practices used to produce metal castings for shipment. *Foundry operations* include: mold or core making and coating; scrap handling and preheating; metal melting and inoculation; pouring, cooling, and shakeout; shotblasting, grinding, and other metal finishing operations; and sand handling.

Free liquids means material that fails the paint filter test by EPA Method 9095B (incorporated by reference—see § 63.14). That is, if any portion of the material passes through and drops from the filter within the 5-minute test period, the material contains free liquids.

Furfuryl alcohol warm box mold or core making line means a mold or core making line in which the binder chemical system used is that system commonly designated as a furfuryl alcohol warm box system by the foundry industry.

Iron and steel foundry means a facility or portion of a facility that melts scrap, ingot, and/or other forms of iron and/or steel and pours the resulting molten metal into molds to produce final or near final shape products for introduction into commerce. Research and development facilities and operations that only produce non-commercial castings are not included in this definition.

Large iron and steel foundry means an iron and steel foundry with a metal melt production greater than 10,000 tons per year.

Metal charged means the quantity of scrap metal, pig iron, metal returns, alloy materials, and other solid forms of iron and steel placed into a metal melting furnace. Metal charged does not include the quantity of fluxing agents or, in the case of a cupola, the quantity of coke that is placed into the metal melting furnace.

Metal melting furnace means a cupola, electric arc furnace, electric induction furnace, or similar device that converts scrap, foundry returns, and/or other solid forms of iron and/or steel to a liquid state. This definition does not include a holding furnace, an argon oxygen decarburization vessel, or ladle that receives molten metal from a metal melting furnace, to which metal ingots or other material may be added to adjust the metal chemistry.

Metal melt production means the quantity of metal melted in a metal melting furnace or group of all metal melting furnaces at the iron and steel foundry. For the purposes of this subpart, metal melt production is determined on the basis on the quantity of metal charged to each metal melting furnace; the sum of the metal melt production rates for each furnace is the total metal melt production of the foundry.

Mold or core making line means the collection of equipment that is used to mix an aggregate of sand and binder chemicals, form the aggregate into final shape, and harden the formed aggregate. This definition does not include a line for making green sand molds or cores.

Responsible official means responsible official as defined in § 63.2.

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.

Scrubber blowdown means liquor or slurry discharged from a wet scrubber that is either removed as a waste stream or processed to remove impurities or adjust its composition or pH

Small iron and steel foundry means an iron and steel foundry that has a metal melt production of 10,000 tons per year or less.

Total metal HAP means, for the purposes of this subpart, the sum of the concentrations of compounds 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).

Tables to Subpart ZZZZZ of Part 63

As required in § 63.10898(c), you must conduct performance tests according to the test methods and procedures in the following table.

TABLE 1 TO SUBPART ZZZZZ OF PART 63.—PERFORMANCE TEST REQUIREMENTS FOR LARGE IRON AND STEEL FOUNDRIES

For . . .	You must . . .	According to the following requirements . . .
1. Each metal melting furnace subject to a PM or total metal HAP limit in § 63.10895(b).	a. Select sampling port locations and the number of traverse points in each stack or duct using EPA Method 1 or 1A (40 CFR part 60, appendix A).	Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.
	b. Determine volumetric flow rate of the stack gas using Method 2, 2A, 2C, 2D, 2F, or 2G (40 CFR part 60, appendix A).	
	c. Determine dry molecular weight of the stack gas using EPA Method 3, 3A, or 3B (40 CFR part 60, appendix A)[1].	
	d. Measure moisture content of the stack gas using EPA Method 4 (40 CFR part 60, appendix A).	
	e. Determine PM concentration using EPA Method 5, 5B, 5D, 5F, or 5I, as applicable or total metal HAP concentration using EPA Method 29 (40 CFR part 60, appendix A).	i. Collect a minimum sample volume of 60 dscf of gas during each PM sampling run. The PM concentration is determined using only the front-half (probe rinse and filter) of the PM catch.
		ii. For Method 29, only the measured concentration of the listed metal HAP analytes that are present at concentrations exceeding one-half the quantification 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 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.
		iii. A minimum of three valid test runs are needed to comprise a PM or total metal HAP performance test.
		iv. For cupola metal melting furnaces, sample PM or total metal HAP only during times when the cupola is on blast.
		v. For electric arc and electric induction metal melting furnaces, sample PM or total metal HAP only during normal melt production conditions, which may include, but are not limited to the following operations: charging, melting, alloying, refining, slagging, and tapping.
		vi. Determine and record the total combined weight of tons of metal charged during the duration of each test run. You must compute the process-weighted mass emissions of PM according to Equation 1 of § 63.10898(d) for an individual furnace or Equation 2 of § 63.10898(e) for the group of all metal melting furnaces at the foundry.
2. Fugitive emissions from buildings or structures housing any iron and steel foundry emissions sources subject to opacity limit in § 63.10895(f).	Using a certified observer, conduct each opacity test according to EPA Method 9 (40 CFR part 60, appendix A) and 40 CFR 63.6(h)(5).	i. 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.

TABLE 1 TO SUBPART ZZZZZ OF PART 63.—PERFORMANCE TEST REQUIREMENTS FOR LARGE IRON AND STEEL FOUNDRIES—Continued

For . . .	You must . . .	According to the following requirements . . .
		ii. During testing intervals when PM or total metal HAP performance tests, if applicable, are being conducted, conduct the opacity test such that the opacity observations are recorded during the PM or total metal HAP performance tests.

[1] You may also use as an alternative to EPA Method 3B (40 CFR part 60, appendix A), the manual method for measuring the oxygen, carbon dioxide, and carbon monoxide content of exhaust gas, ANSI/ASME PTC 19.10–1981, ''Flue and Exhaust Gas Analyses'' (incorporated by reference—see § 63.14).

As required in § 63.10898(k), you must establish operating limits using the procedures in the following table.

TABLE 2 TO SUBPART ZZZZZ OF PART 63.—PROCEDURES FOR ESTABLISHING OPERATING LIMITS FOR LARGE IRON AND STEEL FOUNDRIES

For . . .	You must . . .
1. Each wet scrubber subject to the operating limits in § 63.10895(c)(1) for pressure drop and scrubber water flow rate.	Using the CPMS required in § 63.10897(a), measure and record the pressure drop and scrubber water flow rate in intervals of no more than 15 minutes during each PM or total metal HAP test run. 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.
2. Each electrostatic precipitator subject to operating limits in § 63.10895(c)(2) for voltage and secondary current (or total power input).	Measure and record voltage and secondary current (or total power input) manually or by CPMS every 15 minutes during each PM or total metal HAP test run. Compute and record the minimum hourly average voltage and secondary current (or total power input) from all the readings for each valid sampling run in which the applicable emissions limit is met.
3. Each baghouse subject to the operating limit in § 63.10895(c)(3) for pressure drop.	Measure and record the minimum and maximum pressure drop across each baghouse cell during each PM or total metal HAP test run. Compute and record the average minimum and maximum pressure drop values for the three runs.

As required in § 63.10900(a), you must meet each requirement in the following table that applies to you.

TABLE 3 TO SUBPART ZZZZZ OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO LARGE IRON AND STEEL FOUNDRIES

Citation	Subject	Applies to large iron and steel foundry?	Explanation
63.1	Applicability	Yes.	
63.2	Definitions	Yes.	
63.3	Units and abbreviations	Yes.	
63.4	Prohibited activities	Yes.	
63.5	Construction/Reconstruction	Yes.	
63.6(a)–(g)	Compliance with standards and maintenance requirements.	Yes.	
63.6(h)	Opacity and visible emissions standards	Yes.	
63.6(i)(i)–(j)	Compliance extension and Presidential compliance exemption.	Yes.	
63.7(a)(3), (b)–(h)	Performance testing requirements	Yes.	
63.7(a)(1)–(a)(2)	Applicability and performance test dates	No	Subpart ZZZZZ specifies applicability and performance test dates.
63.8(a)(1)–(a)(3),(b), (c)(1)–(c)(3), (c)(6)–(c)(8), (d), (e), (f)(1)–(f)(6),(g)(1)–(g)(4).	Monitoring requirements	Yes.	
63.8(a)(4)	Additional monitoring requirements for control devices in § 63.11.	No.	
63.8(c)(4)	Continuous monitoring system (CMS) requirements.	No.	

TABLE 3 TO SUBPART ZZZZZ OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO LARGE IRON AND STEEL FOUNDRIES—Continued

Citation	Subject	Applies to large iron and steel foundry?	Explanation
63.8(c)(5)	Continuous opacity monitoring system (COMS) Minimum Procedures.	No.	
63.8(g)(5)	Data reduction	No.	
63.9	Notification requirements	Yes.	
63.10(a), (b)(1)–(b)(2)(xii)–(b)(2)(xiv), (b)(3), (d)(1)–(2), (e)(1)–(2), (f).	Recordkeeping and reporting requirements	Yes.	
63.10(c)(1)–(6), (c)(9)–(15)	Additional records for continuous monitoring systems.	No.	
63.10(c)(7)–(8)	Records of excess emissions and parameter monitoring exceedances for CMS.	Yes.	
63.10(d)(3)	Reporting opacity or visible emissions observations.	Yes.	
63.10(e)(3)	Excess emissions reports	Yes.	
63.10(e)(4)	Reporting COMS data	No.	
63.11	Control device requirements	No.	
63.12	State authority and delegations	Yes.	
63.13–63.16	Addresses of State air pollution control agencies and EPA regional offices. Incorporation by reference. Availability of information and confidentiality. Performance track provisions.	Yes.	

As required by § 63.10900(b), your notification of compliance status must include certifications of compliance according to the following table.

TABLE 4 TO SUBPART ZZZZZ OF PART 63.—COMPLIANCE CERTIFICATIONS FOR LARGE IRON AND STEEL FOUNDRIES

For . . .	Your notification of compliance status required by § 63.9(h) must include this certification of compliance, signed by a responsible official:
Each new or existing affected source subject to scrap management requirements in § 63.10885(a)(1) or (2).	''This facility has prepared, and will operate by, written material specifications for metallic scrap according to § 63.10885(a)(1)'' or ''This facility has prepared, and will operate by, written material specifications for general iron and steel scrap according to § 63.10890(a)(2).''
Each new or existing affected source subject to mercury switch removal requirements in § 63.10885(b).	''This facility has prepared, and will operate by, written material specifications for the removal of mercury switches and a site-specific plan implementing the material specifications according to § 63.10890(b)(1)'' or ''This facility participates in and purchases motor vehicles scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the Administrator according to § 63.10890(b)(2)'' or ''This facility complies with the alternative requirements in § 63.10890(b)(3) for specialty metal scrap and will recover only materials from motor vehicles for their specialty alloy content that are not reasonably expected to contain mercury switches.''
Each new or existing affected source subject to § 63.10886 ..	''This facility complies with the no methanol requirement for the catalyst portion of each binder chemical formulation for a furfuryl alcohol warm box mold or core making line according to § 63.10886.''
Each new or existing affected source subject to § 63.10895(a).	''This facility operates a capture and collection system for each emissions source subject to this subpart according to § 63.10895(a).''
Each existing affected source subject to § 63.10895(b)	''This facility complies with the PM or total metal HAP emissions limit in § 63.10895(b) for each metal melting furnace or group of all metal melting furnaces based on a previous performance test in accordance with § 63.10898(a)(1).''
Each new or existing affected source subject to 63.10896(a)	''This facility has prepared and will operate by an operation and maintenance plan according to § 63.10896(a).''
Each new or existing affected source subject to § 63.10896(c).	''This facility has prepared and will operate by an emissions averaging plan according to § 63.10896(c).''
Each new or existing affected source subject to § 63.10897(d).	''This facility has prepared and will operate by a site-specific monitoring plan for each bag leak detection system and submitted the plan to the Administrator for approval according to § 63.10897(d)(2).''

[FR Doc. E7–17972 Filed 9–14–07; 8:45 am]

BILLING CODE 6560–50–P