

**ENVIRONMENTAL PROTECTION AGENCY****40 CFR Part 63**

[EPA-HQ-OAR-2008-0236; FRL-8766-6]

RIN 2060-AO93

**Revision of Source Category List for Standards Under Section 112(k) of the Clean Air Act; National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries****AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Proposed rule.

**SUMMARY:** EPA is revising the area source category list by changing the name of the "Secondary Aluminum Production" category to "Aluminum Foundries" and the "Nonferrous Foundries, not elsewhere classified (nec)" category to "Other Nonferrous Foundries." At the same time, EPA is proposing national emission standards for the Aluminum Foundries, Copper Foundries, and Other Nonferrous Foundries area source categories. These proposed emission standards for new and existing sources reflect EPA's proposed determination regarding the generally available control technology or management practices for each area source category.

**DATES:** Comments must be received on or before March 11, 2009 unless a public hearing is requested by February 19, 2009. If a hearing is requested on the proposed rule, written comments must be received by March 26, 2009. Under the Paperwork Reduction Act, comments on the information collection provisions are best assured of having full effect if the Office of Management and Budget (OMB) receives a copy of your comments on or before March 11, 2009.

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-HQ-OAR-2008-0236, by one of the following methods:

- <http://www.regulations.gov>. Follow the on-line instructions for submitting comments.
- *E-mail:* Comments may be sent by electronic mail (e-mail) to [a-and-r-Docket@epa.gov](mailto:a-and-r-Docket@epa.gov), Attention Docket ID No. EPA-HQ-OAR-2008-0236.
- *Fax:* Fax your comments to: 202-566-9744, Attention Docket ID No. EPA-HQ-OAR-2008-0236.
- *Mail:* Send your comments to: Air and Radiation Docket and Information Center, Environmental Protection Agency, Mailcode: 2822T, 1200

Pennsylvania Ave., NW., Washington, DC 20460, Attention: Docket ID No. EPA-HQ-OAR-2008-0236. 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 or Courier:* Deliver your comments to EPA Docket Center, Room 3334, 1301 Constitution Ave., NW., Washington, DC 20460. Such deliveries are only accepted during the Docket Center'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-2008-0236. 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 <http://www.regulations.gov> or e-mail. The <http://www.regulations.gov> Web site is an "anonymous access" system, which means that 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 <http://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 will be 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 <http://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, will be publicly available only in hard copy form. Publicly available docket materials are available either electronically in <http://www.regulations.gov> or in hard copy at the EPA Docket Center, Public Reading Room, 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:** For questions about the proposed standards for aluminum foundries, contact Mr. David Cole, Office of Air Quality Planning and Standards, Outreach and Information Division, Regulatory Development and Policy Analysis Group (C404-05), Environmental Protection Agency, Research Triangle Park, NC 27711; Telephone Number: (919) 541-5565; Fax Number: (919) 541-0242; E-mail address: [Cole.David@epa.gov](mailto:Cole.David@epa.gov). For questions about the proposed standards for copper foundries and other nonferrous foundries, contact Mr. Gary Blais, Office of Air Quality Planning and Standards, Outreach and Information Division, Regulatory Development and Policy Analysis Group (C404-05), Environmental Protection Agency, Research Triangle Park, NC 27711; Telephone Number: (919) 541-3223; Fax Number: (919) 541-0242; E-mail address: [Blais.Gary@epa.gov](mailto:Blais.Gary@epa.gov).

**SUPPLEMENTARY INFORMATION:** The information presented in this preamble is organized as follows:

- I. General Information
  - A. Does this action apply to me?
  - B. What should I consider as I prepare my comments to EPA?
  - C. Where can I get a copy of this document?
  - D. When would a public hearing occur?
- II. Revision to the Source Category List
- III. Background Information for the Proposed Area Source Standards
  - A. What is the statutory authority and regulatory approach for the proposed standards?
  - B. What source categories are affected by the proposed standards?
  - C. What are the production operations, emission sources, and available controls?
- IV. Summary of the Proposed Standards
  - A. Do these proposed standards apply to my facility?
  - B. When must I comply with the proposed standards?
  - C. What are the proposed standards?
  - D. What are the compliance requirements?
  - E. What are the notification, recordkeeping, and reporting requirements?

- V. Rationale for This Proposed Rule
  - A. How did we select the source categories?
  - B. How did we select the affected source?
  - C. How are the aluminum foundry HAP, the copper foundry HAP, and the other nonferrous foundry HAP addressed by this proposed rule?
  - D. How did we determine GACT?
  - E. How did we select the compliance requirements?
  - F. How did we decide to propose to exempt these area source categories from title V permit requirements?
- VI. Summary of Impacts of the Proposed Standards

- VII. Statutory and Executive Order Reviews
  - A. Executive Order 12866: Regulatory Planning and Review
  - B. Paperwork Reduction Act
  - C. Regulatory Flexibility Act
  - D. Unfunded Mandates Reform Act
  - E. Executive Order 13132: Federalism
  - F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments
  - G. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks
  - H. Executive Order 13211: Actions Concerning Regulations That

- Significantly Affect Energy Supply, Distribution, or Use
- I. National Technology Transfer Advancement Act
- J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

**I. General Information**

*A. Does this action apply to me?*

The regulated categories and entities potentially affected by the proposed standards include:

Category	NAICS code <sup>1</sup>	Examples of regulated entities
Industry:		
Aluminum Foundries .....	331524	Area source facilities that pour molten aluminum into molds to manufacture aluminum castings (excluding die casting).
Copper Foundries .....	331525	Area source facilities that pour molten copper and copper-based alloys (e.g., brass, bronze) into molds to manufacture copper and copper-based alloy castings (excluding die casting).
Other Nonferrous Foundries	331528	Area source facilities that pour molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (excluding die casting). Establishments in this industry purchase nonferrous metals, such as nickel, zinc, and magnesium that are made in other establishments.

<sup>1</sup> 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 63.11544 of subpart ZZZZZZ (National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries). If you have any questions regarding the applicability of this action to a particular entity, consult either the air permit authority for the entity or your EPA Regional representative, as listed in 40 CFR 63.13 of subpart A (General Provisions).

*B. What should I consider as I prepare my comments to EPA?*

Do not submit CBI to EPA through <http://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), Office of Air Quality Planning and Standards, Environmental Protection Agency, Research Triangle Park, NC 27711, Attention: Docket ID No. EPA-HQ-OAR-2008-0236. Clearly mark the part or all of the information that you claim to be CBI. For CBI contained 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 the Technology Transfer Network (TTN). Following signature, a copy of the 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 the proposed rule by February 19, 2009, we will hold a public hearing on February 24, 2009. If you are interested in attending the public hearing, contact Ms. Christine Adams at (919) 541-5590 to verify that a hearing will be held. If a public hearing is held, it will be held at EPA's campus located at 109 T.W.

Alexander Drive in Research Triangle Park, NC, or an alternate site nearby.

**II. Revision to the Source Category List**

This notice announces a revision to the area source category list developed under our Integrated Urban Air Toxics Strategy pursuant to section 112(c)(3) of the Clean Air Act (CAA). The revision changes the name of the "Secondary Aluminum Production" source category to "Aluminum Foundries". The revision also changes the name of the "Nonferrous Foundries, nec" source category to "Other Nonferrous Foundries."<sup>1</sup>

We are proposing to change the name of the "Secondary Aluminum Production" source category because we incorrectly named the category in the notice adding "Secondary Aluminum Production" to our list of area source categories (66 FR 8220, January 20, 2001). Upon identifying the error, we prepared a memorandum explaining the error.<sup>2</sup> The memorandum stated that the

<sup>1</sup> This is a change in name only and in no way affects the scope or coverage of the source category. Nonferrous foundries not elsewhere classified (nec) are simply those foundries melting nonferrous metals other than copper and aluminum. Copper and aluminum foundries were assigned their own unique SIC and NAICS codes.

<sup>2</sup> Memorandum from Barbara Driscoll to Docket Number OAR-2002-0036 (Docket for Final Revision of Area Source Category List Under Sections 112(c)(3) and 112(k)(3)(B)(iii) of the Clean Air Act). "Basis for Determination of New Area Source Categories Listed for Future Regulatory Development on November 22, 2002." Docket Item IV-B-11.

listing of the "Secondary Aluminum Production" category was not based on secondary aluminum facilities, but rather on the emissions from a different source category—"Aluminum Foundries." In addition, background documentation for the 1990 emissions inventory, from which the source category listed in the Integrated Urban Air Toxics Strategy was derived, states that the contribution of aluminum foundries to the CAA section 112(k) inventory of urban hazardous air pollutants (HAP) was based on the 1990 Toxic Release Inventory (TRI) for facilities reporting under Standard Industrial Classification (SIC) code 3365 ("aluminum foundries except die casting") and the obsolete SIC code 3361 ("aluminum foundries—castings").<sup>3</sup> We are therefore changing the name of the "Secondary Aluminum Production" source category to "Aluminum Foundries", which is consistent with the inventory and the record supporting our original listing decision.

We also are revising the name of the "Nonferrous Foundries, nec" category to "Other Nonferrous Foundries" to clarify that the source category includes all nonferrous foundries except aluminum foundries and copper foundries. This change has no impact on the type of sources included in the category or on the scope of the category.

### III. Background Information for the Proposed Area Source Standards

#### A. What is the statutory authority and regulatory approach for the proposed standards?

Section 112(d) of the CAA requires us to establish national emission standards for hazardous air pollutants (NESHAP) for both major and area sources of 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 HAP that, as the result of emissions from area sources, pose the greatest threat to public health in the largest number of urban areas. EPA implemented this provision in 1999 in the Integrated Urban Air Toxics Strategy (64 FR 38715, July 19, 1999). In the Strategy, EPA identified 30 HAP that pose the greatest potential health threat in urban areas;

these HAP are referred to as the "30 urban HAP." Section 112(c)(3) requires EPA to list sufficient categories or subcategories of area sources to ensure that area sources representing 90 percent of the emissions of the 30 urban HAP are subject to regulation. We implemented 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.

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 technology or management practices (GACT) by such sources to reduce emissions of hazardous air pollutants." Additional information on GACT is found in the Senate report on the legislation (Senate Report Number 101-228, December 20, 1989), which describes GACT as

\* \* \* 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, like these, that have a majority of firms classified as small businesses according to the Small Business Administration standards in 13 CFR 121.201. Small businesses for the three foundry source categories that are the subject of this proposed rule are those with fewer than 500 employees.

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. However, we did not identify any major sources in these three source categories.

Under 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.

We are proposing these three foundry national emission standards in response to a court-ordered deadline that requires EPA to issue standards for source categories listed pursuant to section 112(c)(3) and (k) by June 15, 2009 (*Sierra Club v. Johnson*, No. 01-1537, D.D.C., March 2006).

#### B. What source categories are affected by the proposed standards?

##### 1. Overview of the Three Source Categories

Aluminum, copper, and other nonferrous foundries all produce castings of nonferrous metals that are used in products that require specific mechanical properties, machinability, and/or corrosion resistance. Aluminum, copper, and other nonferrous foundries account for approximately 16 percent by weight of all foundry castings (iron and steel foundries account for the other 84 percent). Aluminum and aluminum alloy castings account for 11 percent compared to 2 percent for copper and copper alloy castings and 3 percent for other nonferrous castings. Usually, these nonferrous metals are cast in combinations with each other or with some of about 40 other elements to make many different nonferrous alloys. A few of the more common nonferrous alloys are brass, bronze, magnesium, nickel-copper alloys (Monel); nickel-chromium-iron alloys; aluminum-copper alloys; aluminum-silicon alloys; aluminum-magnesium alloys; and titanium alloys. Aluminum, copper, and other nonferrous foundries are much smaller emitters of particulate matter (PM) and metal HAP than iron and steel foundries, which typically melt much larger quantities of metal on a per facility basis.

Most of the aluminum, copper, and other nonferrous foundries in the United States are small businesses according to the Small Business Administration size classifications (less than 500 employees), and about 70 percent of the facilities employ fewer than 50 people. Conversely, only 11 foundries (1 percent of the total) employ 500 or more people, and all of these are aluminum foundries. Although most foundries manufacture castings for sale to other companies, an important exception is the relatively few "captive" foundries operated by large original equipment manufacturers, such as automobile manufacturers.

<sup>3</sup>Note that most secondary aluminum facilities are major sources and are subject to 40 CFR part 63, subpart RRR. These facilities recycle aluminum scrap and do not produce foundry castings.

## 2. Aluminum Foundries

The area source category “Aluminum Foundries” is comprised of facilities that pour molten aluminum into molds to manufacture aluminum castings. The relevant North American Industry Classification System (NAICS) code is 331524 and is identified as “aluminum foundries except die casting.”<sup>4</sup> This source category was improperly listed under the name “Secondary Aluminum Production” (66 FR 8220, January 20, 2001). As discussed in section II of this preamble, we are revising the area source category list to correct the name of the category. The category is properly labeled “Aluminum Foundries,” and as the 2001 listing decision reflects, the category was listed due to emissions of the urban HAP beryllium, cadmium, lead compounds, manganese, and nickel (the “aluminum foundry HAP”).

Information on aluminum foundries that classify themselves as primarily in NAICS 331524 is available from the U.S. Census Bureau, whose most recent census survey (2002) identified 542 aluminum foundries. The industry is characterized by many small businesses, with 154 plants (28 percent) having only one to four employees, and 531 plants (98 percent) having fewer than 500 employees.

## 3. Copper Foundries

The area source category “Copper Foundries” is comprised of facilities that pour molten copper and copper-based alloys into molds to manufacture copper and copper-based alloy castings (excluding die casting). Copper foundries in the 2002 census survey produce a wide variety of castings, including copper and copper-based alloys, brass, engineered copper alloy (*i.e.*, manganese bronze, silicon brass and bronze, aluminum bronze, and copper nickel), tin bronze, and red and semi-red brass. EPA listed the Copper Foundries area source category in the Integrated Urban Air Toxics Strategy (67 FR 70427, November 22, 2002) due to emissions of the urban HAP lead compounds, manganese, and nickel (the “copper foundry HAP”).

The NAICS code for copper foundries is 331525 (“copper foundries except die casting”). Information on copper foundries that classify themselves as primarily in NAICS 331525 is also available from the U.S. Census Bureau, whose most recent census survey (2002) identified 281 copper foundries. The

copper foundry industry consists of small businesses, with 80 plants (28 percent) having only one to four employees, and all of the plants having fewer than 250 employees.

## 4. Nonferrous Foundries

The area source category “Other Nonferrous Foundries” is comprised of facilities that pour molten nonferrous metals (excluding aluminum, copper, and copper-based alloys) into molds to manufacture nonferrous metal castings (excluding die casting). Nonferrous foundries in the 2002 census survey produce a variety of nonferrous metal castings, including nickel and nickel-based alloys, zinc and zinc-based alloys, and magnesium and magnesium-based alloys. EPA listed “Nonferrous Foundries, nec” in the Integrated Urban Air Toxics Strategy (67 FR 70427, November 22, 2002) due to emissions of the urban HAP chromium, lead compounds, and nickel (the “other nonferrous foundry HAP”). As explained in section II of this preamble, we are changing the name of the “Nonferrous Foundries, nec” area source category to “Other Nonferrous Foundries” to clarify that the source category includes all nonferrous foundries except aluminum and copper foundries.

The NAICS code for nonferrous foundries is 331528 (“other nonferrous foundries except die casting”). Information on nonferrous foundries that classify themselves as primarily in NAICS 331528 is also available from the U.S. Census Bureau, whose most recent census survey (2002) identified 143 nonferrous foundries. The nonferrous foundry industry is also characterized by many small businesses, with 51 plants (36 percent) having only one to four employees and all of the plants having fewer than 500 employees.

### *C. What are the production operations, emission sources, and available controls?*

#### 1. Production Operations

The processes used at aluminum, copper, and other nonferrous foundries are similar; the primary difference is the type of metal that is melted and cast. Foundries produce complex metal shapes by melting the metal in a furnace and pouring the molten metal into a mold to solidify into the desired shape. Foundry processes include: (1) Melting metal ingot, alloyed ingot, scrap, or a combination in a melting furnace; (2) alloying the molten metal (if necessary); (3) pouring the molten metal into a mold where it forms the desired shape, cools, and solidifies (this process is also

referred to as casting); (4) removing the cast from the mold; (5) cleaning (*e.g.*, shot blasting, grinding); and (6) finishing the casting surface. Foundries using sand casting may also have facilities that prepare sand molds and cores onsite.

The metal HAP emissions that were used as the basis for the 1990 inventory are emitted from the melting furnaces, where solid metal (*e.g.*, ingot, scrap, alloys) is heated to high temperatures to produce molten metal. The most common types of melting furnaces used at aluminum, copper, and other nonferrous foundries are reverberatory (more common for aluminum foundries), crucible, and induction furnaces. Gas-fired (and sometimes oil-fired) reverberatory furnaces heat the metal to melting temperatures with direct-fired, wall-mounted burners. These furnaces are brick-lined and constructed with a curved roof. The term “reverberatory” is used because heat rising from ignited fuel is reflected (reverberated) back down from the curved furnace roof and into the melted charge. A typical reverberatory furnace has an enclosed melt area where the flame heat source operates directly above the molten metal. Reverberatory furnaces have capacities ranging from 1 to 150 tons of molten metal. The advantages of reverberatory melters are the high-volume processing rate and low operating and maintenance costs. The disadvantages are the high metal oxidation rates, low efficiencies, and large floor space requirements.

Gas-fired crucible furnaces are small-capacity indirect melters and holders typically used for small melting applications or exclusively as a holding furnace. The metal is placed or poured into a ceramic crucible, which is contained in a circular furnace and is fired by a gas burner. The energy is applied indirectly to the metal by heating the crucible. The advantages of crucible furnaces are their ability to change alloys quickly, their low oxidation losses, and their low maintenance costs. Disadvantages include low efficiency and size limitations.

There are two general types of induction furnaces: Channel and coreless. Channel furnaces use an electromagnetic field to heat the metal between two coils and induce a flowing pattern of the molten metal, which serves to maintain uniform temperatures without mechanical stirring. Coreless furnaces heat the metal via an external primary coil and are slightly less efficient than channel furnaces, but their melt capacity per unit floor area is much higher. Channel furnaces are used

<sup>4</sup> Aluminum die casters are included under the SIC code 3363 and NAICS 331521 and are defined as establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die castings.

almost exclusively as holding furnaces, while coreless furnaces are used mainly for melting finely shredded scrap, where they are most cost competitive with gas-fired furnaces. The advantages of induction furnaces include high melting efficiency, low emissions, low metal oxidation losses, and high alloy uniformity due to increased mixing. Their disadvantages relate primarily to their high capital and operating costs. Induction furnaces range in size from very small to 7.5 tons per melt.

Tower furnaces are less common than the furnaces discussed above. In tower furnaces, metal ingot and scrap are loaded from the top of a vertical tower, and burners at the bottom of the tower melt the metal. The advantages of the tower furnaces are high efficiency and low oxidation losses. The disadvantages of tower furnaces are their high capital costs and the furnace size, which is restricted by height limitations.

## 2. Emission Sources and Available Controls

Melting furnaces at aluminum, copper, and other nonferrous foundries are the emission sources of the HAP for which these area source categories were listed. Emissions of HAP metals from aluminum, copper, and other nonferrous foundries are directly related to the quantity of trace HAP metals that enter with the scrap and ingot that is charged to the melting furnaces. We collected industry survey data, reviewed operating permits, and held discussions with industry and trade association representatives to identify potential control technologies and management practices for these source categories. We identified two primary methods to control metal HAP emissions from foundries: (1) Management practices (*i.e.*, specifications that limit the amount of metal HAP in charge materials, and suppression techniques, such as covers) and (2) add-on pollution control devices, such as baghouses. Our review indicated that most foundries already use management practices, often as part of their standard operating procedures, to reduce emissions of PM and metal HAP. Typical management practices include using covers or enclosures on melting furnaces when they are melting; using clean scrap; defining specifications for charge materials (*e.g.*, specified range for lead, certified ingot); and monitoring melting and pouring temperature.

The vast majority<sup>5</sup> of melting furnaces at aluminum foundries are not

equipped with emission control devices for PM, which may be attributed to differences in certain physical properties and characteristics of melting aluminum compared to melting copper and other nonferrous metals. For example, melting aluminum may result in lower emissions compared to the other nonferrous metals for several reasons. Higher melting temperatures result in higher emissions of PM and greater volatilization of HAP metals. Aluminum melts at approximately 1,200 °F, whereas copper melts at about 2,000 °F, nickel melts at 2,650 °F, and iron and steel melt at 2,300 to 2,800 °F. In addition, most aluminum foundries melt aluminum ingot, alloyed ingot, and internal scrap that is recycled, all of which typically have very low concentrations of HAP metals. From our survey of aluminum foundries, we found that the materials charged to the melting furnaces contained, on average, only 0.4 percent of the urban HAP for which the source category was listed. In contrast, some copper-based alloys, such as leaded brass, contain up to 3.5 percent lead.

Melting furnaces for copper, copper-based alloys (primarily brass and bronze), and other nonferrous metals also use management practices to control emissions. In addition, many of the melting furnaces at copper and other nonferrous foundries, especially at the larger foundries, are equipped with baghouses or cartridge filters to control emissions of PM and metal HAP.

## IV. Summary of the Proposed Standards

### A. Do these proposed standards apply to my facility?

The proposed standards would apply to all existing or new melting operations (the affected source), including all of the various types of melting furnaces, at an aluminum, copper, or other nonferrous foundry that meets certain applicability criteria. A melting operation is an existing affected source if construction or reconstruction of the melting operation commenced on or before February 9, 2009. A melting operation is a new affected source if construction or reconstruction of the melting operation commences after February 9, 2009.

The proposed standards apply to each aluminum foundry, copper foundry, or other nonferrous foundry that: (1) Is an area source; (2) uses material that contains or has the potential to emit

had PM control devices, and our review of operating permits for 36 aluminum foundries with 297 melting furnaces showed that only two foundries with 12 of the 297 melting furnaces (4 percent) had PM control devices.

HAP for which the source category was listed (*i.e.*, “aluminum foundry HAP”, “copper foundry HAP”, and “other nonferrous foundry HAP”); and (3) melts 600 tpy or greater of metal. Any material that contains beryllium, cadmium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), or contains manganese in amounts greater than or equal to 1.0 percent by weight (as the metal), would be considered a “material containing aluminum foundry HAP”. Any material that contains lead or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), or contains manganese in amounts greater than or equal to 1.0 percent by weight (as the metal) would be considered to be a “material containing copper foundry HAP.” Any material that contains chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal) would be considered to be a “material containing other nonferrous foundry HAP.” As explained in more detail in section V.A of this preamble, we are using elemental lead in the charge materials as a surrogate for lead compounds because the elemental lead is emitted from the melting furnace as lead compounds. Facilities could determine whether material contains the target HAP by using formulation data provided by the manufacturer or supplier, such as the material safety data sheet. The proposed definitions of these terms are consistent with the definitions used in standards developed for other area source categories such as Plating and Polishing (73 FR 37728, July 1, 2008), Metal Fabrication and Finishing (73 FR 42978, July 23, 2008) and as defined by OSHA at 29 CFR 1910.1200 (*i.e.*, a concentration of 0.1 percent or more for carcinogens and 1.0 percent or more for non-carcinogens).

The proposed standards would not apply to research and development facilities, as defined in section 112(c)(7) of the CAA, because these facilities were not part of the 1990 inventory.

### B. When must I comply with the proposed standards?

The owner or operator of an existing source would be required to comply with the rule no later than 2 years after the date of publication of the final rule in the **Federal Register**. The owner or operator of a new source would be required to **Federal Register** or startup of the facility, whichever is later.

### C. What are the proposed standards?

We are proposing that the following management practices are GACT for new and existing sources at aluminum,

<sup>5</sup> As discussed in more detail later in this preamble, none of the 111 aluminum melting furnaces identified in our survey of nine companies

copper, and other nonferrous foundries: (1) Cover or enclose melting furnaces that are equipped with covers or enclosures during the melting process, to the extent practicable (e.g., except when access is needed, such as for charging, alloy addition, tapping); and (2) purchase and use only scrap material that has been depleted (to the extent practicable) of "aluminum foundry HAP," "copper foundry HAP", or "other nonferrous foundry HAP" (as applicable) in the materials charged to the melting furnace, excluding HAP metals that are required to be added for the production of alloyed castings. We are further proposing that facilities develop and retain and operate by a written management practices plan for minimizing emissions from melting operations that documents how the required management practices (and any other management practices in use) are to be implemented.

The owner or operator of a new or existing source at a copper foundry or other nonferrous foundry that melts at least 6,000 tpy of metal would be required to comply with emission limits as described below. In setting the proposed emission limits, we are using PM as a surrogate for the metal HAP emissions. We are proposing that GACT for existing affected sources is achieving a PM control efficiency of at least 95.0 percent or an outlet PM concentration of at most 0.015 grains per dry standard cubic feet (gr/dscf). We are proposing that GACT for new affected sources is achieving a PM control efficiency of at least 99.0 percent or an outlet PM concentration of at most of 0.010 gr/dscf.

#### *D. What are the compliance requirements?*

##### 1. Performance Test

The owner or operator of any existing or new source subject to a PM emissions limit would be required to conduct a one-time initial performance test. The owner or operator would be required to test PM emissions from melting operations using EPA Method 5 (40 CFR part 60, appendix A-3) or EPA Method 17 (40 CFR part 60, appendix A-6).

A performance test is not required for an existing affected source if a prior performance test has been conducted within the past 5 years using the methods required by this proposed rule, which are the methods required in § 63.11151 of proposed subpart ZZZZZZ, and either no process changes had been made since the test, or the owner or operator can demonstrate to the satisfaction of the permitting authority that the results of the

performance test, with or without adjustments, reliably demonstrate compliance despite process changes.

##### 2. Monitoring Requirements

The owner or operator of new or existing source would be required to record information to document conformance with the management practices plan. The proposed recordkeeping requirements are described in section IV.E of this preamble.

For existing sources where emissions are controlled by a fabric filter, the owner or operator would be required to conduct and record the results of daily observations of visible emissions (VE) from the monovent or fabric filter outlet stack(s) during melting operations. Should any of the daily observations reveal any VE, the owner or operator must initiate corrective action to determine the cause of the VE within 1 hour and alleviate the cause of the emissions within 3 hours of the observations by taking whatever corrective actions are necessary.

The foundry would have the option to decrease the frequency of observations from daily to weekly if the foundry collects at least 90 consecutive operating days of observations with no VE. If, after the foundry converts to a weekly schedule, any VE is observed, the foundry would be required to revert to a daily schedule until another consecutive 90 operating days of data are obtained that demonstrate there was no VE during the period observed. Then, the foundry may convert to a weekly observation schedule. We are requesting comment on whether the requirement for an initial period of 90 consecutive days of VE observations is appropriate and whether some other period of time would be adequate to establish consistent performance of the baghouse before reducing to weekly observations. As an alternative to the VE observations, an owner or operator of an existing source may elect to operate and maintain a bag leak detection system as described below for new sources.

The owner or operator of new source equipped with a fabric filter would be required to operate and maintain a bag leak detection system and prepare a site-specific monitoring plan. The owner or operator of existing sources would have the option of complying with the bag leak detection system requirements as an alternative to the daily (or weekly) visual inspections.

Our study of the industry indicates that fabric filters are used as the control device for melting furnaces; however, it is conceivable that there is an existing foundry that does or could use some

other type of control device to meet the PM emission standard. If a copper or other nonferrous foundry uses a control device other than a fabric filter for existing sources subject to the PM emissions limit, the owner or operator must prepare and submit a monitoring plan to the permitting authority for approval. The information requirements for the plan would include: (1) A description of the device, (2) test results collected according to the rule requirements that verify the performance of the device for reducing PM emissions, (3) an operation and maintenance plan for the control device, (4) a list of operating parameters to be monitored, and (5) operating limits for control device operating parameters based on monitoring data collected during the performance test.

#### *E. What are the notification, recordkeeping, and reporting requirements?*

The owner or operator of existing or new sources would be required to comply with certain requirements of the General Provisions (40 CFR part 63, subpart A), which are identified in Table 1 of the proposed rule. The General Provisions include specific requirements for notifications, recordkeeping, and reporting. We are proposing that the owner or operator of an affected foundry submit an Initial Notification according to the requirements § 63.9(a) through (d) and a Notification of Compliance Status according to the requirements in § 63.9(h) of the NESHAP General Provisions (40 CFR part 63, subpart A).

All aluminum, copper and other nonferrous foundries would be required to keep records to document compliance with the required management practices. For melting furnaces equipped with a cover or enclosure, these records would include the identity of each melting furnace equipped with a cover or enclosure, the date and time of each melting operation, and confirmation that the procedures in the management practices plan were followed. These records may be in the form of a checklist. The proposed rule also would require records of the purchase and use of only metal scrap that has been depleted of HAP metals prior to charging in a melting furnace.

Owners or operators of existing sources equipped with a fabric filter would be required to maintain records of all VE monitoring data including:

- Date, place, and time of the monitoring event;
- Person conducting the monitoring;
- Technique or method used;

- Operating conditions during the activity;
- Results, including the date, time, and duration of the period from the time the monitoring indicated a problem to the time that monitoring indicated proper operation.
- Maintenance or other corrective action.

Recordkeeping requirements also would apply to facilities that use bag leak detection systems. We are also proposing to require that copper foundries and other nonferrous foundries that are not subject to the PM emission limits keep records to demonstrate the total annual amount (*i.e.*, tpy) of metal melted at the facility is less than 6,000 tpy.

If a deviation from the rule requirements occurs, an affected foundry would be required to submit a compliance report for that reporting period. The proposed rule specifies the information requirements for such compliance reports.

## V. Rationale for This Proposed Rule

### A. How did we select the source categories?

As discussed in section II of this preamble, the inclusion of the "Secondary Aluminum Production" (renamed "Aluminum Foundries") area source category on the area source category list was based on data from the CAA section 112(k) inventory, which represents 1990 urban air information. The "Aluminum Foundries" area source category was listed as contributing a percentage of the total area source emissions for the following urban HAP: Beryllium, cadmium, lead compounds, manganese, and nickel.

The "Copper Foundries" and "Nonferrous Foundries nec" (renamed "Other Nonferrous Foundries") source categories were listed under CAA section 112(c)(3) on November 22, 2002 (67 FR 70427). The "Copper Foundries" area source category was listed based on emissions of lead compounds, manganese, and nickel. The "Other Nonferrous Foundries" area source category was listed based on emissions of chromium, lead compounds, and nickel.

For the Aluminum Foundries, Copper Foundries, and Other Nonferrous Foundries area source categories, we solicited information on the production operations, emission sources, and available controls using written facility surveys, reviews of published literature, and reviews of operating permits. We also held discussions with industry representatives and trade associations. This research confirmed that the

aluminum, copper, and other nonferrous foundry sources emit the urban HAP for which the source categories were listed, although we found that current emissions of such HAP are lower than the amounts estimated for 1990 in the section 112(k) inventory. The lower emissions can be attributed to the lower worker exposure standard for lead developed by the Occupational Safety and Health Administration (OSHA) in 1996, State permitting requirements, and actions taken to improve efficiency or reduce costs.

We are proposing that the rule apply only to those foundries that emit the metal HAP for which the source category was listed. The Aluminum Foundries, Copper Foundries, and Other Nonferrous Foundries source categories would include only those facilities that use materials that contain or have the potential to emit aluminum foundry HAP, copper foundry HAP, or other nonferrous foundry HAP from melting furnaces.

We are proposing to use elemental lead as a surrogate for lead compounds when determining the HAP metal content of materials charged to the furnace because elemental lead is a precursor to the formation of lead oxide (and other lead compounds), and lead compounds are a listed HAP for all three of the source categories that are the subject of this proposal. When elemental lead is used in furnace charge materials (*e.g.*, as an alloy), some lead volatilizes at the high temperatures of the melting furnace and reacts with oxygen in the air, forming lead compounds. The presence of elemental lead in materials charged to the melting furnaces is an indication of potential HAP emissions of lead compounds. As with the listed examples, we believe that emissions below the OSHA thresholds were not part of the 1990 inventory that established the basis for the listing. However, foundries melting copper-based alloys (such as alloys that contain elemental lead to make certain types of brass) emit lead compounds and were part of the 1990 inventory that established the basis for the listing.

We also queried the 1990 TRI to develop the list of plants and their emissions used to develop the CAA section 112(k) emissions inventory for the three source categories. This query was performed in the same manner (by standard industrial classification code for the source categories reporting for 1990) that was used to develop the 1990 inventory. Our review of the basis for the listing of the three source categories indicated that the 1990 inventory was based on a small number of the largest

foundries that met the TRI reporting thresholds. None of the very small foundries that are common in these source categories were included in the 1990 TRI or used as the basis for the CAA section 112(k) listing. From our analysis of the 1990 TRI reporting data, we concluded that emissions from foundries melting less than 600 tpy of metal were not included in the 1990 baseline inventory because they were not significant contributors to emissions of the listed metal HAP. Consequently, consistent with the listing, we are clarifying that the source category includes only those aluminum, copper, and other nonferrous foundries that melt 600 tpy or more of metal because only these foundries were the basis for the listing of the area source categories. We estimate that 318 of 966 aluminum, copper, and other nonferrous foundries would be subject to the proposed rule. These 318 facilities account for 90 percent of the production in the source categories and approximately 90 percent of the urban HAP emissions. Based on our experience with previous regulations involving foundry operations, there is a good correlation between the total amount of metal melted (production level) and resulting PM/metal HAP emissions.

### B. How did we select the affected source?

Affected source means the collection of equipment and processes in the source category or subcategory to which the subpart applies. In selecting the affected source for this proposed rule, we identified foundry melting operations as the source of metal HAP emissions that was used for the 1990 inventory. In the melting operations, the melting furnaces (*e.g.*, induction, reverberatory, crucible, tower) are heated to high temperatures, primarily by natural gas or electricity, to melt solid ingot and scrap. Emissions from the molten metal include the primary metal being melted and its oxides, and to a lesser extent, trace quantities of HAP metals if they are present in the materials melted in the furnace. We concluded that designating foundry melting operations (including all of the various types of melting furnaces at an affected foundry) as the affected source was the most appropriate approach.

### C. How are the aluminum foundry HAP, the copper foundry HAP, and the other nonferrous foundry HAP addressed by this proposed rule?

For this proposed rule, we decided that it was not practical to establish individual standards for each specific type of aluminum, copper, and other

nonferrous foundry metal HAP that could be present in the various processes. A sufficient correlation exists between PM and these metal HAP to rely on PM as a surrogate for both the presence of the HAP and for their control.<sup>6</sup> When released, each of the metal HAP compounds behaves as PM. The control technologies used for the control of PM emissions achieve comparable levels of performance on the individual aluminum, copper, and other nonferrous foundry metal HAP emissions. Therefore, standards requiring good control of PM also achieve good control of aluminum, copper, and other nonferrous foundry metal HAP emissions. Furthermore, establishing separate standards for each individual metal HAP would impose costly and significantly more complex compliance and monitoring requirements and achieve little, if any, HAP emissions reductions beyond what would be achieved using the surrogate pollutant approach based on total PM. Based on these considerations, we are proposing standards for aluminum, copper, and other nonferrous foundries based on control of total PM as a surrogate pollutant for the individual aluminum, copper, and other nonferrous foundry metal HAP.

#### D. How did we determine GACT?

As provided in CAA section 112(d)(5), we are proposing standards representing GACT for the "Aluminum Foundries", "Copper Foundries", and "Other Nonferrous Foundries" area source categories. As noted in section III.A of this preamble, EPA has the discretion to establish standards for area sources listed pursuant to section 112(c) based on GACT. See CAA section 112(d)(5). The statute does not set any condition precedent for issuing standards under section 112(d)(5) other than that the area source category or subcategory at issue must be one that EPA listed pursuant to section 112(c), which is the case here.

Our data indicate that none of the facilities in the aluminum or other nonferrous foundries source categories are major sources. Consequently, we could not examine major sources in the same industrial sector to identify control technologies and management practices that may be transferable and generally available to area sources. However, we did consider technologies and practices at other major and area sources in similar categories. For example, we reviewed the management practices required by the area source

standards for iron and steel foundries (40 CFR part 63, subpart ZZZZZ).

All of the facilities in the three source categories at issue here for which we have obtained data have good operational controls in place. We evaluated the control technologies and management practices that are generally available for these foundry area source categories. We also considered costs and economic impacts in determining GACT. We believe the consideration of costs and economic impacts is especially important for determining GACT for the Aluminum Foundries, Copper Foundries, and Other Nonferrous Foundries area source categories because, given their relatively low level of HAP emissions, requiring additional controls would result in only marginal reductions in emissions at very high costs for modest incremental improvement in control. We explain our proposed GACT determinations in detail below.

#### 1. Aluminum Foundries

We gathered background information on aluminum foundries from discussions with industry trade associations, an industry survey of area sources (no major sources were identified), and from a review of operating permits to identify the emission controls and management practices that are currently used to control PM and metal HAP emissions. We sent surveys to 9 companies with 10 aluminum foundries, and we received information from these 9 companies for 111 aluminum melting furnaces. EPA sent the survey to foundries ranging in size from 200 tpy of total metal processed and 11 to 12 employees per plant to 20,000 tpy and 350 to 650 employees per plant (including three large foundries operated by automobile manufacturing companies). We also obtained and reviewed operating permits for 36 foundries that operate 297 furnaces for melting aluminum. The survey results indicate that none of the 111 melting furnaces at the 10 plants have PM emission control devices on their melting furnaces. Ninety-six percent of the melting furnaces included in the permit information do not have PM emission control devices.<sup>7</sup> The lack of PM controls for aluminum melting furnaces is not surprising because of their lower operating (melt) temperatures and corresponding low emission potential compared to furnaces melting other metals.

We also requested information in our survey on management practices to

control emissions, and we reviewed the operating permits for management practices that might be used. The most common management practice reported in the survey responses was the use of "clean charge" materials (primary ingot, internal recycled scrap), which was mentioned specifically by six plants. Four plants reported using covers on some of their furnaces to suppress emissions. In our review of management practices employed by similar area source categories, we found that a similar management practice has been applied and is required in other area source rules (*i.e.*, requiring that furnace charge materials be depleted of HAP metals to the extent practicable). (See 40 CFR part 63, subpart EEEEE and subpart YYYYY.)

Based on our review of the techniques used at aluminum foundries and other types of foundries, we are proposing that the management practices discussed above are GACT for both existing and new sources. These techniques are generally available and have been implemented by many of the aluminum foundries. To the best of our knowledge and based on the information we have available, the management practices are not costly to implement and would not result in any significant adverse economic impact on any foundry (*i.e.*, the cost would be much less than 0.1 percent of sales). Specifically, we are proposing as GACT that each aluminum foundry owner or operator would (1) cover or enclose melting furnaces, which are equipped with covers or enclosures during the melting process, to the extent practicable (*e.g.*, except when access is needed, such as for charging, alloy addition, tapping); and (2) purchase and use only aluminum scrap that has been depleted (to the extent practicable) of HAP metals in the materials charged to the melting furnace, excluding HAP metals that are required to be added for the production of alloyed castings. In addition, we are proposing that each aluminum foundry owner or operator prepare and operate pursuant to a written management practices plan that includes, but is not limited to, the requirements described above. The plan would also include all other procedures that are implemented at the facility to minimize emissions from melting furnaces. The exception for alloyed castings is appropriate because some foundries, especially those producing alloys in which lead is an essential component, purchase certain types of scrap specifically for their lead content. An owner or operator who uses this exception would be required to

<sup>6</sup> *National Lime Association v. EPA*, 233 F.3d 625, 639-640 (D.C. Cir. 2000) and *Sierra Club v. EPA*, 353 F.3d 976 (D.C. Cir. 2004).

<sup>7</sup> 285 of the 297 melting furnaces (96 percent) at 34 of the 36 plants.

maintain records to document that the HAP metal is included in the material specification for the cast metal product.

We also examined the feasibility of defining GACT to include an add-on control device (such as a fabric filter) to control metal HAP emissions from aluminum foundries. We had sufficient data on emissions and stack gas flow rates from an operating permit and an emissions inventory to perform an analysis for a medium-sized aluminum foundry (4,700 tpy of production) that had 51 crucible melting furnaces with melting rates that ranged from 9 to 68 tons per hour. The furnaces were in seven groups that exhausted through 16 different stacks. We estimated the total installed capital cost for a baghouse on each of the seven groups of furnaces as \$4.7 million, with a total annualized cost of \$1.0 million per year. The reduction in PM emissions was estimated as 6 tpy, with a reduction of 0.02 tpy of metal HAP emissions. The cost effectiveness was estimated as \$200,000 per ton for control of PM and \$50 million per ton for control of metal HAP. We are therefore proposing that add-on controls, such as a baghouse, should not represent GACT for aluminum foundries because of the high cost and low cost effectiveness for only a marginal reduction in HAP emissions.

## 2. Copper and Other Nonferrous Foundries

In identifying GACT for sources in the Copper Foundries and Other Nonferrous Foundries area source categories, we gathered background information from industry surveys and operating permits to identify the emission controls and management practices that are currently used to control PM and metal HAP emissions from these sources. We sent surveys to nine companies operating copper foundries and two companies operating nonferrous foundries. We found that many facilities have both copper and other nonferrous foundries co-located at the same site. Because of the significant overlap between foundry operations and the similarity in melting processes, we evaluated GACT for copper and other nonferrous foundries collectively. In addition to similar metal products being cast at many of the same facilities in the two source categories, we found that copper and other nonferrous foundries use the same types and sizes of furnaces to melt certified ingot and/or scrap metal. The survey sent to the nine companies included foundries ranging in size from 50 tpy of total metal processed and less than 5 employees per plant to 16,000 tpy and 350 to 500 employees per plant. We also received information from industry

trade associations and from operating permits for 15 additional copper and other nonferrous foundries. As part of the industry survey, we requested information on management practices to control emissions, and we reviewed the operating permits for management practices that might be used. We also reviewed the management practices used in similar source categories, such as Aluminum Foundries and Iron and Steel Foundries.

Based on our review of the techniques used at foundries, we are proposing the management practices discussed previously for aluminum foundries as GACT for both existing and new sources at copper and other nonferrous foundries. These techniques are generally available and have been widely implemented by many copper and other nonferrous foundries. In addition, these management practices are not costly to implement and would not result in any significant adverse economic impact on any foundry (*i.e.*, the cost would be much less than 0.1 percent of sales). The owner or operator of a copper and other nonferrous foundry subject to the area source standards would be required to (1) cover or enclose melting furnaces, which are equipped with covers or enclosures during the melting process, to the extent practicable (*e.g.*, except when access is needed, such as for charging, alloy addition, tapping); and (2) purchase and use only scrap that has been depleted (to the extent practicable) of HAP metals in the materials charged to the melting furnace, excluding HAP metals that are required to be added for the production of alloyed castings. In addition, we are proposing that each copper and other nonferrous foundry owner or operator prepare and operate by a written management practices plan that includes, but is not limited to, the requirements described above. The plan would also include all other procedures that are implemented at the facility to minimize emissions from melting furnaces. As discussed above, the exception for alloyed castings is appropriate because some foundries, especially those producing alloys in which lead is an essential component, purchase certain types of scrap specifically for their lead content. For example, certain grades of brass castings (a copper-based alloy) are required to have percent levels of lead in their product specification. As for aluminum foundries, an owner or operator who uses this exception would maintain records to document that the HAP metal is included in the material specification for the cast metal product.

As part of the GACT analysis, we also considered whether other control techniques or add-on controls (in addition to management practices) should be considered generally available for this industry and whether there are differences in processes, sizes, or other factors affecting emissions that would warrant subcategorization.<sup>8</sup> In our review of the production and emissions data for all of the copper and other nonferrous foundries in the project database, we found significant differences among foundries based on their total melt rates. Smaller foundries were found to have smaller melting furnaces and lower emissions, and smaller foundries are more likely to have smaller scale (*e.g.*, crucible) furnaces and other low capacity furnaces. These differences in process equipment affect the feasibility and cost effectiveness of add-on controls such as baghouses to reduce metal HAP emissions. Based on these differences, we determined that subcategorization of copper and other nonferrous foundries by size was justified to evaluate the feasibility of add-on controls.

We evaluated the impacts of requiring all melting furnaces to operate with a baghouse control system. As part of that evaluation, we examined the feasibility of defining GACT for those facilities melting less than 6,000 tpy of total metal to include an add-on control device for PM and HAP metals (such as a baghouse) to control metal HAP emissions. For those facilities with annual melting rates less than 6,000 tpy of total metal, we had information showing that fewer than half (4 out of 10) of the foundries currently use add-on controls and that all of the facilities that responded to the survey use some type of management practice(s) to minimize PM and metal HAP emissions. Based on our analysis of costs for a typical facility melting less than 6,000 tpy, we estimated the cost effectiveness for applying a baghouse to the melting furnaces as \$50,000 per ton of PM and \$1 million per ton of metal HAP. We therefore concluded that add-on controls, such as a baghouse, should not represent GACT for copper and other nonferrous foundries with melting rates less than 6,000 tpy of total metal processed because of the high equipment and installation cost (compared to process equipment) and low cost effectiveness. For facilities melting less than 6,000 tpy, we

<sup>8</sup> 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 \* \* \*".

concluded that GACT is the management practices discussed above.

We also examined the feasibility of add-on controls for metal HAP for melting furnaces melting 6,000 tpy or more. Our evaluation of the data and survey results showed that at least nine of the 10 foundries we identified with melting rates greater than or equal to 6,000 tpy use add-on controls for PM and HAP metals on their melting operations. Discussions with industry trade associations and foundry representatives indicated that all copper and other nonferrous foundries melting more than 6,000 tpy used add-on controls for emissions of PM and metal HAP. Consequently, to the best of our knowledge and based on the available information, there would be no significant costs or adverse economic impacts in determining that GACT for foundries melting 6,000 tpy or more of total metal should include (in addition to the management practices discussed above) an emission standard based on the level of control achieved by an add-on control device. If commenters can identify foundries not in our database that would be required to install add-on control devices as a result of this proposed rule, please provide supporting data (at a minimum, the name and location of the foundry and its melting capacity) in your comments.

In their survey responses, facilities that melted 6,000 tpy or more of total metal reported using fabric filters (*i.e.*, baghouses or cartridge filters) on furnace melting operations and that such fabric filters performed at a PM collection efficiency of at least 95 percent. Based on the same types of controls used on similar sources, an equivalent outlet PM concentration limit is 0.034 grams per dry standard cubic meter (g/dscm) (*i.e.*, 0.015 grains per dry standard cubic foot [gr/dscf]).

Based on the data we have collected, we are proposing the management practices discussed above and a PM standard as GACT for existing copper and other nonferrous foundries that melt 6,000 tpy or more of metal that would require achieving a reduction in the PM emissions from melting operations of at least 95 percent or an outlet concentration of no more than 0.034 g/dscm (0.015 gr/dscf), which is equivalent to a reduction of at least 95 percent. The proposed PM standard would be based on the performance that has been demonstrated for fabric filters applied to existing sources' melting operations in the Copper Foundries and Other Nonferrous Foundries source categories. For example, an equivalent outlet concentration limit of 0.034 g/dscm (0.015 gr/dscf) was determined to

be GACT for melting furnaces at secondary nonferrous metal processing area sources, and the melting furnaces, emissions, and level of control that can be achieved are similar to those at copper and other nonferrous foundries. An outlet concentration limit is necessary (in addition to a percent reduction standard) because the inlet flow rate and concentration (both needed to determine control efficiency) for some emission control systems cannot be accurately measured due to the configuration of duct work. In addition, some furnaces have an inlet mass rate that is so low that control efficiency is not a practical measure of performance. We determined that the GACT level of control is achievable by technology (*i.e.*, baghouse or cartridge filters) that is generally available and widely used, and the technology is effective for controlling emissions of PM, copper foundry HAP, and other nonferrous foundry HAP.

In identifying GACT for new affected sources in the Copper Foundries and Other Nonferrous Foundries area source categories, we considered the available data on the existing facilities and the levels of control achieved by the best performing sources, which is a level of control that can be designed into and achieved by new sources. The best performing facilities reported that each fabric filter used at their facilities performed at a PM collection efficiency of at least 99 percent.

We contacted baghouse manufacturers to gather information on design parameters and performance for new baghouse installations in the foundries industry. Furthermore, we also considered the performance of baghouses at similar sources (*e.g.*, melting furnaces used in other industries). Based on the available data from the existing facilities, a review of operating permits, contacts with baghouse manufacturers, and consideration of baghouse performance at similar sources, we are proposing that the management practices discussed above and a PM standard as GACT for new copper and other nonferrous foundries that melt 6,000 tpy or more of metal that would require achieving a reduction in the PM emissions from melting operations of at least 99 percent or an outlet concentration of no more than 0.023 g/dscm (0.010 gr/dscf), which is equivalent to a reduction of at least 99 percent.

#### *E. How did we select the compliance requirements?*

We are proposing testing, monitoring, notification, recordkeeping, and reporting requirements needed to assure

compliance with the rule as proposed. These proposed provisions are based, in part, on requirements that have been applied to several similar industries in other area source category rules and an understanding of how control devices perform and how control devices and management practices can be effectively monitored. In selecting these provisions, we identified the information necessary to ensure that emissions controls are maintained and operated properly on a continuing basis.

The proposed notification and recordkeeping requirements are primarily from the NESHAP General Provisions (40 CFR part 63, subpart A). Specifically, we are proposing that the owner or operator of an affected source submit Initial Notifications and a Notification of Compliance Status because these notifications provide the information needed to identify the affected sources subject to the proposed standards and to confirm the compliance status of the facilities. See 40 CFR 63.9(b) and (h). We are also proposing that foundry owners or operators keep records and, if a deviation occurs, submit a compliance report that describes the deviation and corrective action. We believe the proposed requirements would ensure compliance with the provisions of this proposed rule without posing a significant additional burden for the facilities that would implement them.

Aluminum, copper, and other nonferrous foundries that would be subject to this rule would be required to prepare and implement a written management practice plan to minimize emissions from melting furnaces and record certain information showing that the management practices are implemented. Copper or other nonferrous foundries that melt 6,000 tpy or greater of metal would be required to comply with a PM emission standard, conduct a performance test to demonstrate initial compliance, and conduct daily monitoring of control device operation to ensure that the fabric filter continues to operate efficiently. If an observation reveals the presence of visible emissions (VE), the owner or operator would be required to take corrective action. Records would be required to demonstrate conformance with the fabric filter monitoring requirements.

We are proposing to require bag leak detection systems for new sources because these systems can be incorporated into the design and operation of new sources without retrofitting, as would be the case if they were to be incorporated into existing sources. Bag leak detection systems are

typical requirements in our regulations of new sources that are of the size and complexity as copper and other nonferrous foundries. The proposed rule also offers bag leak detection systems as an alternative monitoring option for owners or operators of existing sources.

We are proposing that facilities with existing sources comply with the rule's requirements no later than 2 years after the date of publication of the final rule in the **Federal Register**. We are further proposing that facilities with new sources comply at startup. We are proposing 2 years for existing sources because of the time needed for facilities (most of which are small businesses that have never been regulated before) to understand the regulation and to plan, prepare, and implement compliance activities. These small businesses have limited resources and will need assistance; however, it will take time for small business assistance centers to provide the necessary outreach and assistance. We believe 2 years for compliance is "as expeditious as practicable" considering all of these factors. (See CAA section 112(i)(3).)

*F. How did we decide to propose to exempt these source categories from title V permit requirements?*

We are proposing exemptions from title V permitting requirements for affected facilities in the aluminum, copper, and other nonferrous foundries area source categories for the reasons described below. 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 unnecessarily burdensome" on an area source category. See CAA section 502(a). In December 2005, in a national rulemaking, EPA interpreted the term "unnecessarily burdensome" in CAA section 502 and developed a four-factor balancing test for determining whether title V is unnecessarily burdensome for a particular area 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 area 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 these factors in the Exemption Rule, we further 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 Act." 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. As discussed in more detail below, our evaluation of these four factors weigh in favor of exemption of these source categories.

In the Exemption Rule, in addition to determining whether compliance with title V requirements would be unnecessarily burdensome on an area source category, we considered, consistent with the guidance provided by the legislative history of section 502(a), whether exempting the area source category would adversely affect public health, welfare, or the environment. See 70 FR 15254–15255, March 25, 2005. We believe that the proposed exemptions from title V would not adversely affect public health, welfare, and the environment. Our rationale for these decisions follows here.

In considering the proposed exemption from title V requirements for sources in the source categories affected by this proposed rule, we first compared the title V monitoring, recordkeeping, and reporting requirements (factor one) to the requirements in this proposed NESHAP for the Aluminum Foundries, Copper Foundries, and Other Nonferrous Foundries area source categories. EPA is proposing that a PM

emission limit based on the use of fabric filters is GACT for copper and other nonferrous foundries melting 6,000 tpy or more of metal, and that management practices currently used at most facilities is GACT for all foundries in each of the three source categories. This proposed rule would require daily (or weekly) VE determinations for existing sources, bag leak detection system for new sources, recordkeeping, and deviation reporting to assure compliance with this NESHAP. The monitoring component of the first factor favors title V exemption because this proposed standard would provide for monitoring that assures compliance with the requirements of the proposed rule. For existing sources located at copper or other nonferrous foundries processing 6,000 tpy or more of total metal, this proposed NESHAP would set an emission limit that would require the use of a PM control system (*i.e.*, fabric filter) with daily VE determinations. For new and existing sources located at aluminum, copper, or nonferrous foundries, the proposed NESHAP would require management practices to control emissions from melting furnaces. For the management practices, recordkeeping would be required to assure that the management practices are implemented, such as the use of covers or enclosures during melting and the purchase and use of materials that have been depleted (to the extent practicable) of aluminum foundry HAP, copper foundry HAP, and other nonferrous foundry HAP.

As part of the first factor, we have considered the extent to which title V could potentially enhance compliance for area sources covered by this proposed rule through monitoring, recordkeeping, or reporting requirements. We have considered the various title V recordkeeping and reporting requirements, including requirements for a 6-month monitoring report, deviation reports, and an annual certification in 40 CFR 70.6 and 71.6. For any affected aluminum, copper, or other nonferrous foundry area source facility, this proposed NESHAP would require Initial Notifications and a Notification of Compliance Status. The proposed aluminum, copper, and other nonferrous foundries NESHAP would also require affected facilities to maintain records showing compliance with the proposed monitoring requirements and management practices and to submit a compliance report to the permitting authority if any deviation occurs. The information that would be required in the notifications, records, and reports is similar to the information

that would be provided in the deviation reports required under 40 CFR 70.6(a)(3) and 40 CFR 71.6(a)(3). We acknowledge that title V might impose additional compliance requirements on this category, but we believe that the monitoring, recordkeeping, and reporting requirements of this proposed NESHAP for aluminum, copper, and other nonferrous foundries would be sufficient to assure compliance with the provisions of this NESHAP, and that title V would not significantly improve those compliance requirements.

For the second factor, we determined whether title V permitting would impose a significant burden on the area sources in the category 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 cost of obtaining and complying with a title V permit was \$65,700 per source for a 5-year permit period, including fees. See Information Collection Request for Part 70 Operating Permit Regulations, June 2007, EPA ICR Number 1587.07. EPA does not have specific estimates for the burdens and costs of permitting aluminum, copper, and other nonferrous foundry sources; however, there are certain activities associated with the part 70 and 71 rules. These activities are mandatory and impose burdens on the facility. 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 consultants to help them understand and meet the permitting program's requirements. The ICR for part 70 provides additional information on the overall burdens and costs, as well as the relative burdens of

each activity. 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 assessing the second factor for aluminum, copper, and other nonferrous foundries, we found that approximately 98 percent of the plants that would be affected by the proposed rule are small businesses, most with fewer than 50 employees and about 25 percent or more with only one to four employees. These small sources lack the technical resources to comply with permitting requirements and the financial resources needed to hire the necessary staff or outside consultants. As discussed previously, title V permitting would impose significant costs on these area sources, and, accordingly, we believe that title V would be a significant burden for sources in this category. Most are small businesses with limited resources, and under title V, they would be subject to numerous mandatory activities with which they would have difficulty complying, whether they were issued a standard or a general permit. Furthermore, given the number of sources in the category and the relatively small size of most of those sources, it would likely be difficult for them to obtain assistance from the permitting authority. Thus, we believe that the second factor strongly supports title V exemption for aluminum, copper, and other nonferrous foundries.

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 for the second factor that the costs of compliance with title V would impose a significant burden on nearly all of the 300 or more aluminum, copper, and other nonferrous foundries that would be affected by the proposed rule. Although title V might impose additional requirements, we believe that in considering the first factor, the monitoring, recordkeeping and reporting requirements in the proposed NESHAP would assure compliance with the controls and management practices imposed in the NESHAP as proposed. Because the costs of compliance with title V are so high, and the potential for gains in compliance is low, we are proposing that title V permitting is not justified for these source categories. Accordingly, the third factor supports the proposed title V exemptions for

aluminum, copper, and other nonferrous foundries area sources.

The fourth factor we considered in determining if title V is unnecessarily burdensome is whether there are implementation and enforcement programs in place that are sufficient to assure compliance with the NESHAP without relying on title V permits. States to which EPA delegates authority to implement and enforce this NESHAP will have programs in place to enforce the rule, and we believe that these programs will be sufficient to assure compliance. We also note that EPA retains authority to enforce this NESHAP anytime under CAA sections 112, 113, and 114. We further 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. Also, States and EPA often conduct voluntary compliance assistance, outreach, and education programs (compliance assistance programs), which are not required by statute. These additional programs would supplement and enhance the success of compliance with this area source NESHAP. We believe that the statutory requirements for implementation and enforcement of this NESHAP by the delegated States and EPA and the additional assistance programs described above together are sufficient to assure compliance with this area source NESHAP without relying on title V permits.

In applying the fourth 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 assure that the area sources were in the best position to comply with the NESHAP. See 70 FR 75325–75326. In proposing this rule, we do not have similar data available on the specific enforcement as in the Exemption Rule, but we have no reason to think that States which are delegated to implement and enforce this NESHAP will be less diligent in their enforcement responsibilities. See 70 FR 75326. In fact, States must have adequate programs to enforce the section 112 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 all the information presented here, we believe that there are implementation and enforcement programs in place that are sufficient to assure compliance with the aluminum,

copper, and other nonferrous foundries NESHAP without relying on title V permitting.

Balancing the four factors for these area source categories strongly supports the proposed finding that title V is unnecessarily burdensome. Although title V might add additional compliance requirements, if imposed, we believe that there would not be significant improvements to the proposed compliance requirements in the NESHAP because the proposed requirements are specifically designed to assure compliance with the emission standards that would be imposed on these area source categories.

We also believe that the costs of compliance with title V would impose a significant burden on the sources. In addition, the high relative costs would not be justified given that there is likely to be little or no potential gain in compliance if title V were required. And, finally, for delegated States, we believe there are adequate implementation and enforcement programs in place to assure compliance with the NESHAP. Thus, we propose that title V permitting is unnecessarily burdensome for the Aluminum Foundries, Copper Foundries, and Other Nonferrous 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 section 502(a), whether exempting the aluminum, copper, and other nonferrous foundries area source categories from title V requirements would adversely affect public health, welfare, or the environment. Exemption of the aluminum, copper, and other nonferrous foundries area source categories from title V requirements would not adversely affect public health, welfare, or the environment because the level of control would remain the same if a permit were required. The title V permit program does not generally impose new substantive air quality control requirements on sources, but instead requires that certain procedural measures be followed, particularly with respect to determining compliance with applicable requirements. As stated in our consideration of the first factor for this category, we do not believe title V would lead to significant improvements in the compliance requirements applicable to existing or new area sources.

Furthermore, one of the primary purposes of the title V permitting program is to clarify, in a single

document, the various and sometimes complex regulations that apply to sources in order to improve understanding of these requirements and to help sources achieve compliance with the requirements. In this case, however, we do not believe that a title V permit is necessary to understand the requirements that would be applicable to these area sources because the requirements of the rule are not difficult to implement. We also have no reason to think that new sources would be substantially different from the existing sources. In addition, we explained in the Exemption Rule that requiring permits for the large number of area sources could, at least in the first few years of implementation, potentially adversely affect public health, welfare, or the environment by shifting State agency resources away from assuring compliance for major sources with existing permits to issuing new permits for these area sources, potentially reducing overall air program effectiveness. Based on this analysis, we believe that title V exemptions for the aluminum, copper, and other nonferrous foundries area sources would not adversely affect public health, welfare, or the environment for all of the reasons previously explained.

For the reasons stated here, we are proposing to exempt the aluminum, copper, and other nonferrous foundries area source categories from title V permitting requirements.

## VI. Summary of the Impacts of the Proposed Standards

Existing aluminum, copper, and other nonferrous foundries are currently well-controlled, and our proposed GACT determination reflects such controls. Compared to 1990, when the baseline emissions were established, these sources have improved their level of control and reduced emissions due to State permitting requirements, OSHA regulations (particularly for lead), and actions taken to improve efficiency and reduce costs. We estimate that the only impacts associated with the proposed rule are the compliance requirements (*i.e.*, monitoring, reporting, recordkeeping, and testing).

Approximately 318 aluminum, copper, and other nonferrous foundries would be subject to the proposed rule and would incur initial one-time costs of \$656,000 and a total annualized cost of \$645,000/yr (an average of \$2,000/yr per plant). The one-time ("first" costs) are for initial notifications; preparing the management practices plan and startup, shutdown, and malfunction plan; and initial performance tests. Recurring annual costs include those for

maintaining records and daily visual inspections of fabric filters.

## VII. Statutory and Executive Order Reviews

### A. Executive Order 12866: Regulatory Planning and Review

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

### B. Paperwork Reduction Act

The information collection 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 No. 2332.01.

The recordkeeping and reporting requirements in the proposed rule would be based on the information collection requirements in EPA's 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 EPA's implementing regulations at 40 CFR part 2, subpart B.

The proposed NESHAP would require applicable one-time notifications according to the NESHAP General Provisions. Plant owners or operators would be required to prepare and operate by written management practice plans and include compliance certifications for the management practices in their Notifications of Compliance Status. Foundries subject to the emission standards would be required to conduct daily VE observations with a reduction to weekly VE observations if VE are not detected after 90 consecutive days of daily observations. Recordkeeping would be required to demonstrate compliance with management practices, monitoring, and applicability provisions. The affected facilities are expected to already have the necessary control and monitoring equipment in place and to already conduct much of the required monitoring and recordkeeping activities. Foundries subject to the rule also would be required to comply with the requirements for startup, shutdown, and malfunction plans/reports and to submit

a compliance report if a deviation occurred during the semiannual reporting period.

The average annual burden for this information collection averaged over the first 3 years of this ICR is estimated to total 7,202 labor hours per year at a cost of approximately \$411,278 for the 318 facilities that would be subject to the proposed rule, or approximately 68 hours per year per facility. No capital/startup costs or operation and maintenance costs are associated with the proposed information collection requirements. No costs or burden hours are estimated for new area source foundries because none are projected for the next 3 years. Burden is defined at 5 CFR 1320.3(b).

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless the collection 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 EPA'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-2008-0236. Please submit any comments related to the ICR for the proposed rule to EPA and OMB. See the **ADDRESSES** section at the beginning of this preamble 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 Office for EPA. Because OMB is required to make a decision concerning the ICR between 30 and 60 days after February 9, 2009, a comment to OMB is best assured of having its full effect if OMB receives it by March 11, 2009. The 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 area source NESHAP on small entities, a small entity is defined as: (1) A small business whose parent company meets the Small Business Administration size standards for small businesses found at 13 CFR 121.201 (less than 500 for aluminum, copper, and other nonferrous foundries); (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 that is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today's proposed rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. There would be no significant impacts on new or existing aluminum, copper, or nonferrous foundries because this proposed rule would not create any new requirements or burdens other than minimal compliance requirements. This proposed rule is estimated to impact 318 (of more than 962) area source facilities, 307 of which are small entities. The analysis shows that none of the small entities would incur economic impacts exceeding 3 percent of its revenue. We have determined that small entity compliance costs are expected to be less than 0.05 percent of company sales revenue for all affected plants. Although this proposed rule would contain requirements for new area sources, EPA does not expect any new aluminum, copper, or other nonferrous foundries to be constructed in the foreseeable future; therefore, EPA did not estimate the impacts for new affected sources.

Although this proposed rule would not have a significant economic impact on a substantial number of small entities, EPA nonetheless has tried to reduce the impact of this proposed rule on small entities. The standards represent practices and controls that are common throughout the industry. The standards would also require only the essential monitoring, recordkeeping, and reporting needed to verify compliance. The proposed standards were developed based on information obtained from small businesses in our surveys, consultation with small business representatives, and consultation with industry representatives that are affiliated with small businesses. 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

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 to the private sector in any one year. This proposed rule is not expected to impact State, local, or tribal governments. The nationwide annualized cost of this proposed rule for affected industrial sources is \$645,000/yr. Thus, this proposed rule would not be subject to the requirements of sections 202 and 205 of the Unfunded Mandates Reform Act (UMRA).

This proposed rule would also not be subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments. The proposed rule would not apply to such governments and would impose no obligations upon them.

### E. Executive Order 13132: Federalism

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

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. The proposed rule would 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 comments on this proposed rule from State and local officials.

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

This action does not have tribal implications, as specified in Executive Order 13175 (65 FR 67249, November 9, 2000). This proposed rule would not impose any requirements on tribal governments; thus, Executive Order 13175 does not apply to this action. EPA specifically solicits additional comment on this proposed action 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 action is not subject to Executive Order 13045 because it is based solely on technology performance.

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

This action is not a "significant energy action" as defined in Executive Order 13211 (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 would not likely have any significant adverse energy effects because no additional pollution controls or other equipment that consume energy would be required.

*I. National Technology Transfer Advancement Act*

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 ("NTTAA"), Public Law No. 104-113 (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. VCS are technical standards (e.g., materials specifications, test methods, sampling procedures, business practices) that are developed or adopted by voluntary consensus standards bodies. NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable VCS.

This rulemaking involves technical standards. EPA has decided to use ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses," for its manual methods of measuring the oxygen or carbon dioxide content of the exhaust gas. These parts of ASME PTC 19.10-1981 are acceptable alternatives to EPA Method 3B. This standard is available from the American Society of Mechanical Engineers (ASME), Three Park Avenue, New York, NY 10016-5990.

EPA has also decided to use EPA Methods 1, 1A, 2, 2A, 2C, 2D, 2F, 2G, 3, 3A, 3B, 4, 5, 5D, and 17. Although the Agency has identified 11 VCS as being potentially applicable to these methods cited in this rule, we have decided not to use these standards in this rulemaking. The use of these VCS would have been impractical because they do not meet the objectives of the standards cited in this rule. The search and review results are in the docket for this rule.

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. Under § 63.7(f) and § 63.8(f) of Subpart A of the General Provisions, 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 in the final rule and amendments.

*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 would not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because it would not affect the level of protection provided to human health or the environment.

**List of Subjects in 40 CFR Part 63**

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

Dated: January 15, 2009.

**Stephen L. Johnson,**  
*Administrator.*

For the reasons stated in the preamble, title 40, chapter I, 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 paragraph (i)(1) 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), 63.11551(a)(2)(i)(C), table 5 to subpart DDDDD of this part, and table 1 to subpart ZZZZZ of this part.

\* \* \* \* \*

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

**Subpart ZZZZZZ—National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries**

**Applicability and Compliance Dates**  
Sec.

- 63.11544 Am I subject to this subpart?  
63.11545 What are my compliance dates?

#### Standards and Compliance Requirements

- 63.11550 What are my standards and management practices?  
63.11551 What are my initial compliance requirements?  
63.11552 What are my monitoring requirements?  
63.11553 What are my notification, reporting, and recordkeeping requirements?

#### Other Requirements and Information

- 63.11555 What General Provisions apply to this subpart?  
63.11556 What definitions apply to this subpart?  
63.11557 Who implements and enforces this subpart?  
63.11558 [Reserved]

#### Tables to Subpart ZZZZZZ of Part 63

- Table 1 to Subpart ZZZZZZ of Part 63—  
Applicability of General Provisions to  
Aluminum, Copper, and Other  
Nonferrous Foundries Area Sources

#### Subpart ZZZZZZ—National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries

#### Applicability and Compliance Dates

##### § 63.11544 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate an aluminum foundry, copper foundry, or other nonferrous foundry as defined in § 63.11556, “What definitions apply to this subpart?” that is an area source of hazardous air pollutant (HAP) emissions and meets the criteria specified in paragraphs (a)(1) and (2) of this section.

(1) Your aluminum foundry, copper foundry, or other nonferrous foundry uses materials that contain or have the potential to emit one or more aluminum foundry HAP, copper foundry HAP, or other nonferrous foundry HAP, as defined in § 63.11556, “What definitions apply to this subpart?”; and  
(2) Your aluminum foundry, copper foundry, or other nonferrous foundry melts at least 600 tons per year (tpy) of metal.

(b) This subpart applies to each new or existing affected source located at an aluminum, copper, or other nonferrous foundry subject to this subpart, as specified in paragraphs (b)(1) through (3) of this section.

(1) Aluminum foundry sources that melt materials that contain or have the potential to emit one or more aluminum foundry HAP as defined in § 63.11556, “What definitions apply to this subpart?”

(2) Copper foundry melting operations that melt materials that contain or have

the potential to emit one or more copper foundry HAP as defined in § 63.11556, “What definitions apply to this subpart?”

(3) Other nonferrous foundry melting operations that melt materials that contain or have the potential to emit one or more other nonferrous foundry HAP as defined in § 63.11556, “What definitions apply to this subpart?”

(c) An affected source is an existing source if you commenced construction or reconstruction of the affected source on or before February 9, 2009.

(d) An affected source is a new source if you commenced construction or reconstruction of the affected source after February 9, 2009.

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

(f) 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 to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

##### § 63.11545 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 no later than [2 years after the date of publication of the final rule in the **Federal Register**].

(b) If you start up a new affected source 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 no later than [the date of publication of the final rule in the **Federal Register**].

(c) If you start up a new affected source 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.

#### Standards and Compliance Requirements

##### § 63.11550 What are my standards and management practices?

(a) If you own or operate new or existing sources at an aluminum foundry, copper foundry, or other nonferrous foundry that is subject to this subpart, you must comply with the requirements in paragraphs (a)(1) through (3) of this section.

(1) Cover or enclose each melting furnace that is equipped with a cover or enclosure during the melting operation to the extent practicable (e.g., except where access is needed, such as for charging, alloy addition, tapping).

(2) Purchase only metal scrap that has been depleted (to the extent practicable) of aluminum foundry HAP, copper foundry HAP, or nonferrous foundry HAP (as applicable) in the materials charged to the melting furnace, except metal scrap that is purchased specifically for its HAP metal content for use in alloying;

(3) Prepare and operate pursuant to a written management practices plan. The management practices plan must include the required management practices in paragraphs (a)(1) and (2) of this section and any other management practices that are implemented at the facility to minimize emissions from melting furnaces. You may use your standard operating procedures as the management practices plan provided the standard operating procedures include the required management practices in paragraphs (a)(1) and (2) of this section.

(b) If you own or operate new or existing sources at a copper foundry or other nonferrous foundry that melts 6,000 tpy or greater of metal:

(1) For existing sources, you must achieve a particulate matter (PM) control efficiency of at least 95.0 percent or an outlet PM concentration limit of at most 0.034 grams per dry standard cubic meter (g/dscm) (0.015 grains per dry standard cubic feet (gr/dscf)).

(2) For new sources, you must achieve a PM control efficiency of at least 99.0 percent or an outlet PM concentration limit of at most 0.023 g/dscm (0.010 gr/dscf).

##### § 63.11551 What are my initial compliance requirements?

(a) Except as specified in paragraph (b) of this section, you must conduct a performance test for existing and new sources at a copper or other nonferrous foundry that is subject to § 63.11550(b). You must conduct the test within 180 days of your compliance date and report the results in your Notification of Compliance Status according to § 63.9(h).

(b) If you own or operate existing sources at a copper or other nonferrous foundry that is subject to § 63.11550(b), you are not required to conduct a performance test if a prior performance test was conducted within the past 5 years of the compliance date using the same methods specified in paragraph (c) of this section and you meet either of the following two conditions:

(1) No process changes have been made since the test; or

(2) You demonstrate to the satisfaction of the permitting authority that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process changes.

(c) You must conduct each test according to the requirements in § 63.7 and the requirements in paragraphs (c)(1) and (2) of this section.

(1) You must determine the concentration of PM (for the concentration standard) or the mass rate of PM (for the percent reduction standard) according to the following test methods:

(i) Method 1 or 1A (40 CFR part 60, appendix A-1) to select sampling port locations and the number of traverse points in each stack or duct. If you are complying with the concentration provision in § 63.11550(b), sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere. If you are complying with the percent reduction provision in § 63.11550(b), sampling sites must be located at the inlet and outlet of the control device and prior to any releases to the atmosphere.

(ii) Method 2, 2A, 2C, 2D, 2F (40 CFR part 60, appendix A-1), or Method 2G (40 CFR part 60, appendix A-2) to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B (40 CFR part 60, appendix A-2) to determine the dry molecular weight of the stack gas. You may use ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses" (incorporated by reference-see § 63.14) as an alternative to EPA Method 3B.

(iv) Method 4 (40 CFR part 60, appendix A-3) to determine the moisture content of the stack gas.

(v) Method 5 or 5D (40 CFR part 60, appendix A-3) or Method 17 (40 CFR part 60, appendix A-6) to determine the concentration of PM or mass rate of PM (front half filterable catch only). If you are subject to the percent reduction PM standard, you must determine the mass rate of PM at the inlet and outlet in pounds per hour and calculate the percent reduction in PM.

(2) Three valid test runs are needed to comprise a performance test. Each run must cover at least one production cycle (charging, melting, and tapping).

(3) During the test, you must operate each melting furnace within  $\pm 10$  percent of its normal process rate. You must monitor and record the process rate during the test.

#### **§ 63.11552 What are the monitoring requirements?**

(a) You must record the information specified in § 63.11553(c)(2) to document conformance with the management practices plan required in § 63.11550(a).

(b) Except as specified in paragraph (b)(3) of this section, if you own or operate existing sources, you must conduct visible emissions (VE) monitoring according to the requirements in paragraphs (b)(1) and (2) of this section.

(1) You must conduct visual monitoring of the monovent or fabric filter outlet stack(s) for any visible emissions (VE) according to the schedule specified in paragraphs (b)(1)(i) and (ii) of this section.

(i) You must perform a visual determination of fugitive emissions once per day, on each day the process is in operation, during melting operations.

(ii) If no visible fugitive emissions are detected in consecutive daily visual monitoring performed in accordance with paragraph (b)(1)(i) of this section for 90 days of operation of the process, you may decrease the frequency of visual monitoring to once per calendar week of time the process is in operation, during operation of the process. If visible fugitive emissions are detected during these inspections, you must resume daily visual monitoring of that operation during each day that the process is in operation, in accordance with paragraph (b)(1)(i) of this section until you satisfy the criteria of this section to resume conducting weekly visual monitoring.

(2) If the visual monitoring reveals the presence of any VE, you must initiate procedures to determine the cause of the emissions within 1 hour of the observations and alleviate the cause of the emissions within 3 hours by taking whatever corrective action(s) are necessary.

(3) As an alternative to the monitoring requirements in paragraphs (b)(1) and (2) of this section, you may install, operate, and maintain a bag leak detection system for each fabric filter according to the requirements in paragraph (c) of this section.

(c) If you own or operate new sources equipped with a fabric filter, you must install, operate, and maintain a bag leak detection system for each fabric filter according to paragraphs (c)(1) through (3) of this section.

(1) Each bag leak detection system must meet the specifications and requirements in paragraphs (c)(1)(i) through (viii) of this section.

(i) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram 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 PM loadings. You must continuously record the output from the bag leak detection system using electronic or other means (*e.g.*, using a strip chart recorder or a data logger).

(iii) The bag leak detection system must be equipped with an alarm system that will sound when the system detects an increase in relative particulate loading over the alarm set point established according to paragraph (c)(1)(iv) of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.

(iv) In the initial adjustment of the bag leak detection system, you must establish, at a minimum, the baseline output by adjusting the sensitivity (range) and the averaging period of the device, the alarm set points, and the alarm delay time.

(v) Following initial adjustment, you must not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority, except as provided in paragraph (c)(1)(vi) of this section.

(vi) Once per quarter, you may adjust the sensitivity of the bag leak detection system to account for seasonal effects, including temperature and humidity, according to the procedures identified in the site-specific monitoring plan required by paragraph (c)(2) of this section.

(vii) You must install the bag leak detection sensor downstream of the fabric filter.

(viii) 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. You must operate and maintain each bag leak detection system according to the plan at all times. Each monitoring plan must describe the items in paragraphs (c)(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 and alarm delay time will be established;

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

(iv) How the bag leak detection system will be maintained, including a routine maintenance schedule and spare parts inventory list;

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

(vi) Corrective action procedures as specified in paragraph (c)(3) of this section.

(3) Except as provided in paragraph (c)(4) of this section, you must initiate procedures to determine the cause of every alarm from a bag leak detection system within 1 hour of the alarm and alleviate the cause of the alarm within 3 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to, the following:

(i) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM 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 fabric filter compartment;

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

(4) You may take more than 3 hours to alleviate a specific condition that causes an alarm if you identify in the monitoring plan this specific condition as one that could lead to an alarm, adequately explain why it is not feasible to alleviate this condition within 3 hours of the time the alarm occurs, and demonstrate that the requested time will ensure alleviation of this condition as expeditiously as practicable.

(d) If you use a control device other than a fabric filter for existing sources subject to § 63.11551(b), you must prepare and submit a monitoring plan to the permitting authority for approval. Each plan must contain the information in paragraphs (d)(1) through (5) of this section.

(1) A description of the device;

(2) Test results collected in accordance with § 63.11551(c) verifying the performance of the device for reducing PM emissions to the levels required by this subpart;

(3) Operation and maintenance plan for the control device (including a preventive maintenance schedule consistent with the manufacturer's instructions for routine and long-term maintenance);

(4) A list of operating parameters that will be monitored to maintain continuous compliance with the applicable emission limit; and

(5) Operating parameter limits based on monitoring data collected during the performance test.

**§ 63.11553 What are my notification, reporting, and recordkeeping, requirements?**

(a) You must submit the Initial Notification required by § 63.9(b)(2) no later than 120 calendar days after [the date of publication of the final rule in the **Federal Register**] or within 120 days after the source becomes subject to the standard. The Initial Notification must include the information specified in paragraphs (a)(1) through (3) of this section and may be combined with the Notification of Compliance Status required in paragraph (b) of this section.

(1) The name and address of the owner or operator;

(2) The address (*i.e.*, physical location) of the affected source; and

(3) An identification of the relevant standard, or other requirement, that is the basis of the notification and source's compliance date.

(b) You must submit the Notification of Compliance Status required by § 63.9(h) no later than 120 days after the applicable compliance date specified in § 63.11546 unless you must conduct a performance test. If you must conduct a performance test, you must submit the Notification of Compliance Status within 60 days of completing the performance test. In addition to the information required in § 63.9(h)(2) and § 63.11551, your notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:

(1) "This facility complies with the requirements in § 63.11550(a)(1) to cover or enclose each melting furnace that is equipped with a cover or enclosure during the melting operation to the extent practicable".

(2) "This facility complies with the requirement in § 63.11550(a)(2) to purchase and use only metal scrap that has been depleted (to the extent practicable) of aluminum foundry HAP, copper foundry HAP, or other nonferrous foundries HAP (as applicable) in the materials charged to the melting furnace, except for metal scrap that is purchased specifically for its HAP metal content for use in alloying".

(3) "This facility has prepared and will operate by a written management practices plan according to § 63.11550(a)(3)."

(4) If the owner or operator of an existing affected source is certifying compliance based on the results of a previous performance test: "This facility complies with § 63.11550(b) based on a

previous performance test in accordance with § 63.11551(b)."

(4) This certification of compliance by the owner or operator that installs bag leak detection systems: "This facility has prepared a bag leak detection system monitoring plan in accordance with § 63.11552(c) and will operate each bag leak detection system according to the plan."

(c) You must keep the records specified in paragraphs (c)(1) through (5) of this section.

(1) As required in § 63.10(b)(2)(xiv), you must keep a copy of each notification that you submitted to comply with this subpart and all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted.

(2) You must keep records to document conformance with the management practice plan required by § 63.11550 as specified in paragraphs (c)(2)(i) through (iv) of this section.

(i) For melting furnaces equipped with a cover or enclosure, records must identify each melting furnace equipped with a cover or enclosure, the date and time of each melting operation, and that the procedures in the management practices plan were followed for each melting operation. These records may be in the form of a checklist.

(ii) Records documenting your purchase and use of only metal scrap that has been depleted of HAP metals (to the extent practicable) charged to the melting furnace. If you purchase scrap metal specifically for the HAP metal content for use in alloying, records must show that the HAP metal is included in the material specifications for the cast metal product.

(3) You must keep the records of all inspection and monitoring data required by §§ 63.11551 and 63.11552, and the information identified in paragraphs (c)(3)(i) through (v) of this section for each required inspection or monitoring.

(i) The date, place, and time of the monitoring event;

(ii) Person conducting the monitoring;

(iii) Technique or method used;

(iv) Operating conditions during the activity;

(v) Results, including the date, time, and duration of the period from the time the monitoring indicated a problem (e.g., VE) to the time that monitoring indicated proper operation; and

(v) Maintenance or corrective action taken (if applicable).

(4) If you own or operate new or existing sources at a copper foundry or other nonferrous foundry that is not subject to § 63.11550(b), you must maintain records to document that your

facility melts less than 6,000 tpy of metal.

(5) If you use a bag leak detection system, you must keep the records specified in paragraphs (c)(5)(i) through (iii) of this section.

(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.

(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.

(d) Your records must be in a form suitable and readily available for expeditious review, according to § 63.10(b)(1). As specified in § 63.10(b)(1), you must keep each record for 5 years following the date of each recorded action. You must keep each record onsite for at least 2 years after the date of each recorded action according to § 63.10(b)(1). You may keep the records offsite for the remaining 3 years.

(e) If a deviation occurs during a semiannual reporting period, you must submit a compliance report to your permitting authority according to the requirements in paragraphs (e)(1) and (2) of this section.

(1) The first reporting period covers the period beginning on the compliance date specified in § 63.11546 and ending on June 30 or December 31, whichever date comes first after your compliance date. Each subsequent reporting period covers the semiannual period from January 1 through June 30 or from July 1 through December 31. Your compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.

(2) A compliance report must include the information in paragraphs (e)(2)(i) through (iv) of this section.

(i) Company name and address.

(ii) Statement by a responsible official, with the official's name, title, and signature, certifying the truth, accuracy and completeness of the content of the report.

(iii) Date of the report and beginning and ending dates of the reporting period.

(iv) Identification of the affected source, the pollutant being monitored, applicable requirement, description of deviation, and corrective action taken.

## Other Requirements and Information

### § 63.11555 What General Provisions apply to this subpart?

Table 1 to this subpart shows which parts of the General Provisions in § 63.1 through 63.16 apply to you.

### § 63.11556 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 as follows:

*Aluminum foundry* means a facility that melts aluminum and pours molten aluminum into molds to manufacture aluminum castings (except die casting).

*Aluminum foundry HAP* means any compound of the following metals: beryllium, cadmium, lead, manganese, or nickel, or any of these metals in the elemental form.

*Bag leak detection system* means a system that is capable of continuously monitoring relative particulate matter (i.e., 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, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

*Copper foundry* means a facility that melts copper or copper-based alloys and pours molten copper or copper-based alloys into molds to manufacture copper or copper-based alloy castings (excluding die casting).

*Copper foundry HAP* means any compound of any of the following metals: Lead, manganese, or nickel, or any of these metals in the elemental form.

*Material containing aluminum foundry HAP* means a material containing one or more aluminum foundry HAP. Any material that contains beryllium, cadmium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), or contains manganese in amounts greater than or equal to 1.0 percent by weight (as the metal), as shown in formulation data provided by the manufacturer or supplier, such as the Material Safety Data Sheet for the material, is considered to be a material containing aluminum foundry HAP.

*Material containing copper foundry HAP* means a material containing one or more copper foundry HAP. Any material that contains lead or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), or contains manganese in amounts greater than or equal to 1.0 percent by weight (as the metal), as shown in formulation

data provided by the manufacturer or supplier, such as the Material Safety Data Sheet for the material, is considered to be a material containing copper foundry HAP.

*Material containing other nonferrous foundry HAP* means a material containing one or more other nonferrous foundry HAP. Any material that contains chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), as shown in formulation data provided by the manufacturer or supplier, such as the Material Safety Data Sheet for the material, is considered to be a material containing other nonferrous foundry HAP.

*Melting operations* means the collection of furnaces (e.g., induction, reverberatory, crucible, tower, dry hearth) used to melt metal ingot, alloyed ingot and/or metal scrap to produce molten metal that is poured into molds to make castings.

*Other nonferrous foundry* means a facility that melts nonferrous metals other than aluminum, copper, or copper-based alloys and pours the nonferrous metals into molds to manufacture nonferrous metal castings (excluding die casting).

*Other nonferrous foundry HAP* means any compound of the following metals: Chromium, lead, and nickel, or any of these metals in the elemental form.

### § 63.11557 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by the U.S. EPA or a delegated authority, such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if 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 Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

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

(1) Approval of alternatives to the applicability requirements in § 63.11544, the compliance date requirements in § 63.11545, and the applicable standards in § 63.11550.

(2) Approval of an alternative nonopacity emissions standard under § 63.6(g).

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

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

(5) Approval of a waiver of recordkeeping or reporting requirements under § 63.10(f), or another major

change to recordkeeping/reporting. A “major change to recordkeeping/reporting” is defined in § 63.90(a).

**§ 63.11558 [Reserved]**

**Tables to Subpart ZZZZZZ of Part 63**

**TABLE 1 TO SUBPART ZZZZZZ OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO ALUMINUM, COPPER, AND OTHER NONFERROUS FOUNDRIES AREA SOURCES**

As required in § 63.11555, “What General Provisions apply to this subpart?” you must comply with each requirement in the following table that applies to you.

Citation	Subject	Applies to subpart ZZZZZZ?	Explanation
§ 63.1(a)(1), (a)(2), (a)(3), (a)(4), (a)(6), (a)(10)–(a)(12), (b)(1), (b)(3), (c)(1), (c)(2), (c)(5), (e).	Applicability .....	Yes .....	§ 63.11544(f) exempts affected sources from the obligation to obtain a title V operating permit.
§ 63.1(a)(5), (a)(7)–(a)(9), (b)(2), (c)(3), (c)(4), (d).	Reserved .....	No.	
§ 63.2 .....	Definitions .....	Yes.	Subpart ZZZZZZ requires continuous compliance with all requirements in this subpart.
§ 63.3 .....	Units and Abbreviations .....	Yes.	
§ 63.4 .....	Prohibited Activities and Circumvention .....	Yes.	
§ 63.5 .....	Preconstruction Review and Notification Requirements .....	Yes.	
§ 63.6(a), (b)(1)–(b)(5), (b)(7), (c)(1), (c)(2), (c)(5), (e)(1), (e)(3)(i), (e)(3)(iii)–(e)(3)(ix), (f)(2), (f)(3), (g), (i), (j).	Compliance with Standards and Maintenance Requirements .....	Yes.	
§ 63.6(f)(1) .....	Compliance with Nonopacity Emission Standards .....	No .....	
§ 63.6(h)(1), (h)(2), (h)(5)–(h)(9) .....	Compliance with Opacity and Visible Emission Limits .....	No .....	
§ 63.6(b)(6), (c)(3), (c)(4), (d), (e)(2), (e)(3)(ii), (h)(3), (h)(5)(iv).	Reserved .....	No.	
§ 63.7 .....	Applicability and Performance Test Dates .....	Yes.	
§ 63.8(a)(1), (b)(1), (f)(1)–(5), (g) .....	Monitoring Requirements .....	Yes.	
§ 63.8(a)(2), (a)(4), (b)(2)–(3), (c), (d), (e), (f)(6), (g).	Continuous Monitoring Systems .....	No .....	
§ 63.8(a)(3) .....	[Reserved] .....	No.	Subpart ZZZZZZ requires submission of Notification of Compliance Status within 120 days of compliance date unless a performance test is required.
§ 63.9(a), (b)(1), (b)(2)(i)–(iii), (b)(5), (c), (d), (e), (h)(1)–(h)(3), (h)(5), (h)(6), (j).	Notification Requirements .....	Yes .....	
§ 63.9(b)(2)(iv)–(v), (b)(4), (f), (g), (i) .....	.....	No.	Subpart ZZZZZZ does not require a CPMS, COMS, CEMS, or opacity or visible emissions limit.
§ 63.9(b)(3), (h)(4) .....	Reserved .....	No.	
§ 63.10(a), (b)(1), (b)(2)(i)–(v), (vii), (vii)(C), (viii), (ix), (b)(3), (d)(1)–(2), (d)(4), (d)(5), (f).	Recordkeeping and Reporting Requirements .....	Yes.	
§ 63.10(b)(2)(vi), (b)(2)(vii)(A)–(B), (c), (d)(3), (e).	.....	No .....	
§ 63.10(c)(2)–(c)(4), (c)(9) .....	Reserved .....	No.	
§ 63.11 .....	Control Device Requirements .....	No.	
§ 63.12 .....	State Authority and Delegations .....	Yes.	
§§ 63.13–63.16 .....	Addresses, Incorporations by Reference, Availability of Information, Performance Track Provisions .....	Yes.	