

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 63**

[EPA-HQ-OAR-2008-0236; FRL-8920-9]

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:** Final 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 issuing final national emission standards for the Aluminum Foundries, Copper Foundries, and Other Nonferrous Foundries area source categories. These final emission standards for new and existing sources reflect EPA’s determination regarding the generally available control technologies or management practices (GACT) for each of the three area source categories.

**DATES:** The final rule is effective on June 25, 2009. The incorporation by reference of certain publications listed in this rule is effective as of June 25, 2009.

**ADDRESSES:** EPA has established a docket for this action under Docket ID No. EPA-HQ-OAR-2008-0236. All documents in the docket are listed in the Federal Docket Management System index at <http://www.regulations.gov>. Although listed in the index, some information is not publicly available (e.g., confidential business information (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 through <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 final 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 final 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:**

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

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**I. General Information**

*A. Does This Action Apply to Me?*

The regulated categories and entities potentially affected by the final rule 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 is 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. Where Can I Get a Copy of This Document?*

In addition to being available in the docket, an electronic copy of this final action will also be available on the Worldwide Web (WWW) through the Technology Transfer Network (TTN). Following signature, a copy of this final action will be posted on the TTN's policy and guidance page for newly proposed or promulgated rules at the following address: <http://www.epa.gov/ttn/oarpg/>. The TTN provides information and technology exchange in various areas of air pollution control.

#### *C. Judicial Review*

Under section 307(b)(1) of the Clean Air Act (CAA), judicial review of this final rule is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit by August 24, 2009. Under section 307(b)(2) of the CAA, the requirements established by this final rule may not be challenged separately in any civil or criminal proceedings brought by EPA to enforce these requirements.

Section 307(d)(7)(B) of the CAA further provides that “[o]nly an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review.” This section also provides a mechanism for EPA to convene a proceeding for reconsideration, “[i]f the person raising an objection can demonstrate to EPA that it was impracticable to raise such objection within [the period for public comment] or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule.” Any person seeking to make such a demonstration to us should submit a Petition for

Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, Ariel Rios Building, 1200 Pennsylvania Ave., NW., Washington, DC 20460, with a copy to both the person(s) listed in the preceding **FOR FURTHER INFORMATION CONTACT** section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave., NW., Washington, DC 20460.

## **II. Background Information for This Final Rule**

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 hazardous air pollutants (HAP) that are listed for regulation under CAA section 112(c). A major source emits or has the potential to emit 10 tons per year (tpy) or more of any single HAP or 25 tpy or more of any combination of HAP. An area source is a stationary source that is not a major source.

Section 112(k)(3)(B) of the CAA calls for EPA to identify at least 30 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 Strategy and subsequent updates to the source category list. The aluminum foundry area source category was listed pursuant to section 112(c)(3) for its contribution toward meeting the 90 percent requirement for beryllium, cadmium, lead, manganese, and nickel compounds. The copper foundry area source category was listed due to emissions of lead, manganese, and nickel compounds, and the other nonferrous foundry area source category was listed due to emissions of chromium, lead, and nickel compounds.

Under CAA section 112(d)(5), the Administrator may, in lieu of issuing a MACT standard pursuant to CAA section 112(d)(2), elect to promulgate standards or requirements for area sources “which provide for the use of generally available control technology or management practices by such sources to reduce emissions of

hazardous air pollutants.” As explained in the preamble to the proposed NESHAP, EPA proposed, and is finalizing in today's action, standards based on generally available control technology and management practices (GACT).

We are issuing these final standards in response to a court-ordered deadline that requires EPA to issue standards for these three foundry 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)).

## **III. Revision to the Source Category List**

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

## **IV. Summary of Changes Since Proposal**

This final rule contains several clarifications to the proposed rule as a result of public comments. We explain the reasons for these changes in detail in the summary of comments and responses (section VI of this preamble).

First, we established that the production from calendar year 2010 is used to determine if your existing aluminum, copper, or other nonferrous foundry melted more than 600 tpy of aluminum, copper, other nonferrous metals, and all associated alloys and, therefore, is subject to the rule. If a foundry with an existing melting operation increases production after 2010 such that the annual metal melt production equals or exceeds 600 tpy, it must notify the permitting authority within 30 days after the end of that calendar year and comply with the rule within 2 years following the date of the notification. If a foundry with an existing melting operation subsequently decreases annual production after 2010 such that it produces less than 600 tpy, the foundry remains subject to the rule. Foundries with new melting operations are subject to the rule if the annual metal melt capacity at the time of startup equals or exceeds 600 tpy. If a foundry with a new melting operation increases capacity after startup such that the annual metal melt capacity equals or

<sup>1</sup> We did not receive any adverse comments on the proposed revisions to the list.

exceeds 600 tpy, it must notify the permitting authority within 30 days after the capacity increase and comply with the rule at the time of the capacity increase. If a foundry with a new melting operation subsequently decreases annual capacity after startup such that the capacity is less than 600 tpy, the foundry remains subject to the rule.

Second, we revised the rule to clarify that the production from calendar year 2010 for existing sources (or capacity at the time of startup for new sources) is used to determine if you are a small copper or other nonferrous foundry or a large copper or other nonferrous foundry. Large foundries are subject to both management practices and particulate matter (PM) emission limits.

The final rule also addresses comments on production levels that may fluctuate above or below the 6,000 tpy annual copper and other nonferrous metal melt production (excluding aluminum) and whether the PM/metal HAP control requirements apply to copper and other nonferrous foundries when the melt production rises above or falls below 6,000 tpy. If a small copper or other nonferrous foundry with an existing melting operation increases production after the 2010 calendar year such that the annual copper and other nonferrous metal melt production equals or exceeds 6,000 tons, the foundry must submit a notification of foundry reclassification to the Administrator (or his or her authorized representative) within 30 days after the end of that calendar year and comply with the requirements for large copper or other nonferrous foundries no later than 2 years after the date of the foundry's notification that the annual copper and other nonferrous metal melt production equaled or exceeded 6,000 tons. If a large copper or other nonferrous foundry with an existing melting operation subsequently decreases production such that the quantity of copper and other nonferrous metal melted is less than 6,000 tpy, it remains a large copper or other nonferrous foundry.

If, subsequent to start-up, a new source small copper or other nonferrous foundry increases its melting operation capacity such that the annual copper and other nonferrous metal melt capacity equals or exceeds 6,000 tons, the foundry must submit a notification of foundry reclassification to the Administrator (or his or her authorized representative) within 30 days after the increase in capacity and comply with the requirements for large copper or other nonferrous foundries at the time of the capacity increase. If a new source

large copper or other nonferrous foundry subsequently decreases metal melt capacity such that the capacity is less than 6,000 tpy, it remains a large copper or other nonferrous foundry and must continue to comply with the PM/metal HAP control requirements.

We further clarified in the final rule that, in determining whether a source's "annual metal melt production" (for existing sources) and "annual metal melt capacity" (for new sources) exceeds 600 tpy, sources must identify the total amount of only aluminum, copper, and other nonferrous metal melted for existing sources (or the capacity to melt only aluminum, copper, and other nonferrous metal for new sources), and not the total amount of all types of metal melted (or the capacity to melt all metals for new sources). The comments EPA received noted that this clarification is particularly important for aluminum, copper, and other nonferrous melting operations that are co-located with ferrous metal melting operations. Similarly, we also clarified that the 6,000 tpy threshold between small and large copper and other nonferrous foundries (excluding aluminum foundries) is based on the annual amount of copper and other nonferrous metal (excluding aluminum) that is melted.

We revised the recordkeeping requirements to remove the requirement to record the date and time of each melting operation. Several commenters, specifically for smaller sources, expressed that the burden of recording and keeping these records would not have provided useful documentation that the required management practices were being followed. We have added a provision to the final rule that requires monthly inspections to document that the management practices are being followed during melting operations.

We also adjusted the visible emission (VE) monitoring requirements to allow a reduction from daily to weekly observations after 30 consecutive days of no VE instead of 90 consecutive days. Several commenters noted that there are some special occasions when the cause of VE cannot be remedied within 3 hours as proposed. We changed the VE requirements to parallel those for bag leak detection systems, which allow more than 3 hours if the owner or operator identifies the specific conditions in a monitoring plan, adequately explains why more than 3 hours is necessary, and demonstrates that the requested time will alleviate the problem as expeditiously as practicable.

Based on our survey results and a review of operating permits, we expect

most (if not all) large copper and other nonferrous foundries will use a fabric filter to control emissions from melting operations. However, it is conceivable that a new or existing foundry could use a device other than a fabric filter. We revised the monitoring requirements for large copper and other nonferrous foundries that use a control device other than a fabric filter to require that they submit a request to use alternative monitoring procedures as required by the General Provisions (section 63.8(f)(4)). Submitting this request is consistent with EPA's requirements and procedures for alternative monitoring.

Finally, we have clarified that the final rule does not include other source categories, such as secondary aluminum production, secondary copper production, secondary nonferrous metal production, and primary copper smelting. We have explicitly stated in the rule that primary and secondary metal melting operations are not subject to this foundry rule. We clarified the definition of foundries to include the casting of complex metal shapes and to exclude the products cast by primary and secondary metal production facilities (e.g., sows, ingots, bars, anode copper, rods, and copper cake).

## V. Summary of Final Standards

### A. Is My Foundry Subject to This Subpart?

The three source categories subject to this rule include aluminum foundries, copper foundries, and other nonferrous foundries. Any aluminum, copper, or other nonferrous foundry is subject to this subpart if it (1) is an area source defined by 40 CFR 63.2, (2) has an annual metal melt production in calendar year 2010 for existing affected sources or an annual metal melt capacity at startup for new affected sources of 600 tpy or more, and (3) is an aluminum foundry that uses material containing "aluminum foundry HAP," a copper foundry that uses material containing "copper foundry HAP," or an other nonferrous foundry uses material containing "other nonferrous foundry HAP" (as these terms are defined in more detail below).

Material containing "aluminum foundry HAP" is 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). Material containing "copper foundry HAP" is 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). Material containing "other nonferrous foundry HAP" is any material that contains chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal). The owner or operator must determine whether material contains aluminum, copper, or other nonferrous foundry HAP, for example, by using formulation data provided by the manufacturer or supplier, such as the material safety data sheet (MSDS).

#### *B. Do These Standards Apply to My Source?*

The standards apply to the melting operations (the affected source) at foundries subject to the rule as discussed above. More specifically, the affected source is (and the standards apply to) (1) the collection of all aluminum foundry melting operations that melt any material containing aluminum foundry HAP, (2) the collection of all copper foundry melting operations that melt any material containing copper foundry HAP, and (3) the collection of all other nonferrous foundry melting operations that melt any 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.

A foundry is an existing affected source if construction or reconstruction of the melting operations commenced on or before February 9, 2009. A foundry is a new affected source if construction or reconstruction of the melting operations commenced after February 9, 2009. Because the affected source is the collection of all the melting operations at, for example, a copper foundry, addition of new melting equipment at an existing affected source (i.e., a source constructed before February 9, 2009) does not subject the foundry to the GACT standards for a new affected source. Furthermore, the standards for a new affected source would only apply to an aluminum, copper or other nonferrous foundry that is constructed or reconstructed after February 9, 2009.

#### *C. When Must I Comply With These Standards?*

The owner or operator of an existing affected source is required to comply with the rule no later than June 27, 2011. The owner or operator of a new affected source is required to comply by

June 25, 2009 or upon startup of the source, whichever occurs later.

#### *D. What Are the Final Standards?*

These final standards establish that the following management practices are GACT for all new and existing affected sources at aluminum, 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, including, but not limited to, charging, alloy addition, and tapping); and (2) purchase only scrap material that has been depleted (to the extent practicable) of "aluminum foundry HAP," "copper foundry HAP", or "other nonferrous foundry HAP" in the materials charged to the melting furnace(s), excluding HAP metals that are required to be added for the production of alloyed castings or that are required to meet written specifications for the casting. Owners or operators of affected sources must develop and operate under a written management practices plan for minimizing emissions from melting operations that apply the two techniques described above. The rule also requires owners or operators to retain the plan and the appropriate records to demonstrate that the two techniques are used during melting operations. Both EPA and the State permitting authority can request to review the management practices plan at their discretion.

In addition, the owner or operator of an existing affected source at a large copper foundry and other nonferrous foundry (i.e., one that melts at least 6,000 tpy of copper and other nonferrous metal, excluding aluminum) is required to achieve 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 foot (gr/dscf). The owner or operator of a new affected source at a large copper foundry or other nonferrous foundry must achieve a PM control efficiency of at least 99.0 percent or an outlet PM concentration of at most 0.010 gr/dscf.

#### *E. What Are the Testing and Monitoring Requirements?*

##### 1. Performance Test

No performance tests are required for an aluminum foundry or for a small copper or other nonferrous foundry (i.e., one that melts less than 6,000 tpy of copper and other nonferrous metal, excluding aluminum) because they are subject only to the management practices as described in 63.11550(a).

The owner or operator of any existing or any new affected source at a large copper or other nonferrous foundry is required to conduct a one-time initial performance test to demonstrate compliance with the PM/metal HAP standard. The owner or operator is required to test PM emissions from melting operations using EPA Method 5 or 5D (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 5 years of the compliance date using the methods required by this final rule, and either (1) no process changes have been made since the test, or (2) 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 a new or existing affected source (i.e., the collection of melting operations as defined in section 63.11556 of this final rule) is required to record information to document conformance with the management practices plan, including conducting monthly inspections, to document that the management practices are being followed.

For existing affected sources at large copper or other nonferrous foundries where PM emissions are controlled by a fabric filter, the owner or operator is required to conduct daily observations of VE from the fabric filter outlet during melting operations. We do not expect any VE from a fabric filter that is properly designed, operated, and maintained. 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 owner or operator may take more than 3 hours to alleviate the cause of VE if the owner or operator has already identified the specific condition requiring more time in a monitoring plan. In addition to identifying the condition in the plan, the owner or operator must also adequately explain in the monitoring plan why it is not feasible to alleviate this condition within 3 hours of the time the VE occurs, provide an estimate of the time that it would take to alleviate the cause, and demonstrate that the requested time will ensure alleviation of this condition

as expeditiously as practicable. The owner or operator must record the results of the daily observations and any corrective actions taken in response to VE. Owners or operators of large copper or other nonferrous foundries could decrease the frequency of observations from daily to weekly if the foundry operates for at least 30 consecutive days without any VE. The owner or operator must maintain adequate records to support the claim of no VE for the 30-day operating period. After the foundry converts to a weekly observation schedule, if any VE are observed, the foundry must revert back to daily observations. The foundry may subsequently reduce the observations to weekly if it operates for at least 30 consecutive days without any VE.

As an alternative to the VE observations, an owner or operator of an existing affected source at a large copper or other nonferrous foundry may elect to operate and maintain a bag leak detection system as described below for a new affected source at a large copper or other nonferrous foundry.

The owner or operator of a new affected source (*i.e.*, collection of melting operations) at a large copper or other nonferrous foundry must install, operate and maintain a bag leak detection system to monitor the affected source. The owner or operator of a new affected source at a large copper or other nonferrous foundry must also prepare a site-specific monitoring plan for each bag leak detection system. As with monitoring the VE for an existing affected source, EPA expects that a properly designed, operated and maintained filter system will not trigger the leak detection system.

Our study of the industry indicates that fabric filters are used as the control device for melting furnaces; however, a new or existing melting operation may use some other type of control device to meet the PM emission standards. If a large copper or other nonferrous foundry uses a control device other than a fabric filter for a new or existing melting operation to comply with the PM emission standards, the owner or operator must submit a request to use an alternative monitoring procedure as required by the General Provisions in section 63.8(f)(4).

#### *F. What Are the Notification, Recordkeeping, and Reporting Requirements?*

The owner or operator of an existing or new affected source is required to comply with certain notification, recordkeeping and reporting requirements of the General Provisions (40 CFR part 63, subpart A), which are

identified in Table 1 of the final rule. Each owner or operator of an affected source is required to submit an Initial Notification according to the requirements section 63.9(a) through (d) and a Notification of Compliance Status according to the requirements in section 63.9(h) of the NESHAP General Provisions (40 CFR part 63, subpart A). In addition to the information required in 63.9(h), the owner or operator must indicate how it plans to comply with the requirements.

Each owner or operator of an existing or new affected source is required to keep records to document compliance with the required management practices. If the melting operations use a cover or enclosure, the owner or operator must identify which melting furnaces are equipped with a cover or enclosure, and record the results of the monthly inspection in order to demonstrate compliance with the procedures in the management practices plan for covers or enclosures. These records may be in the form of a checklist.

The owner or operator of a new or existing affected source must also keep records of the metal scrap purchased to demonstrate compliance with the requirement that only metal scrap that has been depleted of HAP metals prior to charging can be used in the melting furnace(s).

Owners or operators of existing affected sources at large copper or other nonferrous foundries equipped with a fabric filter that choose to comply with the PM standard through visual emission observations must 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 apply to facilities that use bag leak detection systems, including records of the bag leak detection system output, bag leak detection system adjustments, the date and time of all bag leak detection system alarms, and for each valid alarm, the time corrective action was taken, the corrective action taken, and the date on which corrective action was completed.

Existing affected sources at small copper and other nonferrous foundries (excluding aluminum) must keep records to demonstrate that the annual copper and other nonferrous metal melt production is less than 6,000 tpy for each calendar year.

Similarly, new affected sources at small copper and other nonferrous foundries (excluding aluminum) must keep records to demonstrate that the annual copper and other nonferrous metal melt capacity is less than 6,000 tpy for each calendar year.

If a deviation from the rule requirements occurs, an affected source is required to submit a compliance report for that reporting period. The final rule, section 63.11553(e), specifies the information requirements for such compliance reports.

#### *G. What Are the Title V Permit Requirements?*

This final rule exempts the aluminum foundries, copper foundries, and other nonferrous foundries area source categories from title V permitting requirements unless the affected source is otherwise required by law to obtain a title V permit. For example, sources that have title V permits because they are major sources under the criteria pollutant program (*i.e.*, for PM, ozone, carbon monoxide, nitrogen oxides, sulfur dioxide and lead) would maintain those permits.

## **VI. Summary of Comments and Responses**

We received public comments on the proposed rule from a total of 24 commenters. These commenters included eight companies, seven trade associations, five representatives of State agencies, three private citizens, and one environmental organization. Sections VI.A through VI.I of this preamble summarize the comments and provide our responses.

### *A. GACT Issues*

#### 1. Selection of GACT

*Comment:* One commenter stated that EPA's decision to issue GACT standards pursuant to CAA section 112(d)(5), instead of MACT standards pursuant to section 112(d)(2) and (3), is arbitrary and capricious because EPA provided no rationale for its decision to issue GACT standards. The commenter also claimed that the proposed standards are based solely on cost and are thus unlawful and arbitrary.

The commenter claims that CAA section 112(d)(5) does not direct EPA to set standards based on what is cost effective; rather, according to the

commenter EPA must establish GACT based on the “methods, practices and techniques which are commercially available and appropriate for application by the sources in the category considering economic impacts.” The commenter stated that because cost effectiveness is not relevant under CAA section 112(d)(5), the reliance on cost effectiveness as the sole determining factor in establishing GACT renders the proposed standards unlawful.

*Response:* As the commenter recognizes, in section 112(d)(5), Congress gave EPA explicit authority to issue alternative emission standards for area sources. Specifically, section 112(d)(5), which is titled “Alternative standard for area sources,” provides:

With respect *only* to categories and subcategories of area sources listed pursuant to subsection (c) of this section, the Administrator *may, in lieu of* the authorities provided in paragraph (2) and subsection (f) of this section, elect to promulgate standards or requirements applicable to sources in such categories or subcategories which provide for the use of generally available control technologies or management practices by such sources to reduce emissions of hazardous air pollutants. *See* CAA section 112(d)(5) (*emphasis added*).

There are two critical aspects to section 112(d)(5). First, section 112(d)(5) applies only to those categories and subcategories of area sources listed pursuant to section 112(c). The commenter does not dispute that EPA listed the aluminum, copper, and other nonferrous foundries area source categories pursuant to section 112(c). Second, section 112(d)(5) provides that for area sources listed pursuant to section 112(c)(3), EPA “*may, in lieu of*” the authorities provided in section 112(d)(2) and 112(f), elect to promulgate standards pursuant to section 112(d)(5). Section 112(d)(2) provides that emission standards established under that provision “require the maximum degree of reduction in emissions” of HAP (also known as MACT). Section 112(d)(3), in turn, defines what constitutes the “maximum degree of reduction in emissions” for new and existing sources. *See* section 112(d)(3).<sup>2</sup>

<sup>2</sup> Specifically, section 112(d)(3) sets the minimum degree of emission reduction that MACT standards must achieve, which is known as the MACT floor. For new sources, the degree of emission reduction shall not be less stringent than the emission control that is achieved in practice by the best-controlled similar source, and for existing sources, the degree of emission reduction shall not be less stringent than the average emission limitation achieved by the best performing 12 percent of the existing sources for which the Administrator has emissions information. Section 112(d)(2) directs EPA to consider whether more stringent—so called “beyond-the-floor”—limits are technologically

Webster’s dictionary defines the phrase “in lieu of” to mean “in the place of” or “instead of.” *See* Webster’s II New Riverside University (1994). Thus, section 112(d)(5) authorizes EPA to promulgate standards under section 112(d)(5) that provide for the use of GACT, *instead of* issuing MACT standards pursuant to section 112(d)(2) and (d)(3). 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)(3), which is the case here.<sup>3</sup>

The commenter argues that EPA must provide a rationale for issuing GACT standards under section 112(d)(5), instead of MACT standards. The commenter is incorrect. Had Congress intended that EPA first conduct a MACT analysis for each area source category, Congress would have stated so expressly in section 112(d)(5). Congress did not require EPA to conduct any MACT analysis, floor analysis or beyond-the-floor analysis before the Agency could issue a section 112(d)(5) standard. Rather, Congress authorized EPA to issue GACT standards for area source categories listed under section 112(c)(3), and that is precisely what EPA has done in this rulemaking.

Although EPA need not justify its exercise of discretion in choosing to issue a GACT standard for an area source listed pursuant to section 112(c)(3), EPA still must have a reasoned basis for the GACT determination for the particular area source category. The legislative history supporting section 112(d)(5) provides that GACT is to encompass:

\* \* \* 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.

*See* Senate Report on the 1990 Amendments to the Act (S. Rep. No. 101–228, 101st Cong. 1st session. 171–172). The discussion in the Senate report clearly provides that EPA may consider costs in determining what constitutes GACT for the area source category.

achievable considering, among other things, the cost of achieving the emission reduction.

<sup>3</sup> Section 112(d)(5) also references section 112(f). *See* CAA section 112(f)(5) (titled “Area Sources”), which provides that EPA is not required to conduct a review or promulgate standards under section 112(f) for any area source category or subcategory listed pursuant to section 112(c)(3) and for which an emission standard is issued pursuant to section 112(d)(5).

Congress plainly recognized that area sources differ from major sources, which is why Congress allowed EPA to consider costs in setting GACT standards for area sources under section 112(d)(5), but did not allow that consideration in setting MACT floors for major sources pursuant to section 112(d)(3). This important dichotomy between section 112(d)(3) and section 112(d)(5) provides further evidence that Congress sought to do precisely what the title of section 112(d)(5) states—provide EPA the authority to issue “[a]lternative standards for area sources.”

Notwithstanding the commenter’s claim, EPA properly issued standards for the area source categories at issue here under section 112(d)(5) and in doing so provided a reasoned basis for its selection of GACT for these area source categories. As explained in the proposed rule and below, EPA evaluated the control technologies and management practices that reduce HAP emissions at aluminum, copper and other nonferrous foundries, including those at both major and area sources. *See* 74 FR 6512. In its evaluation, EPA used information from an EPA survey of the three source categories, discussed options for control with industry trade associations, and reviewed operating permits to identify the emission controls and management practices that are currently used to control PM and metal HAP emissions. We also considered technologies and practices at 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).

In our evaluation, we identified certain management practices and PM control techniques that have been implemented at a significant number of foundries. Of the management practices identified, two in particular were used frequently: (1) Cover or enclose melting furnaces that are equipped with covers or enclosures during the melting process, and (2) purchase only scrap that has been depleted (to the extent practicable) of HAP metals in the materials charged to the melting furnace. Of the PM control technologies identified, we found that large copper and other nonferrous foundries (*i.e.*, foundries melting 6,000 tpy or more of copper and other nonferrous metal) frequently used control technologies to reduce PM/HAP emissions, while smaller (less than 6,000 tpy) did not. Furthermore, we found that large copper and other nonferrous foundries used fabric filters as the primary technique to reduce PM/HAP metal emissions. The

wide use of the management techniques and PM controls indicates that such practices are generally available for the area source categories at issue.

The commenter further argues that EPA inappropriately chose the management practices and controls described above as GACT based solely on costs, and according to the commenter, cost is not relevant to GACT determinations and as such the standards are unlawful. We disagree. First, contrary to the commenter's assertions, EPA did not select GACT on cost alone, as the discussion above supports. Second, and also contrary to the commenter's assertions, the Agency's consideration of cost effectiveness in establishing GACT and the Agency's views on what is a cost-effective requirement under section 112(d)(5) are relevant. The U.S. Court of Appeals for the DC Circuit has stated that cost effectiveness is a reasonable measure of cost as long as the statute does not mandate a specific method of determining cost. *See Husqvarna AB v. EPA*, 254 F.3d 195, 201 (D.C. Cir. 2001) (finding EPA's decision to consider costs on a per ton of emissions removed basis reasonable because CAA section 213 did not mandate a specific method of cost analysis).

In addition to evaluating what was generally available to the foundries at issue, we considered costs and economic impacts in determining GACT. We estimated the cost of compliance for the proposed rule to include a one-time first year cost of \$656,000, a recurring total annualized cost of \$645,000 per year, and an average of \$2,000 per year per plant. (74 FR 6522). 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. Our economic impact analysis estimated that the proposed rule would have an impact of less than 0.05 percent of sales (74 FR 6523). We believe the consideration of costs and economic impacts is especially important for determining GACT for the aluminum, copper, and other nonferrous foundries 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.

Finally, even though not required, EPA did provide a rationale for why it set a GACT standard in the proposed rule. In the proposal, we explained that the facilities in the source categories at issue here are already well controlled

for the urban HAP for which the source category was listed pursuant to section 112(c)(3). *See* 74 FR 6517 and 6522. Consideration of costs and economic impacts proves especially important for the well-controlled area sources at issue in this final action. Given the current, well-controlled emission levels, a MACT floor determination, where costs cannot be considered, could result in only marginal reductions in emissions at very high costs for modest incremental improvement in control for the area source category.

## 2. Cost Effectiveness of the GACT Standards

*Comment:* One commenter claimed that EPA did not undertake sufficient analysis to support the conclusion that "given their relatively low levels of HAP emissions, requiring additional controls would result in only marginal reductions in emissions at very high costs for modest incremental improvement in control." (*See* 74 FR 6517.) As an example, the commenter said that for copper and other nonferrous foundries that melt 6,000 tpy or more, EPA determined that the majority of facilities currently operate using a control system for PM, and that those controls achieve a reduction in PM emissions of 95 percent. According to the commenter, EPA did not consider setting a tighter standard despite the fact that of the eight facilities that reported the efficiency of their add-on controls, four achieved an efficiency of 98 percent or higher. The commenter stated that when EPA analyzed and rejected stronger control options, the analysis was based solely on the cost-effectiveness of those controls. The commenter also asserted that EPA should not have rejected the option of requiring all copper and other nonferrous foundries to utilize add-on controls because, in the commenter's view, such controls are "generally available" and "effective for controlling emissions of PM and metal HAP from copper and nonferrous foundries."

The commenter noted that EPA determined that it would be overly costly to require facilities to install new PM control devices for the under 6,000 tpy subcategory because the cost effectiveness was \$50,000 per ton of PM and \$1 million per ton of metal HAP. According to the commenter, EPA neither claims that the economic impacts are too great based on the profitability of these plants, nor determines how economically significant it would be for such a plant to make the necessary investment in these controls.

*Response:* EPA properly issued standards for the area source categories at issue here under section 112(d)(5), and cost effectiveness was not the only consideration in setting the standards.

In establishing GACT standards for all three types of foundries, EPA determined that all affected sources subject to this rule must meet two management practices applicable to the melting operations to reduce the HAP emissions. First, covers or enclosures are used during the melting operation on furnaces that have them to suppress emissions. Second, the purchased scrap is depleted to the extent practicable of HAP metals that are contaminants and are not necessary to meet product specifications. EPA found that most of the sources in the survey employed one or both of these methods to control HAP emissions from the melting process. Affected sources must use these two practices to comply with this area source standard. The general use of these methods and their acceptable costs and economic impacts led EPA to choose these as part of the GACT standards applicable to aluminum, copper and other nonferrous foundries.

For existing large copper and other nonferrous foundries, EPA determined these affected sources have generally available to them PM control techniques that result in a PM control efficiency of 95 percent. The survey conducted prior to the proposal indicated that the large copper and other nonferrous foundries used operating practices and add-on control devices to control PM emissions. EPA requested test data as part of the industry survey, but none was provided. Sources did report control efficiencies, but in some cases, the control levels for the baghouses and cartridge filters were engineering estimates or equipment manufacturer specifications.

In choosing the management practices for foundries in all three source categories and additional PM controls on large copper and other nonferrous foundries, EPA looked to the discussion on GACT as found in the Senate report on the legislation (Senate report No. 101-228, Dec. 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 emission controls systems.

The information we collected supports a 95 percent control level for PM (as a surrogate for metal HAP) as GACT for these two categories of existing area sources. While the data collected during the survey shows that

some sources reported a 98 percent PM emission control efficiency, the data also showed that the control equipment commercially available and appropriate for application to these sources (e.g., baghouses) does not result in control efficiencies of 98 percent on a continuing basis. See *Mossville Environmental Action Now v. EPA*, 370 F.3d 1232, 1242 (D.C. Cir. 2004) (EPA may appropriately account for operational variability in setting section 112(d) emission standards).

EPA also determined that the cost associated with replacing existing control equipment that achieves 95 percent control with newer equipment to achieve 98 percent control would result in a cost and cost effectiveness not justified by the incremental reduction in emissions. For example, consider a copper foundry melting 6,000 tpy of copper in electric induction furnaces with a fabric filter as the control device operating at 95 percent control efficiency. Uncontrolled emissions of PM (at 1.5 lb/ton) and HAP (at 5 percent of PM) of 4.5 tpy and 0.23 tpy, respectively, would be reduced to 0.225 and 0.0113 tpy, respectively, assuming the 95 percent control efficiency of the existing fabric filter. Either a new baghouse in series or an expanded baghouse, both with newer fabric for the filter (e.g., membrane bags) and a lower air-to-cloth ratio, would be required to increase the control efficiency from 95 percent to 98 percent. At the new 98 percent control level, emissions of PM and HAP would be reduced to 0.09 tpy and 0.0045 tpy, respectively. The capital cost of the new or expanded baghouse would be \$520,000 with a total annualized cost of \$119,000 per year (sized for a flow of 16,500 actual cubic feet per minute). The incremental cost effectiveness for the upgrade would be \$880,000/ton for PM and \$18,000,000/ton for HAP, which is a very high cost effectiveness to achieve an additional HAP emission reduction of only 0.0067 tpy (0.0113 tpy at 95 percent control versus 0.0045 tpy at 98 percent control). As the commenter noted and quoted, we also presented at proposal the very high cost effectiveness of requiring small copper and other nonferrous foundries (i.e., all of the copper and nonferrous foundries subject to the rule) to install PM controls. We do not believe the cost numbers presented here and in the proposal are reasonable for requiring PM controls for melting furnaces at all copper and other nonferrous foundries.

Contrary to the commenter's assertions, the Agency's consideration of cost effectiveness in establishing GACT and the Agency's views on what

is a cost-effective requirement under section 112(d)(5) are relevant. The U.S. Court of Appeals for the DC Circuit has stated that cost effectiveness is a reasonable measure of cost as long as the statute does not mandate a specific method of determining cost. See *Husqvarna AB v. EPA*, 349 U.S. App. D.C. 118, 254 F.3d 195, 201 (D.C. Cir. 2001) (Finding EPA's decision to consider costs on a per ton of emissions removed basis reasonable because CAA section 213 did not mandate a specific method of cost analysis). Section 112(d)(5) does not mandate a specific method for considering cost when setting GACT standards.

The commenter has provided no information to support its assertion that add-on control requirements for small copper and other nonferrous foundries are generally available for melting operations in the two source categories. The commenter also failed to provide any information indicating that our cost-effectiveness determinations were unreasonable and likewise failed to provide any information concerning the economic impacts associated with requiring the standards that the commenter suggests represent GACT. The GACT standards for the three foundry area source categories are consistent with the requirements of section 112(d)(5).

*Comment:* One commenter questioned the authority for the promulgation of the GACT standards. The commenter stated it is inconsistent with the CAA section 112(d)(1) schedules to promulgate this new area source standard after the expiration of the schedules. According to the commenter, it would be more appropriate to promulgate GACT standards under CAA section 112(f)(2)(C) to comply with the court order. The commenter stated he did not think the court intends to order EPA to violate the time frame specified by the CAA.

*Response:* The commenter is incorrect. In *Sierra Club v. Johnson*, (D.D.C. 2006), the Court held, among other things, that EPA violated a mandatory duty by failing to establish emission standards for area source categories listed pursuant to section 112(c)(3) and (k)(3)(B) by the date specified in the statute. The Court issued an order in March 2006, requiring the Agency to promulgate emission standards for the area source categories listed pursuant to section 112(c)(3) and (k)(3)(B). In August 2006, the Court issued an opinion establishing deadlines for issuing the standards. By issuing emission standards for the three area source categories at issue in this rule, the Agency is acting wholly

consistently with the schedule set forth in the Court's August 2006 opinion, as amended. The commenter's thoughts about what the Court "intend[ed] to order" are wholly irrelevant. The order speaks for itself, and the Agency continues to comply with the terms of the order.

Moreover, because the requirements of the Court's order are unambiguous, the commenter's thoughts about the "appropriate[ness]" of promulgating GACT standards under CAA section 112(f)(2)(C) are similarly irrelevant. Furthermore, the commenter fails to recognize that section 112(f) of the CAA addresses the second stage of standard setting under section 112, and this phase occurs 8 years after the initial promulgation of a technology-based standard under section 112(d). This rule marks the promulgation of a technology-based standard under section 112(d). If EPA sought to conduct a residual risk analysis for these categories, it would do so 8 years after issuance of the section 112(d) standard. The commenter also fails to recognize that residual risk review is not required for area sources where the standards are based on GACT, as is the case in this rule. See CAA 112(f)(5).

## 2. Estimates of Impacts of the Proposed Rule

*Comment:* One commenter stated that EPA did not estimate the emissions reductions or cost effectiveness associated with the management practices that represent GACT. The commenter noted that EPA estimated the costs associated with the rule, but not the emissions reductions, and consequently, did not show that GACT was cost effective. The commenter asked that EPA identify the amount of HAP reductions associated with the rule, and reconsider the cost effectiveness and potential impacts on area sources (almost all of which are small businesses) if the environmental benefits are minimal.

One commenter stated it was the intent of the CAA that the area source program results in reductions in emissions from area sources of hazardous air pollution and expressed disappointment that EPA's proposal states "we estimate that the only impacts associated with the proposed rule are the compliance requirements (i.e., monitoring, reporting, recordkeeping and testing)." The commenter was concerned that such proposals are merely paperwork exercises and are not responsive to Congress' intent to reduce hazardous air pollution when it included the area source provisions in the CAA. The

commenter recommended that in this rule and in future area source proposals, EPA incorporate provisions that will provide additional public health protection from the adverse effects of emissions of HAP from area sources.

One commenter stated that, as described in the CAA section 112(k)(1), the purpose of the area source program is to “achieve a substantial reduction in emissions of hazardous air pollutants from area sources and an equivalent reduction in the public health risks associated with such sources \* \* \*”. According to the commenter, the approach laid out by EPA in the proposed rule does not reflect this purpose and instead focuses entirely on cost estimates. The commenter stated that the preamble did not contain any discussion or estimate of the current emissions of HAP from the sources to be regulated or the public health risks associated with those sources, and that there was no discussion of the expected benefits of the proposed rule.

*Response:* We disagree with the commenter’s assertions that EPA did not show that GACT for these sources was cost effective. We examined all available HAP emission reduction approaches and determined GACT, considering costs, economic impacts, and the cost effectiveness of PM control devices (74 FR 6518 and 6523). Few additional quantifiable emission reductions at existing affected sources are expected to result from the requirements of this rule because most of the existing affected sources are already implementing the process improvements, management practices, and control devices required by this rule. The requirements in the final rule, however, will prevent any existing facilities from making changes that could result in less stringent requirements and an increase in HAP emissions. Codifying these requirements will result in fewer emissions from new affected sources at large copper and other nonferrous foundries due to the more stringent PM/metal HAP emission standards and continuous monitoring by bag leak detectors. In addition, we expect that the increased attention to the implementation of management practices, recordkeeping, and the monitoring of control devices required by the rule will result in additional emission reductions because the management practices will be applied more consistently and uniformly, and control device monitoring will result in shorter times that fabric filter bags are allowed to leak. The management practices will also focus more attention on the raw materials (metals) being melted and will promote pollution prevention for reducing HAP emissions.

Although we are, in large part, codifying the status quo, the emission reductions we are obtaining, as compared to 1990 levels, are significant because these facilities have implemented controls over the past 20 years. For example, HAP emissions reported to the 1990 Toxics Release Inventory (TRI) by 86 foundries in these three source categories totaled 18.2 tpy compared to 13.6 tpy in 2005 with 132 plants reporting (*i.e.*, there has been a large decrease in emissions even though over 50 percent more plants were reporting to the TRI). These reductions are consistent with the goals of the Urban Air Toxics Strategy, which uses 1990 as the baseline year and measures reductions against that baseline.

Finally, one commenter requests that EPA incorporate provisions that will provide additional public health protection from HAP emissions. In this rule, we set technology-based standards pursuant to section 112(d)(5) for three area source categories. The emission control requirements in the final rule reflect GACT. Although assessing public health risks is not a part of the GACT determination, we believe that the rule requirements will provide important public health protection, as discussed above.

### 3. GACT Determination for PM

*Comment:* One commenter stated that it was unclear from the administrative record how EPA set the standards for control efficiencies and emission limits for copper and other nonferrous foundries. Based on the limited data available to EPA, the commenter claims that it is difficult to establish standards that foundries can reliably and consistently meet. The commenter requested that EPA provide its detailed analysis on how the control efficiencies and emission limits were established to allow the commenter to determine if the standards appropriately represent GACT.

*Response:* EPA developed the control efficiencies for copper and other nonferrous foundries based on available operating permit information and industry survey responses. The summary of survey responses from copper and other nonferrous foundries is included in the supporting docket materials for the proposed rule (Docket ID No. EPA-HQ-OAR-2008-0236, items 0012, 0021, and 0022).

EPA developed the alternate emission limit from control equipment (baghouse) specifications and performance test data from other NESHAP background/compliance demonstration information involving similar industries (*e.g.*, foundries), similar emission sources

(*e.g.*, melting furnaces), and similar control devices (*e.g.*, baghouses).

Industry stakeholders stated that a 95 percent standard will be a significant (and costly) issue for some facilities to demonstrate compliance because it is difficult or impossible in some cases to sample the inlet according to the test method criteria because of the configuration of the duct work. Sampling the outlet is easier because it is a straight duct or stack. We investigated alternate forms of an emission limit used in similar source categories and found that baghouses in secondary nonferrous metals processing facilities were subject to an emission limit of 0.015 gr/dscf for the outlet.

For existing affected sources, the 0.015 gr/dscf limit provides at least the same level of HAP emission reduction as GACT, which requires a 95 percent reduction, based on secondary nonferrous metals processing project data (subpart TTTTTT), as well as information and test data from other similar industries that show well-designed and operated baghouses can achieve the limit. We proposed this limit as an alternative to GACT to provide flexibility and to provide a more straightforward way of demonstrating compliance.

A similar decision was made for the new affected source emission limit, *i.e.*, 99 percent control efficiency. The alternative limit proposed was 0.010 gr/dscf, which was also based on data from the secondary nonferrous metals processing NESHAP (subpart TTTTTT). We proposed an alternative limit for affected sources at large copper and other nonferrous foundries that provides at least the same level of HAP emission reduction as the 99.0 percent GACT requirement.

*Comment:* One commenter requested that EPA consider providing another alternative emissions limit in the proposed regulation, particularly because the proposed regulation allows control devices other than fabric filters. Specifically, the commenter said that an emissions limit expressed in “pounds of PM per tons of metal (*i.e.*, copper and other nonferrous metal) melted” could be helpful to many copper and other nonferrous foundries in demonstrating compliance with the applicable emissions limit, especially with a control device other than a fabric filter. The commenter noted that the emission limits in other foundry rules are often expressed in these units, and this alternative limit could allow foundries a more consistent and flexible approach to collecting data and demonstrating compliance.

*Response:* We agree that alternative emission standards provide additional flexibility; EPA proposed one alternate emission standard based on outlet concentrations alone to provide additional flexibility. We do not, however, have adequate data or a reasonable basis that would allow us to finalize a production-based limit (e.g., “pound per ton”). In addition, the commenter did not provide any data for EPA to assess whether a “pound per ton” format is appropriate or to determine the appropriate and equivalent value in that format.

#### B. The Source Category Designation

1. The source categories at issue in this rule are defined as only those aluminum, copper or other nonferrous foundries that melt 600 tpy or more of aluminum, copper and other nonferrous metals.

*Comment:* Six commenters asked that EPA revise the proposed rule to base the 600 tpy clarification of the source category only on the amount of aluminum, copper, and other nonferrous metals melted without including the quantity of ferrous metals melted. The commenters noted that this is a particular concern for foundries that are predominantly iron and steel foundries already subject to an area source standard for that source category (40 CFR Part 63, subpart ZZZZZ). The commenters stated that iron and steel foundries may melt a small amount of aluminum, copper, or other nonferrous metals, but the large majority of their production is ferrous castings. One commenter cited an example of a small ferrous foundry in Texas that is subject to subpart ZZZZZ that melted 900 tons of metal in 2008, which included 22 tons of aluminum and copper. According to the commenter, if the 600 tpy threshold includes the ferrous metal melted, this facility would be included in the source category subject to the standards. The commenter claimed that this undue burden would likely force the foundry to abandon its small nonferrous operations.

One commenter stated that foundries that melt primarily ferrous metals should not be included in the source category, and therefore subject to the rule, because they are not included in the Standard Industrial Classification (SIC) and NAICS codes used by EPA to determine the population of affected sources (i.e., ferrous foundries are included in separate SIC and NAICS codes specific to iron and steel foundries). One commenter requested clarification of the rule’s scope and was concerned that if the rule is promulgated as proposed, EPA may

inadvertently regulate sources that are outside the rule’s intended scope (i.e., area source iron and steel foundries). Consequently, the commenter asked that the rule be revised to clarify that it is inapplicable to foundries melting predominately ferrous metals.

Another commenter requested that the 600 tpy threshold be determined separately for aluminum, copper, and other nonferrous metals rather than from the combined total of all three and requested that the rule clarify that the threshold is based on actual production and not on melting potential or capacity.

*Response:* EPA based the 600 tpy threshold on the facilities in the 1990 TRI that reported under the SIC codes for aluminum, copper, and other nonferrous foundries. Foundries melting predominantly iron and steel would have reported to TRI under different SIC codes and were not included in our 1990 TRI database for the three area source categories addressed in this rule. Consequently, when determining whether an area source meets the 600 tpy threshold, the source should not include the tpy of ferrous metal melted, but rather only include the nonferrous metal melted (aluminum, copper, and other nonferrous metals) in determining its annual production.

In our analysis of the 1990 TRI emissions data, we could not distinguish the quantities of aluminum, copper, and other nonferrous metals melted at each facility. We confirmed that some of the foundry facilities in the 1990 inventory melted a combination of these metals. Consequently, the 600 tpy threshold must be based on the sum of aluminum, copper, and other nonferrous metals melted at each existing affected source, and not based on each type of metal melted separately as the commenter suggests (i.e., there is not a 600 tpy threshold for each type of nonferrous metal at a single facility).

We have clarified that for an existing source, the 600 tpy threshold is based on the annual metal melt production in calendar year 2010 and not capacity. However, for a new affected source we use the annual metal melt capacity at startup because a new affected source must comply at startup (if startup occurs after the date of publication of the final rule in the **Federal Register**), and at startup it would not have any history of annual production.

*Comment:* One commenter suggested that the 600 tpy threshold be based solely on the quantity of metals containing foundry HAP and not on the total amount of metal melted. The commenter cited as an example that a facility melting 599 tpy of metal

containing no foundry HAP and 1 tpy of metal containing foundry HAP would be subject to the rule. On the other hand, the commenter stated that a foundry melting 599 tons of metal containing foundry HAP would not be subject to the rule. The commenter suggested that EPA reconsider the basis of the 600 tpy.

Another commenter asked for clarification of how the 600 tpy threshold should be calculated. Does the 600 tpy of metal (such as aluminum) include any aluminum the facility melts regardless of the amount of metal HAP (by weight) in the charge material?

*Response:* As discussed in the proposal, and clarified again in the earlier response to comment, the 600 tpy of metal melted threshold is not an applicability threshold. Rather, EPA realized that emissions from foundries that melt less than 600 tpy were not included in the 1990 TRI baseline, which is the basis of EPA’s listing of the aluminum, copper and other nonferrous foundries area source categories. In addition, the 600 tpy threshold was based on the amount of aluminum, copper and other nonferrous foundry metal melted regardless of the amount of aluminum foundry HAP, copper foundry HAP or other nonferrous foundry HAP contained in the metal. Defining the threshold in this way was necessary because the level of detail regarding the individual HAP content was not available for the facilities in the 1990 emission inventory. Therefore, as the commenter pointed out, the affected source at an aluminum foundry that melts 599 tpy of aluminum that contains no aluminum foundry HAP and 1 tpy of aluminum that contains an aluminum foundry HAP is subject to this rule.

*Comment:* Commenters noted that the rule did not specify the baseline year(s) for determining the production level to compare with the 600 tpy threshold and also recommended that EPA address annual production fluctuations. For example, commenters asked when a facility would become subject to the rule and when must the facility demonstrate compliance if it initially melted below 600 tpy, but later in time melts over 600 tpy of aluminum, copper and other nonferrous metal. One commenter suggested that the applicability threshold be based on production in 2010 or 2011 to be consistent with the compliance date. Another related question posed by the commenter involved the applicability of the rule if a foundry initially melted over 600 tpy, but in subsequent years melted less than 600 tpy due to economic factors or other reasons.

*Response:* Pursuant to a court order, this final rule will be signed by the

Administrator by June 15, 2009. We expect that the rule will be published in the **Federal Register** in late June 2009, in which case the compliance date for existing sources would be June 2011 (2 years after the date of promulgation of the final standards). In light of this compliance date, we revised the rule to require that an existing foundry use the annual metal melt production for calendar year 2010 to determine whether it is in the source category. To provide further clarification, we added a definition for “annual metal melt production.” If the owner or operator of an existing foundry increases its annual metal melt production after 2010 such that it equals or exceeds 600 tpy in a subsequent year, the owner or operator must notify its permitting authority within 30 days after the end of that calendar year (e.g., December 2011) and comply with the rule requirements within 2 years following the end of the calendar year.

If the foundry’s annual metal melt production (the total aluminum, copper and other nonferrous foundry metal) exceeds 600 tpy in a subsequent year, it is not automatically subject to the GACT requirements of the rule. For example, if an aluminum foundry increases its annual metal melt production from 525 tpy to 725 tpy in 2011, it must also melt materials containing aluminum foundry HAP, as defined in section 63.11556, in order to be subject to the rule’s GACT requirements. If the aluminum foundry does not melt materials that contain beryllium, cadmium, lead or nickel in amounts greater than or equal to 0.1 percent by weight (as metal), or contains manganese in amounts greater than or equal to 1.0 percent by weight (as metal), then the aluminum foundry is not subject to the GACT requirements.

If an existing foundry subsequently decreases production such that it has an annual metal melt production of less than 600 tpy, the foundry remains subject to the rule. We incorporated this requirement into the final rule for several reasons. First, we have listed the three foundry area source categories under CAA section 112(c)(3), and we based the listing and definition of the categories on those facilities that melted at least 600 tpy of aluminum, copper, other nonferrous metals, and all associated alloys in 1990, regardless if they subsequently decreased production. Second, existing foundries subject to the rule at promulgation (i.e., with 600 tpy or greater metal melt production) will have prepared a management practices plan and implemented the management practices. If their annual metal melt production falls below 600 tpy for any year

subsequent to 2010, EPA believes it is reasonable to expect that they keep their management practices plan and continue to implement the management practices to reduce emissions. Third, because EPA learned that the management practices are routine procedures already implemented at most foundries, EPA believes that there would be no significant burden for the rule to continue to apply if annual metal melt production falls below 600 tpy in a calendar year. Finally, if foundries (specifically, existing affected sources) on the borderline of 600 tpy of annual metal melt production (or capacity for new affected sources) fall above and below that level over different years, the time-consuming complexity of possibly other State or local permit revisions is a burden on both the permitting authority and the foundry.

We made clarifications for new affected sources that parallel those for existing affected sources except that annual metal melt capacity is used instead of production because new affected sources must comply at startup (provided startup occurs after the date of publication of this rule in the **Federal Register**), and there would be no production history at startup.

### C. Subcategorization and Applicability Issues

#### 1. Threshold of 6,000 tpy for Copper and Other Nonferrous Foundries

*Comment:* Several commenters asked that EPA clarify that the 6,000 tpy threshold should be determined only from the amount of copper and other nonferrous metals melted and would not include the quantity of aluminum or ferrous metals melted at the facility. One commenter requested that the 6,000 tpy threshold be determined only from the copper and other nonferrous metals that contain the foundry HAP (as defined in the rule) rather than the total amount of copper and other nonferrous metal melted. One commenter provided an example of a foundry that melts 5,000 tpy of iron and 2,000 tpy of copper. Under the proposed rule, the commenter notes that the furnace would have to be equipped with emission controls. The commenter claims this would not be consistent with EPA’s analysis of cost and cost effectiveness in deriving the 6,000 tpy threshold because it was based on retrofitting baghouses to furnaces melting only copper and other nonferrous metals.

*Response:* The survey results used to develop the threshold included facilities that were melting copper and other nonferrous metals and indicated that facilities melting 6,000 tpy or more of

copper and other nonferrous metals had PM emission controls. Although we requested data prior to proposal on the amount of copper and other nonferrous metal containing the specific foundry HAP subject to this rule, we did not receive information to determine a HAP-based threshold. In addition, the analysis of whether to apply PM controls to facilities melting less than 6,000 tpy was based on the costs and cost effectiveness of applying PM emission controls to foundries melting copper and other nonferrous metals, resulting in the conclusion that it was not cost effective to apply emission controls on those melting less than 6,000 tpy of copper and other nonferrous metal. As documented in the proposal (see 74 FR 6518), the cost effectiveness for applying a baghouse to the melting operations at a small copper or other nonferrous foundry was estimated to be \$50,000 per ton of PM and \$1 million per ton of metal HAP. Therefore, we have clarified in the rule that the 6,000 tpy threshold is based on the total amount of copper and other nonferrous metal melted, excluding the amount of aluminum and ferrous metals melted at the facility. In addition, we have added definitions for “annual copper and other nonferrous metal melt production” and “annual copper and other nonferrous metal melt capacity” to be used to determine if an affected source is subject to the control requirements. Therefore, if an existing or new affected source melts 6,000 tpy or more of copper and other nonferrous metal, it must comply with the controls for PM/metal HAP.

*Comment:* Four commenters asked that EPA specify in the rule how the 6,000 tpy threshold is applied under fluctuating production levels over time. One commenter suggested that the approach used in the iron and steel foundry area source rule be incorporated to address questions of changing production levels and noted that those procedures addressed both cases in which a foundry is initially below the threshold and subsequently exceeds it and also the case where a foundry subsequently produces at levels below the threshold.

*Response:* In the final rule, EPA has incorporated definitions for “large foundry” and “small foundry.” These definitions are consistent with the subcategorization scheme set forth in the proposed rule, which used a 6,000 tpy metal melting production rate to define facility size. We have defined a “small foundry” as an existing copper or other nonferrous foundry with an annual copper and other nonferrous metal melt production of less than 6,000

tpy (or a new copper or other nonferrous foundry with an annual copper and other nonferrous metal melt capacity of less than 6,000 tpy). We have defined a "large foundry" as a copper or other nonferrous foundry with an annual copper and other nonferrous metal melt production of 6,000 tpy or more (or a new copper or other nonferrous foundry with an annual copper and other nonferrous metal melt capacity of 6,000 tpy or more). The proposal did not discuss fluctuating production levels with regard to the 6,000 tpy threshold for determining which copper and other nonferrous foundries must comply with the PM emission limit. EPA has reviewed the Iron and Steel Foundry Area Source rule (40 CFR 63, subpart ZZZZZ). We have incorporated into this final rule some of the features of the Iron and Steel Area Source rule. For example, some of the concepts we applied from that rule include establishing a baseline calendar year for determining annual metal melt production, using capacity at startup for new affected sources, requiring a notification if a small foundry becomes a large foundry, and allowing 2 years to comply if a small foundry becomes a large foundry. Therefore, we revised this rule to provide that if the annual metal melt production of your existing small foundry equals or exceeds 6,000 tons of copper and other nonferrous metal during a calendar year subsequent to 2010, you must submit a notification of foundry reclassification to the Administrator within 30 days and comply with the requirements for existing large foundries within 2 years of the date of the notification.

However, in this rule, you must continue to comply with the requirements for large copper and other nonferrous foundries in the case of a production decrease below 6000 tpy after 2010. Because you would have already installed the emission control device, EPA believes it is reasonable to require continued operation of that device. EPA further believes it would not be reasonable to allow you to turn the control device off and not comply with the PM emission limit. Our intent at proposal was that if a large copper or other nonferrous foundry subsequently decreases annual copper and other nonferrous metal melt production below 6,000 tpy, it should remain subject to the requirements for large copper and other nonferrous foundries. We revised the rule to state that if your facility is, at any time, classified as a large foundry, you must continue to comply with the PM control requirements even if your annual copper and other

nonferrous metal melt production falls below 6,000 tons in subsequent calendar years.

*Comment:* According to one commenter, the proposed rule language is not clear regarding whether the PM control requirements apply to aluminum foundries. The commenter would like EPA to clarify that aluminum foundries are subject only to management practices and not the add-on emission control requirements.

*Response:* EPA has revised the rule language to make it clear that only large copper and other nonferrous foundries (excluding aluminum) are subject to the PM control requirements. The rule's definition for large foundry includes only copper and other nonferrous foundries. Furthermore, we have inserted new definitions for the "annual copper and other nonferrous metal melt production" and "annual copper and other nonferrous metal melt capacity" to further clarify that the 6,000 tpy threshold applies only to copper and other nonferrous metal melt production. Therefore, the commenter is correct that the PM controls required in the rule are not applicable to aluminum foundries.

### 3. Material Containing HAP

*Comment:* One commenter stated that the language at section 63.11544(a)(1) should be clarified to set an unambiguous threshold for materials containing aluminum, copper or nonferrous HAP below which the rule does not apply. The commenter notes that section 63.11544(a)(1) limits applicability of the rule to foundries using material containing aluminum, copper or nonferrous foundry HAP, but it expands applicability to include foundries that use materials that have the "potential to emit" copper foundry HAP. The commenter claims that this language is contradictory and appears to set a de minimis applicability threshold based on the definition of material containing foundry HAP, then takes away the threshold with the catch-all "potential to emit" language. The commenter asked that the language be revised to clarify that the rule does not apply to foundries using feedstock that does not meet the definition of materials that contain aluminum, copper, or nonferrous foundry HAP. Several other commenters provided similar comments on the term "potential to emit."

One commenter requested that the definition of "material containing aluminum foundry HAP" be included in the "affected source" definition. The commenter stated that in reviewing the interrelationship of these proposed definitions, the proposed language defining "affected source" does not

clearly limit applicability based solely on materials content. The commenter said that the linkage between the "affected source" definition and the definition of "material containing aluminum foundry HAP" is not clearly established and the use of the term "or have the potential to emit" seems to establish an independent applicability test that could apply even if the materials content is less than the levels set forth for "material containing aluminum foundry HAP." To clarify applicability, the commenter recommended that the applicability in proposed section 63.11544, and its definition of affected source be revised to specifically use the defined term "material containing aluminum foundry HAP," and either: (1) eliminate the reference to "potential to emit" or (2) use the conjunctive, rather than the "disjunctive" preposition in the definition (*i.e.*, both requirements would need to be satisfied).

Another commenter interpreted the proposal to mean that aluminum foundry operations would not be covered under the proposed rules, including the management practices provisions, if they do not use a HAP-containing material for aluminum foundries as defined in the proposed rule. The commenter interprets this to mean that the use of aluminum foundry metal below the defined weight percentage HAP content is not subject to the rule.

*Response:* We agree that the term "potential to emit" used in this context is ambiguous and unnecessary, and we have deleted it in the final rule. Our intent was that the rule be applicable to foundries that melt materials containing the aluminum foundry HAP, copper foundry HAP, and other nonferrous foundry HAP. We have also revised the applicability section in the final rule to state that the requirements apply to the collection of foundry melting operations that melt materials containing aluminum foundry HAP, copper foundry HAP, and other nonferrous foundry HAP (*see* the definitions of these terms provided in the rule). As an example, if an aluminum foundry melted greater than 600 tpy of aluminum, and that aluminum contained less than 0.1 percent by weight of beryllium, cadmium, lead or nickel (individually) and contained less than 1.0 percent by weight manganese, then that foundry would not be subject to the rule.

### 4. Facilities That Are Not Foundries

*Comment:* One commenter stated that his facility processes aluminum scrap and/or dross to produce aluminum that

is used as the raw material in other operations. The commenter's facilities produce molten aluminum, aluminum sow and/or aluminum ingot. The commenter stated that facilities that produce sow and/or ingot by pouring molten aluminum from furnaces, holders or meters into molds are not and should not be subject to the proposed rule because they are not "aluminum foundries." The commenter noted that the sows and ingots produced by these facilities are not complex shapes nor are they used in processes that require specific mechanical properties, machinability, and/or corrosion resistance. According to the commenter, the sows and ingots are used in processes as the raw aluminum metal that is melted and then cast into complex shapes for use in processes requiring the listed properties, and the company does not produce aluminum castings.

*Response:* The facility described by the commenter that melts scrap metal and cast molten metal to produce sows, ingots, or billets is a secondary aluminum production facility and is not an aluminum foundry as defined by this rule. We have clarified in the final rule's definitions that a foundry casts complex shapes rather than sow and ingot (*see*, for example, definition for "aluminum foundry" in section 63.11556), and we have stated explicitly in the definitions for aluminum foundry, copper foundry and other nonferrous foundry that the definitions do not include secondary metal production.

*Comment:* Another commenter stated that as currently written, questions of applicability will arise as to how the rules apply to area sources that may include both types of operations (aluminum foundry casting and secondary aluminum production). According to the commenter, most secondary aluminum production facilities conduct "casting" operations directly after the melting of aluminum scrap and notes that the proposal's preamble provides some explanatory language by describing production operations for aluminum and other nonferrous foundry casting operations as those that "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." The commenter said that this contrasts only slightly with "casting" for other secondary aluminum production facilities where the metal is formed or molded into simple shapes, such as ingots, sows or billets for shipping or further processing.

The commenter said the proposal does not address the nuances of these

different casting operations and therefore does not provide the regulated community with sufficient notice regarding the rule's applicability and what is needed to comply with the rule, and in addition, the rule is subject to misinterpretation by permit authorities. To address these issues, the commenter asked that the rule be revised to make clear which MACT rule (40 CFR part 63 CFR subpart RRR or subpart ZZZZZZ) takes precedence for particular operations where interpretations of applicability may conflict. The commenter said that given the confusion witnessed frequently with permit authorities addressing implementation and compliance for the secondary aluminum production MACT rules, this necessity is even more pronounced. The commenter requested that the rule be revised and that EPA provide an appropriate definition for the term "aluminum castings" and also use the term "aluminum castings" in the definition for "melting operations" in section 63.11556.

*Response:* The facilities that cast molten metal to produce sows, ingots, or billets are secondary metal producers and are not foundries covered by this rule (*see* definition of aluminum foundry in section 63.11556). Secondary metal producers do not produce complex castings that are final or near final products, but instead produce a metal product that is a simple shape that is shipped to other facilities (including foundries) where it is remelted and transformed into final product. We have revised the definitions in the final rule to make a clearer distinction between secondary metal production (such as secondary aluminum facilities that are subject to 40 CFR part 63, subpart RRR) and aluminum foundries. We do not believe there is any conflict or overlap with subpart RRR because that rule does not regulate metal HAP emissions from aluminum foundries as this rule does. It is possible for an aluminum foundry to be subject to both rules, but there would be no overlap in the requirements because the two rules apply to different HAP.

*Comment:* One commenter asked that EPA clarify that 40 CFR part 63 subpart RRR sources are not included in this NESHAP. The commenter stated that there may be confusion because, in subpart RRR (the NESHAP for secondary aluminum production facilities), EPA included certain area sources in that major source rule. According to the commenter, in the secondary aluminum production rule, EPA determined that furnaces, including area sources, melting clean

charge, internal scrap, runaround scrap, or customer returns are not subject to the requirements of Subpart RRR because the use of clean charge materials results in sufficiently low emissions. Therefore, the commenter requested that furnaces melting clean charge, internal scrap, runaround scrap or other customer returns that are area sources subject to 40 CFR part 63 subpart RRR (but excluded from the requirements) also be excluded from applicability of this rule because EPA has already considered the emissions from these furnaces in subpart RRR.

Another commenter seeks clarification on aluminum foundry source category applicability relative to the secondary aluminum MACT standards. The commenter stated the language in the proposal preamble addressing the source category change from secondary aluminum production to aluminum foundries is confusing and appears to be subject to potentially conflicting interpretations. According to the commenter, the language can be interpreted to mean that the secondary aluminum production source category, for which there are existing MACT standards under 40 CFR part 63 subpart RRR, has been changed. The commenter said this distinction is of particular importance since the secondary aluminum production MACT standards also apply in part to area sources.

*Response:* This rule, subpart ZZZZZZ, does not apply to secondary aluminum production facilities, including those secondary aluminum production facilities that are area sources. Furthermore, EPA did not intend any overlap or conflict between 40 CFR part 63 subpart RRR and this rule. Certain types of area source aluminum foundries are subject to a dioxin emission limit under subpart RRR, but subpart RRR has no metal HAP or PM emission limits that would apply to these area sources. Consequently, there are no aluminum foundries that can be addressed solely by subpart RRR, and this foundry area source rule (40 CFR part 63 subpart ZZZZZZ) is necessary to regulate the metal HAP emissions from aluminum foundries.

The change in the source category name in this rule does not change the source category name for secondary aluminum plants subject to subpart RRR. The effect of the change in name is to list aluminum foundries as an area source category for which standards must be developed, and to remove secondary aluminum facilities as a source category for which standards must be developed. We explained in the proposal preamble, 74 FR 6511, that we incorrectly named the "Secondary

Aluminum Production” category in the area source category listing notice, and the emissions used in the listing were from aluminum foundries (*see also* the EPA memorandum cited in the proposal preamble, dated November 26, 2002, which explains this error at Docket ID No. EPA-HQ-OAR-2008-0236, Item 0011).

*Comment:* One commenter stated his plant produces beryllium-copper alloys, copper alloys that do not contain beryllium, and beryllium alloys that do not contain copper. The commenter noted that his plant is subject to the NESHAP ambient air quality standard for beryllium, which is set forth in 40 CFR part 61.32(b). The commenter requested that EPA clarify that the proposed rule for copper and other nonferrous foundries does not apply to his facility because it is already subject to part 61 due to emissions of beryllium. The commenter requested that EPA expressly state in the preamble to the final rule that facilities currently subject to part 61 are not covered by the proposed copper and other nonferrous foundry rule. To make this clear in the rule itself, the commenter suggested that EPA exempt any foundries located at a facility that produces beryllium and/or beryllium alloys and is covered by 40 CFR part 61.32 through 61.34 which coverage, of course, mandates title V permitting for that facility.

Another commenter asked for clarification on whether their facility would be classified as a “foundry” and subject to the rule since the facility melts copper scrap in a gas-fired melting furnace and is a metal powder producer with main product lines consisting of copper, bronze and tin powders.

*Response:* The information supplied by the commenters indicates that these facilities may be secondary metal production facilities that do not cast the molten metal into complex shapes that are final products. As discussed in response to an earlier comment, we have clarified the distinction between foundries and secondary metal producers. We cannot state in the preamble and rule that these facilities are not subject to the rule, and any questions related to applicability should be discussed with the permitting authority (*i.e.*, the State agency if delegated or the EPA regional office if not delegated). In response to the comment about already being subject to a part 61 standard, we confirm that it is possible for an area source to be subject to both a part 61 standard and an area source standard.

*Comment:* One commenter asked how “nonferrous” is defined or interpreted by EPA and whether it is reasonable to

infer that “nonferrous” excludes any iron-containing metal (*e.g.*, nickel alloy containing 10 percent iron would be considered ferrous). Another commenter stated that because many foundries that pour nonferrous metals also pour ferrous metal alloys in the same building, it should be emphasized that this rule is not intended to apply to ferrous alloys and suggested that the word “nonferrous” should be added before the word “material” in the definition of “material containing copper foundry HAP.”

*Response:* The types of facilities described by the commenters are nonferrous foundries if they melt any nonferrous metals (other than copper or aluminum or copper based alloys) unless their melting operations have been identified as a ferrous melting operation that is subject to the area source standard for iron and steel foundries (40 CFR part 63, subpart ZZZZZ). The other nonferrous foundry (*i.e.*, other than copper and aluminum foundries) source category is comprised of facilities identified under NAICS 331528, Other Nonferrous Foundries (except Die-Casting): “This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous (except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.” Examples are foundries (excluding die casting) melting zinc and zinc-base alloys, nickel and nickel-base alloys (including ferrous metal), magnesium and magnesium-base alloys. However, we have not defined the different types of foundries by NAICS because a facility could have multiple types of foundries and NAICS. We specifically define aluminum, copper, and other nonferrous foundry in the rule, and a nonferrous foundry could be co-located with an iron and steel foundry.

*Comment:* One commenter stated that the proposed definition of “copper foundry” should be revised to exclude primary copper smelters, refineries and stand-alone rod mills. The commenter stated that EPA should make clear that the definition does not include the melting of copper (scrap copper, anode copper or cathode copper) at primary copper smelters and refineries, and pouring into casting machines to produce anode copper, copper rod and cake.

*Response:* EPA has revised the definition of copper foundry, stating that “this definition does not include primary or secondary metal producers that cast molten copper to produce simple shapes such as sows, ingots, billets, bars, anode copper, rods or copper cake.”

#### D. Management Practices

##### 1. Purchased Scrap Requirements

*Comment:* One commenter stated that the rule provides that aluminum, copper, and other nonferrous foundry area sources that are subject to the rule shall “purchase only metal scrap 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.” Because foundries also charge ingots, sow, alloys and other “clean charge” materials into the melting furnace, the commenter said that EPA should clarify that this provision also includes these materials. According to the commenter, in purchasing these materials, a foundry may have content specification for its casting application and product that should be sufficient to meet the “deplete” criterion of this management practice, and other references to “metal scrap” should be broadened to include these “compliant” clean charge materials.

Another commenter quoted the proposed rule as stating that foundries are to “purchase only metal scrap that has been depleted (to the extent practicable) of \* \* \* HAP.” Because the specifications of many nonferrous alloys contain metallic HAP, the commenter recommends the rule be changed to state “excluding metallic HAP that are required to be added for the production of alloyed castings.”

One commenter recommended the HAP content requirement for melting metal scrap be deleted or substantially modified to avoid a domestic prohibition against recycling valuable metal scrap. The commenter stated that the proposal requires that covered foundries purchase “only metal scrap that has been depleted (to the extent practicable)” of the identified HAP, but said that this purchase requirement is vague and the word “deplete” is not defined. The commenter said that it is important for EPA to make this clarification to avoid the risk that the depletion requirement will be spuriously interpreted as prohibiting the remelting of scrap that contains HAP in excess of low levels or even trace amounts because it would mean that some metal scrap could only be buried

or exported for remelting outside the U.S. The commenter noted that the proposal recognizes the importance of recycling by providing that the management practice requires the use of scrap depleted of HAP metals except where the scrap is purchased specifically for its HAP metal content for use in alloying. The commenter asked that this provision be broadened by changing the phrase “for use in alloying” to “for use in the production of metal or alloys.” According to the commenter, this change is appropriate and needed because metal HAP in scrap can be valuable in the production of a metal as well as of an alloy.

One commenter recommended that EPA amend definitions in the proposed rule to align the applicability with subpart RRR. The commenter stated that the preamble to the rule indicates that GACT is considered the use of “clean charge” but, rather than defining that term, EPA requires that affected sources purchase or use only metal scrap that has been “depleted of HAP metals (to the extent practicable) charged to the melting furnace.” According to the commenter, EPA does not clearly define clean charge or explain what it means to deplete material of HAP metals “to the extent practicable.” The commenter is concerned that the definition of “depleting to the extent practicable” could change over time, leading to the proposed standard becoming a moving target for sources. Moreover, the commenter is concerned that internal scrap, which is permissible to use under subpart RRR, continue to be usable without any additional conditions under this proposed rule. To that end, the commenter requests that EPA revise the definition of “material containing aluminum foundry HAP” to clarify that clean charge, internal scrap, runaround scrap, and customer returns do not fall within that definition.

The commenter recommended adding this sentence to the definition: “For purposes of this subpart the following materials are not material containing aluminum foundry HAP—clean charge, internal scrap, runaround scrap, or customer returns, as defined in § (section) 63.1503.” The commenter said another way of addressing this concern would be to clarify in section 63.11550 that use of clean charge, internal scrap, runaround scrap, or customer returns as defined in section 63.1503 of subpart RRR, constitutes compliance with the requirements of this rule by adding this sentence: “Purchase or use of clean charge, internal scrap, runaround scrap, or customer returns, as defined in § 63.1503 constitutes compliance with

the requirement of this subparagraph to deplete a material of aluminum foundry HAP.”

*Response:* Our intent was that purchased metal scrap be depleted to the extent practicable of HAP contaminants, except when the HAP metal is an important specified component in the final casting. We did not intend for this provision to apply to ingots, sows, and alloys (they are not metal scrap), nor did we intend it to apply to internal scrap, runaround scrap, and customer returns (they are not purchased). We have clarified the final rule by stating that the provisions relating to the purchase of only metal scrap do not apply to “material that is not scrap (e.g., ingots, alloys, sows) or to materials that are not purchased (e.g., internal scrap, customer returns)”.

We acknowledged at proposal that certain types of scrap metal containing HAP were necessarily purchased to meet alloy specifications. We have clarified the management practices in the final rule that purchased metal scrap must be depleted to the extent practicable of HAP metals except when the HAP metal is needed to meet specifications for the casting. We have also added a recordkeeping requirement for documentation that the HAP metal is in the specifications for the cast metal product.

*Comment:* One commenter suggested that EPA eliminate records for “use” and focus solely on “purchase.” The commenter said the proposed rule requires facilities to purchase only metal scrap that has been depleted to the extent practicable of the relevant HAP. However, the commenter notes that the recordkeeping and labeling requirements in the proposed rule refer to “purchase and use” of such scrap. The commenter is concerned that the insertion of the word “use” might be misread to require tracking of use after metal enters the facility even though he understands that not to be EPA’s intent. The commenter said that EPA has appropriately determined that this aspect of the standard should apply at the point of purchase (i.e., entry to the facility) as the most effective way of assessing compliance and, after that point, the “usage” is not relevant to compliance. The commenter recommends that EPA delete the word “use,” or if that word is to remain, change the phrasing to “purchase for use.”

*Response:* We revised the reporting requirements to be consistent with the management practice provision, which stated “purchase only metal scrap \* \* \*,” by deleting the words “and

use” in the reporting requirements as suggested by the commenter.

*Comment:* One commenter requested that EPA clarify that the alloy exception for purchased scrap in section 63.11550(a)(2) also applies to nickel or other HAP.

*Response:* The exception for “metal scrap that is purchased specifically for its HAP metal content for use in alloying” (alloy exception) applies to any aluminum foundry HAP, copper foundry HAP and other nonferrous foundry HAP.

*Comment:* One commenter stated that the rule has a potentially adverse effect upon the beneficial reuse of metal scrap and asked that EPA consider not imposing the scrap purchase requirement upon those furnaces which are subject to the PM emission and control efficiency requirements. According to the commenter, these highly-controlled and closely-monitored furnaces are where EPA should most strongly encourage the melting of metal scrap and that EPA can encourage this practice by exempting these furnaces from the scrap purchase requirement and their attendant burdens. The commenter said that EPA can appropriately do so because these furnaces are the ones that are subject to the additional emission and control efficiency requirements, which make the scrap purchase requirement redundant and therefore unnecessary.

*Response:* Our analysis indicated that the management practices in the proposed rule represent GACT for all furnaces, even for those melting furnaces equipped with efficient emission controls. We expect careful attention to purchasing scrap metal, which has been depleted to the extent practicable of HAP metals that are not needed in the final casting, and use of covers during melting will reduce emissions at all melting operations. Consequently, we are requiring the use of management practices, including the limitations on scrap metal, at all of the affected sources, even if the furnaces are equipped with control devices for PM and metal HAP.

## 2. Covers

*Comment:* One commenter recommended the following revision to the requirement to use covers:

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 for standard foundry operating practices such as when access is needed for charging, alloy addition, tapping, ladling, fluxing, slagging/drossing, temperature measurement, observation).

The commenter also asked that EPA make clear that this parenthetical list of practices is illustrative, and is not meant to be exclusive or limiting in any way. The commenter suggested it would be helpful to have an additional example to address the situation in which a cover-closing mechanism fails and the cover must remain open, or partially open, until maintenance can be performed within a reasonable period. As an example, the commenter said one copper foundry reported that it would be impractical to cover and uncover a melting furnace continually for its permanent mold operations that ladles the metal into molds as many as 35 times in an hour.

One commenter stated that the rule should be revised to clarify requirements during periods that cover-closing mechanisms fail. The commenter said that occasionally the closing mechanism on a cover will jam, requiring maintenance to correct the problem, and these periods should be included as times during which it is not practicable to close the cover.

Another commenter suggested adding to the rule other examples of opening a cover on the melting furnace and to state that other examples include, but may not be limited to, ramming, scraping, fluxing, slagging, sampling, and temperature taking.

*Response:* The commenter correctly quoted the proposed rule, but we believe the commenter misreads the management practices requirements and that the term “to the extent practicable” addresses the concerns raised by the commenters. We cannot include every possibility in the rule of when it might be necessary to not use the cover. However, we have added the phrase “including but not limited to” to the examples in the rule to indicate that the list is not all inclusive.

### 3. Other Management Practices

*Comment:* One commenter said that foundries subject to the proposed regulation are required to prepare and operate pursuant to a written management practices plan and that the plan must include the management practices required by the rule, as well as “any other management practices that are implemented at the facility to minimize emissions from melting furnaces.” The commenter stated that foundries that implement additional management practices to minimize emissions from melting furnaces should not have additional regulatory requirements imposed on them through the written management plan because a foundry that implements an additional management practice that results in

reduced emissions from the melting furnace could be penalized if the practice is not included in the written management practices plan. The commenter believes such a result is unreasonable, and instead EPA should change the regulatory language to state that a facility may include additional management practices that minimize emissions from melting furnaces in the written management practices plan.

*Response:* We proposed to require the use of two management practices. We are finalizing those management practices in this rule, and they must be in the management practices plan. Although owners and operators can include additional requirements in their management practices plan, they are not required to do so by this rule. If, however, additional management practices are included in the plan, the owner or operator could be held responsible for them to the extent they are not followed. See section 11550(a)(3) in the final rule.

### E. Definitions

*Comment:* One commenter requested that EPA add a definition of “deviation” for purposes of this rule so it is clear to sources when they need to report. Because this is an area source rule, the commenter believes that sources may not be subject to part 70 and, in any event, may not be familiar with deviation reporting, and that EPA should explain that a deviation occurs if the facility fails to meet applicable standards.

*Response:* We agree that a definition of “deviation” is needed, and we have added the definition that has been used in other NESHAP, such as the area source standard for iron and steel foundries (40 CFR 63, subpart ZZZZZ).

*Comment:* Two commenters stated that EPA should clearly define in the rule that the affected source is a “melting operation.” The commenters stated that the affected source is defined in the preamble as “\* \* \* foundry melting operations (including all the various types of melting furnaces at the affected foundry) \* \* \*” However, the commenters said that the affected source does not appear to be defined within the rule.

*Response:* We agree that the rule language should specify what the affected source is, and we have stated directly in the final rule that the affected source is the collection of all melting operations at the facility.

*Comment:* One commenter asked to see clearer distinctions in the rule between the requirements for “large” foundries (above 6,000 tpy), “small” foundries (less than 6,000 tpy, but above

600 tpy actual), and “exempt” foundries (below 600 tpy actual).

*Response:* We have clarified the final rule, as the commenter suggested, and inserted definitions for “large” and “small” foundries that are subject to different requirements. It is important to recognize, however, that foundries with an annual metal melt production less than 600 tpy in calendar year 2010 are not exempted from the rule, but rather these foundries are not included in the source category, as discussed above in Section VI.B., and, therefore, not subject to the management practices, recordkeeping and other requirements of this final rule. In addition, it is also important to note that these rule requirements will not apply to these foundries so long as their production after calendar year 2010 remains below 600 tpy.

*Comment:* One commenter suggested that EPA add a definition of “die casting” to the rule to help clarify what operations are not applicable to the rule and asked that EPA also clarify the applicability of permanent mold casting, including “low pressure permanent mold casting” and “vacuum permanent mold casting” operations.

Another commenter asked for clarification of applicability when melting furnaces for die casting operations, which are not part of the source category, are co-located with aluminum, copper or other nonferrous foundry melting furnaces that are included in the source category. This commenter also requested a definition of “die casting.” The commenter also stated that it would be helpful for EPA to define “aluminum die casting operations,” and, for clarity, to make a conforming change to its definition of “aluminum foundry” using this defined term. The commenter suggested a modified version of the NAICS definition: “aluminum die casting operations mean operations included under the Standard Industrial Classification code 3363 and NAICS 331521. For purposes of this subpart, aluminum die casting operations includes low-pressure injection and high-pressure injection die casting process methods” and “aluminum foundry means a “facility that melts aluminum and pours molten aluminum into molds to manufacture aluminum castings (except aluminum die casting operations).”

*Response:* We agree that “die casting” should be defined and have done so in the final rule using the NAICS definition, which specifically states “under high pressure” and does not include “under low pressure,” as suggested by the commenter. With

regard to co-located operations, if melting operations for die casting and other types of casting are co-located, melting operations dedicated to die casting are not subject to this rule. However, melting operations that serve both types of casting operations are subject to the rule.

In response to the clarification on permanent mold casting, the rule applies to facilities using permanent mold casting because it is not die casting.

#### *F. Monitoring, Reporting and Recordkeeping*

*Comment:* Two commenters noted that records must identify the date and time of each melting operation; however, many foundries do not record this level of detail and are not configured to record this level of detail. In addition, the commenter said the benefit of such recordkeeping detail is not apparent and requested that EPA remove the requirement for recording the time of each melt event.

Two commenters requested that the reporting and recordkeeping be simplified and not required on a per melt basis. The commenter stated that his facility is subject to title V permitting requirements, and that the proposal's monitoring, recordkeeping and reporting requirements are based on EPA's expectation that the furnaces being regulated would not be subject to title V permit requirements. The commenter believes that overlaying the proposal's requirements on his plant would produce a complexity and added costs without any added benefits and stated that this is why EPA has proposed to exempt these foundries from title V permitting.

Another commenter claimed that demonstrating compliance with this management practice can also be unnecessarily burdensome because the rule states that a foundry "must keep records to document conformance with the management practice plan" and that the 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." According to the commenter, this recordkeeping requirement is too onerous for area source foundries, so much so that some foundries could be forced to have one full-time employee dedicated to this single regulatory requirement.

As proposed, the commenter said this requirement would be a serious disincentive for foundries to have covers or enclosures on their melting

furnaces, because melting furnaces that are not equipped with covers and enclosures are in compliance with this management practice and have no recordkeeping requirements at all. The commenter continued by saying that such a result is counterproductive, and regulations should provide foundries with incentives to install covers and enclosures rather than adding regulatory burdens to those that already have them installed. The commenter recommended that EPA streamline the recordkeeping requirement for covers and enclosures to state that the facility shall demonstrate that it follows the standard foundry operating practices for covers and enclosures that are included in its written management practices plan.

If EPA adopts the proposed approach discussed above, two commenters asked that EPA clarify that records of each time the furnace is opened and charged are not required because the proposed rule is ambiguous on this point. An alternative approach suggested by the commenter would be to require monthly inspections to verify that the covers are closed at the appropriate times during the melting operations. According to the commenter, given that sources already have a strong incentive to close covers on furnaces during operations due to OSHA and energy conservation concerns, a periodic check of operations is certainly sufficient to provide an assurance of compliance.

One commenter was concerned that sources will be required to record and report deviations from the recordkeeping requirements even though the covers were likely closed. According to the commenter, even with EPA's suggestion that checklists can be used, at a facility that does not have an extensive staff, an operator may fail to "check the box" even though the operator is following the good management practice of closing the cover that the facility has always used. The commenter said that these types of deviations may make a facility appear as though it is violating the standard even though it is substantively compliant. The commenter stated that a monthly inspection approach, on the other hand, will avoid this paperwork issue while still ensuring that facilities routinely comply with the rule. The commenter provided specific recommendations for revising the proposed rule language to address their recordkeeping concerns.

*Response:* After considering the numerous comments on the burden of the proposed recordkeeping requirements, we agree that the requirements can be streamlined and still be effective. Based on the comments provided, EPA agrees that the

burden to record the time of each melting operation and document that the management practices for covers were followed for each melting operation may require significant additional labor to implement. We have revised the rule to require that the owner or operator inform their appropriate operating personnel of the applicable management practices, perform monthly inspections to ensure that they are being followed, and maintain records documenting conformance with the management practices plan. The rule no longer requires records for the time of each melting operation and documentation that covers were used during each melt.

*Comment:* One commenter suggested that EPA consider a notification for copper and other nonferrous foundries to determine their production level above or below the 6,000 tpy threshold because such a notification would help to clarify which foundries are subject to the applicable emissions limits and monitoring requirements.

*Response:* We have revised the rule to require sources to indicate whether they are a small or a large foundry in the Notification of Compliance report.

*Comment:* One commenter said that EPA appears to be requiring all new sources equipped with a fabric filter to install, operate, and maintain a bag leak detection system, but that does not appear to be consistent with rule development documents contained within the docket. The commenter asked that EPA clarify that only new affected sources at copper foundries or other nonferrous foundries that melt 6,000 tpy or greater of metal would be required to operate bag leak detection systems.

*Response:* We have made a minor revision to the rule to further clarify that only new affected sources at a large foundry, defined as a copper or other nonferrous foundry with an annual copper and other nonferrous metal melt capacity of 6,000 tpy or greater, would be required to install and operate bag leak detection systems. Owners or operators of existing affected sources are not required to install a bag leak detection system, although they could choose to install one as a method of monitoring in lieu of visual emission observations.

*Comment:* Two commenters requested clarification on the proposed regulatory language that the monitoring requirements in section 63.11552 are applicable only to copper and other nonferrous foundries subject to the PM emissions limits and that have emissions controlled with a fabric filter. Other commenters said that the

proposed regulation states that a foundry subject to this provision “must conduct visible monitoring of the monovent or fabric filter outlet stack(s) for any visible emissions.” The commenters request that EPA clarify this provision because the term “monovent” is not common to the metal casting industry, and one commenter recommended deleting the term altogether, or if it is kept, it should be defined. One commenter also said that if this requirement is to monitor VE from a stack associated with a melting furnace, then the reference to “monovent or fabric filter outlet stack(s)” is too limiting because it does not include other add-on control or point source discharge options for copper and other nonferrous foundries. The commenter requests that EPA clarify this provision to specify the point of monitoring for VE. The commenter noted that the proposed regulation provides further confusion with the reference to “fugitive emissions,” which is not consistent with the requirements discussed above that require monitoring of VE from outlet stacks.

One commenter stated the monitoring requirements contain language regarding the observance of “visible fugitive emissions” relative to visual monitoring and requires visual monitoring of a monovent or fabric filter outlet stack(s) for any VE. The commenter stated since it appears that the intent is to require visual monitoring of the outlet of a baghouse, the use of the term “fugitive” would not be appropriate based on the definition of “fugitive emissions.”

*Response:* We have clarified the VE monitoring requirements in the final rule to address the commenters’ concerns. If an owner or operator of a large copper or other nonferrous foundry with an existing melting operation chooses to meet the PM standards using fabric filters, then the owner or operator must conduct VE monitoring. Monitoring the VE is a method to ensure that the fabric filters used to control PM emissions operate properly on a continuing basis. The VE monitoring is required only for fabric filters at existing large foundries (*i.e.*, copper or other nonferrous foundries that melt 6,000 tpy or more of material containing a copper foundry or other nonfoundry HAP collectively). In the alternative, owners or operators may install a bag leak detection system on the fabric filter system as a way of ensuring that it is operating correctly. We have deleted the term “fugitive emissions” and “monovent” from the monitoring requirements and revised

the rule to require that the owner or operator must look at the discharge point(s) of the fabric filter for any VE. Depending on the type and configuration of the fabric filter, the discharge point(s) could be a single stack, multiple stacks, monovent, or other location.

*Comment:* One commenter stated that the rule should not be more restrictive than the existing individual State permits in regard to VE and recommended that EPA change the language in the rule that says “if the visual monitoring reveals the presence of any VE \* \* \*”, to replace the term “any” with “abnormal.”

*Response:* Based on our historical experience and the precedent used in other rules (*e.g.*, the area source standard for ferroalloys in 40 CFR part 63, subpart YYYYYY), a properly designed and operated fabric filter will not release any VE under normal operating conditions. The use of the term “abnormal” suggests that some VE are acceptable. We continue to require that the fabric filter outlet (discharge) be observed for any VE, and if VE are observed, corrective action should be taken to repair the cause of the emissions.

*Comment:* One commenter said that the proposed regulations provide that a facility subject to daily VE monitoring can switch to weekly VE monitoring after 90 consecutive days of no VE recorded. The commenter stated that demonstrating no VE for 5 consecutive days should be sufficient to allow weekly VE monitoring because that period of time would show that the fabric filter had been properly designed and had no VE. The commenter claimed that generally if VE are not observed in a 5 consecutive day period, then VE are unlikely to be observed at all (based on the minimal operational changes that are expected from most foundries). According to the commenter, weekly VE monitoring is also less burdensome on the foundry and would, in most cases, provide adequate safeguards that the baghouse is functioning properly.

*Response:* We have reconsidered the requirement that an owner or operator must conduct daily observations with no VE for 90 consecutive days of monitoring prior to reducing the observation frequency to weekly, and we agree that a shorter time period before reducing to weekly observations would be just as effective. We have revised the final rule to allow weekly observations after 30 consecutive days of observations with no VE because it provides assurance that the baghouse has been properly designed and properly installed as shown by 30

consecutive days of operation with no visible leaks.

*Comment:* One commenter stated that the time for taking corrective action in response to a bag leak detection alarm must be increased for reasons of worker safety and environmental protection. The commenter stated the proposal requires that covered foundries “must initiate procedures to determine the cause at every alarm from a bag leak detection system within 1 hour of the alarm and alleviate the cause of the alarm within 3 hours by taking whatever corrective actions are necessary,” and longer times for initiating and taking corrective action are authorized by the proposal “if you identify in the monitoring plan this specific condition as one that would lead to an alarm” and “adequately explain why it is not feasible to alleviate this condition within 3 hours.” The commenter believes these requirements fail to account for the conditions under which baghouses operate in foundries and to demand perfect foreseeability to avoid violations. He noted that baghouses in foundries operate at extremely high temperatures, and baghouse alarms may occur when metal is being melted or when molten metal is being cast. According to the commenter, the billet and the furnace must cool sufficiently before the baghouse compartment can be safely entered. Also, according to the commenter, stringent company protocols for inspecting and replacing bags typically require that collectors cool for 24 to 72 hours after a furnace is shut down before entry into the collector is permitted. The commenter does not believe that it is productive in its monitoring plan to attempt to predict the entire universe of “specific conditions” that may trigger the alarm and to “adequately explain” why it is not feasible to complete all of the necessary corrective actions within 3 hours.

According to another commenter, these time frames are totally unrealistic and inappropriate for copper and other nonferrous foundries because most, if not all, of these foundries are small businesses and do not always have a fulltime employee dedicated solely to environmental compliance. The commenter said that, while identifying the cause of an emissions occurrence and taking steps to address it in a timely fashion is desirable, more realistic time frames for responding are necessary. The commenter suggested that EPA consider a more realistic requirement, such as a facility must take steps to identify the cause within 24 hours and must take steps to alleviate the cause within 72 hours.

*Response:* We disagree with the commenter that the corrective action response requirements should be revised to provide more time. EPA has applied these same corrective action time frames in the monitoring requirements for several similar source categories, and we are not aware of any implementation problems. The bag leak detection requirements include a provision, as the commenter noted, to provide more time when there are extenuating circumstances or conditions. It is appropriate that these conditions be identified in the monitoring plan. An owner or operator should consider amending its monitoring plan to account for events that it subsequently learns require longer time periods for correction.

Similar to bag leak detection alarms, we agree that there may be occasions when the cause of VE cannot be corrected within 3 hours. We have revised the rule to incorporate a provision that parallels that of the bag leak detection requirement. The new provision requires that the owner or operator identify in a monitoring plan the specific conditions that would lead to VE and adequately explain why it is not feasible to alleviate this condition within 3 hours.

*Comment:* One commenter said EPA details bag leak detection system installation, operation, and maintenance requirements for new affected sources equipped with a fabric filter and requires existing facilities subject to section 63.11551(b) to prepare and submit an operation and maintenance plan for control devices other than fabric filters. The commenter asked that EPA consider requiring all affected sources subject to the emission limits in section 63.11550(b), including existing sources that are not required to install a bag leak detection system, to prepare and operate according to an operation and maintenance plan for each control device. Additionally, the commenter asked that EPA also consider requiring affected sources subject to emission limits under section 63.11550(b) to install and maintain each capture and collection system to meet acceptable engineering standards, such as those published by the American Conference of Governmental Industrial Hygienists.

*Response:* As we stated at proposal, monitoring fabric filters at existing sources for any VE provides assurance that the bags are not leaking and that the fabric filter is performing properly. Corrective action is required if any VE are observed. Consequently, we do not think that the additional monitoring burden recommended by the commenter (preparing an operation and

maintenance plan or specifying the standard to which capture and collection systems must be installed) would result in an improvement in emission control. Furthermore, they would impose an additional burden on many small businesses.

*Comment:* One commenter claimed that EPA provides no technical basis for the “no VE” requirement for copper and other nonferrous foundries in the administrative record for this proposed regulation. According to the commenter, without any technical basis or data to support a “no VE” requirement for either stack emissions or fugitive emissions, the requirement cannot represent a GACT standard for copper and other nonferrous foundry area sources. The commenter stated that the “no VE” requirement is unsubstantiated and inappropriate.

*Response:* There is not a “no VE” requirement; the requirement is to take corrective action if VE are observed from a baghouse because (as discussed above) a properly designed, operated, and maintained baghouse should not have VE. In addition, the observation of VE for baghouses is a baghouse monitoring option that only an existing affected facility may use. In the alternative, an existing affected facility may install and operate a bag leak detection system as a way of monitoring the proper operation of its baghouses. Monitoring requirements are not GACT; rather, they are based on monitoring certain parameters that would indicate that the control device (e.g., a baghouse) is operating properly. It is well established that if VE occur from a baghouse that is used on the exhaust of a melting furnace, then there is a problem with the baghouse (e.g., leaks or tears in the fabric). This monitoring option was previously used in the area source standard developed for ferroalloy furnaces (40 CFR Part 63, subpart YYYYYY), and we proposed it in this rule as a monitoring option for baghouses used on the exhausts of melting furnaces. As mentioned earlier, a facility has the option of monitoring with a bag leak detection system if there is a particular reason they do not want to monitor for VE.

#### G. Testing Requirements

*Comment:* One commenter noted that many of the existing emission control devices that will be subject to the PM emission limit may require significant physical modification in order to conduct the testing in accordance with the test protocols, and these modifications will substantially increase the cost of the testing, but will not affect the performance of the control device.

The commenter stated that in some cases the ductwork modifications will have to be removed after the test is completed. The commenter estimates that as many as 95 percent of the affected control devices may never have been tested based primarily on the fact that the State permitting agency did not feel that such testing was necessary. Given the alternate emission limit of grains per dry standard cubic feet specified within the rule, the commenter believes that VE observations at the outlet of the baghouse provides adequate assurance that the fabric filter is performing in accordance with the rule. The commenter also stated that many State permitting authorities have already adopted VE observations as the only monitoring. The commenter recommended that the area source rule allow an affected facility to use observance of VE as an acceptable method of demonstrating compliance.

The commenter continued by stating that if EPA disagrees with the above recommendation, then EPA should amend the 5-year period for which the results of a prior performance test can be used to demonstrate compliance. The commenter recommended that any existing affected facility that has performed stack tests, regardless of when those tests may have been performed, should be able to use the results to document compliance with the rule as long as the facility is able to provide copies of the maintenance records documenting volume tests, filter changes, and general maintenance done to the equipment upon request.

One commenter operates a brass foundry that voluntarily installed baghouse controls for the melting and pouring operations at the foundry about 17 years ago to capture the metal fume emissions, and currently there are nine separate baghouse modules with a common fan and inlet, but nine individual discharge stacks of which none are testable. The commenter considers the cost to build and test each of these stacks to be an economic hardship for his facility for what he believes to be zero environmental gain.

The commenter stated that manufacturers of baghouse modules like the ones currently in operation at this facility will guarantee new units to meet an outlet particulate concentration of 0.015 gr/dscf for the melting operation. Based on this, the commenter said that an alternative compliance method could be to inspect the system for leaks using accepted visual inspection methods, and such inspections could be done by third party consultants at a more acceptable cost to show that the filters

have been properly installed and functioning as they were intended.

The commenter also stated that broken bag detectors might be used to show both the initial compliance and add a layer of security to the long term leak detection of the emission control system. According to the commenter, broken bag detectors for this system would not be inexpensive, but would likely be a much lower cost than to build and test nine stacks. The commenter said that this facility has over time found a steady state operating range for its fume control system, and by monitoring the cleaning cycle frequency, can detect the slightest system change or failure and react to fix the problem at the start of the failure. The commenter asked that this use of innovative technology should be considered as an acceptable compliance tool.

The commenter said this facility has already installed the emission control for foundry melting operations, but believes that the cost of testing to show compliance is too high for his facility. The commenter asked if “no VE” criteria could be used as acceptable compliance method for facility emissions.

*Response:* We understand the commenters’ concerns regarding the costs to conduct the compliance tests; however, we have defined GACT for the affected facilities to include a PM emission limit, and compliance with this limit must be demonstrated by compliance testing. We agree that testing all nine stacks is not necessary if the melting operation and expected emissions are similar across the stacks. We revised the rule to allow the owner or operator to perform the performance testing on one or more representative stacks with the approval of the Administrator or his or her authorized representative (e.g., a State that has been delegated authority to implement and enforce this rule). The owner or operator must provide data or an adequate explanation why the stack(s) chosen for testing are representative. We note that testing contractors have methods and procedures to make a baghouse “testable,” such as adding a temporary stack extension to a short stack to meet Method 5 criteria. However, we did not revise the requirements for the use of prior test results to allow tests that may have been conducted long ago, perhaps when the baghouse was first installed, and continue to limit the use of prior tests to the preceding 5 years from the compliance date. We are concerned that testing performed more than 5 years from the compliance date, which is beyond the term of a typical operating

permit, would not be representative of current operation.

*Comment:* One commenter stated that the requirement that the facility “must operate each melting furnace within  $\pm$  10 percent of the normal process rate” during the performance test is not consistent with some State requirements for performance testing and requested that EPA consider regulatory language that allows for an alternate method that is approved by another permitting authority.

*Response:* We agree that the testing requirement discussed by the commenter may not be consistent with requirements in existing permits and may not be appropriate in all cases. We deleted this testing requirement from the final rule and note that the requirements for conducting performance tests are already addressed in the applicable General Provisions (section 63.7(e)(1)), which specify that performance tests be “based on representative performance (i.e., performance based on normal operating conditions) of the affected source.”

#### H. Exemption From Title V Permitting Requirements

*Comment:* Several commenters agreed with the proposed title V permit exemption, noting such factors as the adequacy of existing State programs to ensure compliance, the additional economic and other burdens imposed by title V permitting, and the lack of technical resources to comply with permitting requirements for facilities that are mostly small businesses support the exemption.

*Response:* We acknowledge the commenters’ support for the exemption from title V permitting requirements in this rule.

*Comment:* One commenter argued that the agency’s proposal to exempt the three area source categories from title V requirements is unlawful and arbitrary. The commenter states that section 502(a) of the CAA authorizes EPA to exempt area source categories from title V permitting requirements if the Administrator finds that compliance with such requirements is “impracticable, infeasible or unnecessarily burdensome.” 42 U.S.C. section 7661a(a). The commenter notes that EPA did not claim that title V requirements are impracticable or infeasible for any of the source categories it proposes to exempt, but that EPA instead relied entirely on its claim that title V would be “unnecessarily burdensome.”

*Response:* Section 502(a) of the CAA states, in relevant part, that:

\* \* \* [t]he Administrator may, in the Administrator’s discretion and consistent with the applicable provisions of this chapter, promulgate regulations to exempt one or more source categories (in whole or in part) from the requirements of this subsection if the Administrator finds that compliance with such requirements is impracticable, infeasible, or unnecessarily burdensome on such categories, except that the Administrator may not exempt any major source from such regulations. See 42 U.S.C. section 7661a(a).

The statute plainly vests the Administrator with discretion to determine when it is appropriate to exempt non-major (i.e., area) sources of air pollution from the requirements of title V. The commenter correctly notes that EPA based the proposed exemptions solely on a determination that title V is “unnecessarily burdensome,” and did not rely on whether the requirements of title V are “impracticable” or “infeasible”, which are alternative bases for exempting area sources from title V.

To the extent the commenter is asserting that EPA must determine that all three criteria in CAA section 502 are met before an area source category can be exempted from title V, the commenter misreads the statute. The statute expressly provides that EPA may exempt an area source category from title V requirements if EPA determines that the requirements are “impracticable, infeasible or unnecessarily burdensome.” See CAA section 502 (*emphasis added*). If Congress had wanted to require that all three criteria be met before a category could be exempted from title V, it would have stated so by using the word “and,” in place of “or”.

*Comment:* One commenter stated that in order to demonstrate that compliance with title V would be “unnecessarily burdensome,” EPA must show, among other things, that the “burden” of compliance is unnecessary. According to the commenter, by promulgating title V, Congress indicated that it viewed the burden imposed by its requirements as necessary as a general rule. The commenter maintained that the title V requirements provide many benefits that Congress viewed as necessary. Thus, in the commenter’s view, EPA must show why, for any given category, special circumstances make compliance unnecessary. The commenter believed that EPA has not made that showing for any of the categories it proposes to exempt.

*Response:* EPA does not agree with the commenter’s characterization of the demonstration required for determining that title V is unnecessarily burdensome for an area source category. As stated

above, the CAA provides the Administrator discretion to 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”). In addition to interpreting the term “unnecessarily burdensome” and developing the four-factor balancing test in the Exemption Rule, EPA applied the test to certain area source categories.

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).<sup>4</sup>

In discussing the above factors in the Exemption Rule, we explained that we considered on “a case-by-case basis the extent to which one or more of the four

factors supported title V exemptions for a given source category, and then we assessed whether considered together those factors demonstrated that compliance with title V requirements would be ‘unnecessarily burdensome’ on the category, consistent with section 502(a) of the Act.” See 70 FR 75323. Thus, we concluded 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.

The commenter asserts that “EPA must show \* \* \* that the ‘burden’ of compliance is unnecessary.” This is not, however, one of the four factors that we developed in the Exemption Rule in interpreting the term “unnecessarily burdensome” in CAA section 502, but rather a new test that the commenter maintains EPA “must” meet in determining what is “unnecessarily burdensome” under CAA section 502. EPA did not re-open its interpretation of the term “unnecessarily burdensome” in CAA section 502 in the February 9, 2009 proposed rule for the categories at issue in this rule. Rather, we applied the four-factor balancing test articulated in the Exemption Rule to the source categories for which we proposed title V exemptions. Had we sought to re-open our interpretation of the term “unnecessarily burdensome” in CAA section 502 and modify it from what was articulated in the Exemption Rule, we would have stated so in the February 9, 2009 proposed rule and solicited comments on a revised interpretation, which we did not do. Accordingly, we reject the commenter’s attempt to create a new test for determining what constitutes “unnecessarily burdensome” under CAA section 502, as that issue falls outside the purview of this rulemaking.<sup>5</sup>

Moreover, were the comment framed as a request to reopen our interpretation of the term “unnecessarily burdensome” in CAA section 502, which it is not, we would deny such request because we have a court-ordered deadline to complete this rulemaking by June 15, 2009. In any event, although the commenter espouses a new

interpretation of the term “unnecessarily burdensome” in CAA section 502 and attempts to create a new test for determining whether the requirements of title V are “unnecessarily burdensome” for an area source category, the commenter does not explain why EPA’s interpretation of the term “unnecessarily burdensome” is arbitrary, capricious or otherwise not in accordance with law. We maintain that our interpretation of the term “unnecessarily burdensome” in section 502, as set forth in the Exemption Rule, is reasonable.

*Comment:* One commenter stated that exempting a source category from title V permitting requirements deprives both the public generally and individual members of the public who would obtain and use permitting information from the benefit of citizen oversight and enforcement that Congress plainly viewed as necessary. According to the commenter, the text and legislative history of the CAA provide that Congress intended ordinary citizens to be able to get emissions and compliance information about air toxics sources and to be able to use that information in enforcement actions and in public policy decisions on a State and local level. The commenter stated that Congress did not think that enforcement by States or other government entities was enough; if it had, Congress would not have enacted the citizen suit provisions, and the legislative history of the CAA would not show that Congress viewed citizens’ access to information and ability to enforce CAA requirements as highly important both as an individual right and as a crucial means to ensuring compliance. According to the commenter, if a source does not have a title V permit, it is difficult or impossible—depending on the laws, regulations and practices of the State in which the source operates—for a member of the public to obtain relevant information about its emissions and compliance status. The commenter stated that likewise, it is difficult or impossible for citizens to bring enforcement actions. The commenter continued that EPA does not claim—far less demonstrate with substantial evidence, as would be required—that citizens would have the same ability to obtain compliance and emissions information about sources in the categories it proposes to exempt *without* title V permits. The commenter also said that likewise, EPA does not claim—far less demonstrate with substantial evidence—that citizens would have the same enforcement ability. Thus, according to the commenter, the

<sup>4</sup> 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 72 FR 15254–15255, March 25, 2005. As shown above, after conducting the four-factor balancing test and determining that title V requirements would be unnecessarily burdensome on the area source categories at issue here, we examined whether the exemption from title V would adversely affect public health, welfare and the environment, and found that it would not.

<sup>5</sup> If the commenter objected to our interpretation of the term “unnecessarily burdensome” in the Exemption Rule, it should have commented on, and challenged, that rule. Any challenge to the Exemption Rule is now time barred by CAA section 307(b). Although we received comments on the title V Exemption Rule during the rulemaking process, no one sought judicial review of that rule.

exemptions EPA proposes plainly eliminate benefits that Congress thought necessary. The commenter claimed that to justify its exemptions, EPA would have to show that the informational and enforcement benefits that Congress intended title V to confer—benefits which the commenter argues are eliminated by the exemptions—are for some reason unnecessary with respect to the categories it proposes to exempt. The commenter concluded that EPA does not even *acknowledge* these benefits of title V, far less explain why they are unnecessary, and that for this reason alone, EPA's proposed exemptions are unlawful and arbitrary.

*Response:* Once again, the commenter attempts to create a new test for determining whether the requirements of title V are “unnecessarily burdensome” on an area source category. Specifically, the commenter argues that EPA does not claim or demonstrate with *substantial evidence* that citizens would have the same access to information and the same ability to enforce under these NESHAP, absent title V. The commenter's position represents a significant revision of the fourth factor that EPA developed in the Exemption Rule in interpreting the term “unnecessarily burdensome” in CAA section 502. For all of the reasons explained above, the commenter's attempt to create a new test for EPA to meet in determining whether title V is “unnecessarily burdensome” on an area source category cannot be sustained. This rulemaking did not re-open EPA's interpretation of the term “unnecessarily burdensome” in CAA section 502. EPA reasonably applied the four factors to the facts of the three source categories at issue in this rule, and the commenter has not identified any flaw in EPA's application of the four factor test to the three area source categories at issue here.

Moreover, as explained in the proposal, we considered implementation and enforcement issues in the fourth factor of the four-factor balancing test. Specifically, the fourth factor of EPA's unnecessarily burdensome analysis provides that EPA will consider whether there are implementation and enforcement programs in place that are sufficient to assure compliance with the NESHAP without relying on title V permits. *See* 70 FR 75326.

In applying the fourth factor here, EPA determined that there are adequate enforcement programs in place to assure compliance with the CAA. As stated in the proposal, we believe that State-delegated programs are sufficient to assure compliance with the NESHAP

and that EPA retains authority to enforce this NESHAP under the CAA. *See* 74 FR 6521. We also indicated that States and EPA often conduct voluntary compliance assistance, outreach, and education programs to assist sources and that these additional programs will supplement and enhance the success of compliance with this NESHAP. *See* 74 FR 6521. The commenter does not challenge the conclusion that there are adequate State and Federal programs in place to ensure compliance with and enforcement of the NESHAP. Instead, the commenter provides an unsubstantiated assertion that information about compliance by the area sources with these NESHAP will not be as accessible to the public as information provided to a State pursuant to title V. In fact, the commenter does not provide any information that States will treat information submitted under these NESHAP differently than information submitted pursuant to a title V permit.

Even accepting the commenter's assertions that it is more difficult for citizens to enforce the NESHAP absent a title V permit, which we dispute, in evaluating the fourth factor in EPA's balancing test, EPA concluded that there are adequate implementation and enforcement programs in place to enforce the NESHAP. The commenter has provided no information to the contrary or explained how the absence of title V actually impairs the ability of citizens to enforce the provisions of these NESHAP. Furthermore, the fourth factor is one factor that we evaluated in determining if the title V requirements were unnecessarily burdensome. As explained above, we considered that factor together with the other factors and determined that it was appropriate to finalize the proposed exemptions for the area source categories at issue in this rule.

*Comment:* One commenter explained that title V provides important monitoring benefits, and, according to the commenter, EPA assumes that title V monitoring would not add any monitoring requirements beyond those required by the regulations for each category. The commenter said that in its proposal EPA proposed to require “management practices currently used at most facilities is GACT for all foundries in each of the three source categories. 74 Fed. Reg. at 6520.” The commenter further states that “EPA argues that its proposed standard, by including these practices, provides monitoring in the form of recordkeeping that would ‘assure compliance’ with the requirements of the proposed rule. *Id.* at 6521.” The commenter maintains that

EPA made conclusory assertions and that the Agency failed to provide any evidence to demonstrate that the proposed monitoring requirements will assure compliance with the NESHAP for the exempt sources. The commenter stated that, for this reason as well, its claim that title V requirements are “unnecessarily burdensome” is arbitrary and capricious, and its exemption is unlawful and arbitrary and capricious.

*Response:* As noted in the earlier comment, EPA used the four-factor test to determine if title V requirements were unnecessarily burdensome. In the first factor, EPA considers whether imposition of title V requirements would result in significant improvements to the compliance requirements that are proposed for the area source categories. *See* 70 FR 75323. It is in the context of this first factor that EPA evaluates the monitoring, recordkeeping and reporting requirements of the proposed NESHAP to determine the extent to which those requirements are consistent with the requirements of title V. *See* 70 FR 75323.

The commenter asserts that “EPA argues that its proposed standard, including these practices, ‘provides monitoring in the form of recordkeeping that will assure compliance with the requirements of the proposed rule.’” The commenter has taken a phrase from the preamble out of context to imply that EPA has only required monitoring in the form of recordkeeping. In the proposal, we stated:

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.

See 74 FR 6520.

We nowhere state or imply that the only monitoring required for the rule is in the form of recordkeeping. As the above excerpt states, we required periodic monitoring, *i.e.*, inspection for VE, of emission control devices for existing affected sources and continuous monitoring, *i.e.*, bag leak detection system, for new affected sources when the rule requires the installation of such controls. This monitoring is in addition to the recordkeeping that serves as monitoring for the management practices. For the final rule, we have added a requirement for monthly inspections to assure that the management practices are being implemented. The commenter does not provide any evidence that contradicts the conclusion that the proposed monitoring requirements are sufficient to assure compliance with the standards in the rule.

Based on the foregoing, we considered whether title V monitoring requirements would lead to significant improvements in the monitoring requirements in the proposed NESHAP and determined that they would not. We believe that the monitoring, recordkeeping and reporting requirements in this area source rule can assure compliance.

For the reasons described above and in the proposed rule, the first factor supports exempting these three area source categories from title V requirements. Assuming, for arguments sake, that the first factor alone cannot support the exemption, the four-factor balancing test requires EPA to examine the factors in combination and determine whether the factors, viewed together, weigh in favor of exemption. See 70 FR 75326. As explained above, we determined that the factors, weighed together, support exemption of the area source categories from title V.

*Comment:* One commenter believes that EPA cannot justify exempting the source from title V by asserting that compliance with title V requirements poses a significant burden. According to the commenter, regardless of whether EPA regards the burden as “significant,” the Agency may not exempt a category from compliance with title V requirements unless compliance is “unnecessarily burdensome.” Or in the commenter’s words, that “the compliance burden is especially great.” The commenter stated that in any event, EPA’s claims about the alleged burden of compliance is entirely conclusory

and could be applied equally to any major or area source category; therefore, the commenter claims that EPA has not justified why these three sources should be exempt from title V permitting as opposed to any other category.

*Response:* As we have stated before, we found the burden placed on these sources in complying with the title V requirements is unnecessarily burdensome when we applied the four-factor balancing test. We did not re-open EPA’s interpretation of the term “unnecessarily burdensome” in this rule. As explained above, we maintain that the Agency’s interpretation of the term “unnecessarily burdensome,” as set forth in the Exemption Rule and reiterated in the proposal to this rule, is reasonable.

In applying the four-factor test, we properly analyzed the second factor, *i.e.*, will title V permitting impose a significant burden on the area source, and will that burden be aggravated by any difficulty that the source may have in obtaining assistance from the permitting agency. See 70 FR 75320. EPA found that the sources would have a significant burden because we estimated that the average cost of obtaining and complying with a title V permit in general was \$65,700 per source for a 5-year permit period. *Id.* In addition, EPA estimates that more than 300 of the affected sources would need to get a title V permit, absent the exemption finalized in the rule. In addition, EPA found that 98 percent of the sources affected by the rule are small businesses, most with fewer than 50 employees and about 25 percent or more with only one to four employees. Small businesses, such as most all of the foundries in these three source categories, often lack the technical resources to comply with the permitting requirements and the financial resources needed to hire the necessary staff or outside consultants. EPA found that not only is the individual cost of permitting significant for these source categories (*i.e.*, \$65,700), but also the cost to the source categories as a whole is significant. Furthermore, given the number of affected sources in these three categories (*i.e.*, more than 300), it would likely be difficult for them to obtain assistance from the permitting authorities. These specific factors for the affected sources alone justify that EPA has properly exempted the source categories from title V. However, as discussed in the proposal and above, EPA analyzed all of the four factors in making its determination that these sources should be exempt from title V permitting requirements; and we found

that the totality of these factors weighs heavily in favor of the exemption.

Therefore, we disagree with the commenter’s assertion that EPA’s finding (*i.e.*, that the burden of obtaining a title V permit is significant does not equate to the required finding that the burden is unnecessary) is misplaced. While EPA could have found that the second factor alone could justify the exemption, EPA found that the other three factors also support exempting the sources from the title V requirements because the permitting requirements are unnecessarily burdensome for these three source categories. We also disagree with the commenter that EPA has not provided a source-specific analysis that the burden for these three source categories is unnecessarily burdensome.

*Comment:* According to one commenter, EPA argued that compliance with title V would not yield any gains in compliance with underlying requirements in the relevant NESHAP (74 FR 6521). The commenter stated that EPA’s conclusory claim could be made equally with respect to any major or area source category. According to the commenter, the Agency provides no specific reasons to believe—with respect to any of the categories it proposes to exempt—that the additional informational, monitoring, reporting, certification, and enforcement requirements that exist in title V, but not in these NESHAP, would not provide additional compliance benefits. The commenter also stated that the only basis for EPA’s claim is, apparently, its beliefs that those additional requirements never confer additional compliance benefits. According to the commenter, by advancing such argument, EPA merely seeks to elevate its own policy judgment over Congress’ decisions reflected in the CAA’s text and legislative history.

*Response:* The commenter takes out of context certain statements in the proposed rule concerning the factors used in the balancing test to determine if imposition of title V permit requirements is unnecessarily burdensome for the source categories. The commenter also mischaracterizes the first of the four-factor balancing test with regard to determining whether imposition of title V would result in significant improvements in compliance. In addition, the commenter mischaracterizes the analysis in the third factor of the balancing test which instructs EPA to take into account any gains in compliance that would result from the imposition of the title V requirements.

First, EPA nowhere states, nor does it believe, that title V never confers

additional compliance benefits as the commenter asserts. While EPA recognizes that requiring a title V permit offers additional compliance options, the statute provides that EPA must assess whether compliance with title V would be unnecessarily burdensome to the specific area source. For the three source categories subject to this rulemaking, EPA concluded that requiring title V permits would be unnecessarily burdensome.

Second, the commenter mischaracterizes the first factor by asserting that EPA must demonstrate that title V will provide no additional compliance benefits. The first factor calls for a consideration of “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.” Thus, contrary to the commenter’s assertion, the inquiry under the first factor is not whether title V will provide any compliance benefit, but rather whether it will provide significant improvements in compliance requirements.

EPA feels that the monitoring, recordkeeping and reporting requirements in the rule are sufficient to assure compliance with the requirements of this rule and are sufficient to allow the public the opportunity to obtain knowledge about the source, consistent with the goal in title V permitting. For example, in the Initial Notification, the source must identify its size, whether it must meet any of the GACT requirements in the rule, and how it plans to comply with the rule requirements. The source must also certify how it is complying and that it has complied with the requirements to institute the management practices, to establish recordkeeping to demonstrate compliance with the management practices, to install controls, if necessary, to establish monitoring of the controls as required, and to establish recordkeeping regarding the inspections of the controls and any corrective actions taken as a result of seeing any visual monitoring. See § 63.11553 in the final rule. These two reports are available to the public once the source has filed them with the permitting agency. The source must also keep records and conduct inspections to document that it is complying with the management practices finalized in this rule. See § 63.11553 in the final rule. The source must monitor and record the VE from the PM control, if applicable, must begin corrective action and record the specifics about the corrective action upon seeing any VE from the control.

The source must also submit deviation reports to the permitting agency every 6 months if there has been a deviation in the requirements of the rule. See § 63.11553 in the final rule. Again, these deviation reports are available to the public once the source has submitted them to the permitting agency. EPA believes that these requirements in the rule itself, including the requirement to provide information about the source’s compliance that is available to the public, provide sufficient basis to ensure compliance, and does not feel that the title V requirements, if applicable to these sources, would offer significant improvements in the compliance of the sources with the rule.

Third, the commenter incorrectly characterizes our statements in the proposed rule concerning our application of the third factor. Under the third factor, EPA evaluates “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.” Contrary to what the commenter alleges, EPA did not state in the proposed rule that compliance with title V would not yield any gains in compliance with the underlying requirements in the relevant NESHAP, nor does factor three require such a determination.

Instead, consistent with the third factor, we considered whether the costs of title V are justified in light of any potential gains in compliance. In other words, EPA must view the costs of title V permitting requirements, considering any improvement in compliance above what the rule requires. EPA reviewed the three area source categories at issue and determined that fewer than 20 of the more than 300 sources that would be subject to the rule currently have a title V permit. As stated in the proposal (74 FR 6521), 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, 72 FR 32290, June 12, 2007, EPA ICR Number 1587.07. Based on this information, EPA determined that there is a significant cost burden to the industry to require title V permitting for all the sources subject to the rule. In addition, in analyzing factor one, EPA found that imposition of the title V requirements offers no significant improvements in compliance. In considering the third factor, we stated in part that, “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.” See 74 FR 6521.

Most importantly, EPA considered all four factors in the balancing test in determining whether title V was unnecessarily burdensome on the area source categories. EPA found it reasonable after considering all four factors to exempt these three source categories from the permitting requirements in title V. This rulemaking did not re-open EPA’s interpretation of the term “unnecessarily burdensome” in CAA section 502. Because the commenter’s statements do not demonstrate a flaw in EPA’s application of the four-factor balancing test to the specific facts of the source categories at issue here, the comments provide no basis for the Agency to reconsider its proposal to exempt the area source categories from title V.

*Comment:* According to one commenter, “[t]he agency does not identify any aspect of any of the underlying NESHAP showing that with respect to these specific NESHAP—unlike all the other major and area source NESHAP it has issued without title V exemptions—title V compliance is unnecessary.” Instead, according to the commenter, EPA merely pointed to existing State requirements and the potential for actions by States and EPA that are generally applicable to all categories (along with some small business and voluntary programs). The commenter said that, absent a showing by EPA that distinguishes the sources it proposes to exempt from other sources, however, the Agency’s argument boils down to the generic and conclusory claim that it generally views title V requirements as unnecessary. The commenter stated that, while this may be EPA’s view, it was not Congress’ view when Congress enacted title V, and a general view that title V is unnecessary does not suffice to show that title V compliance is unnecessarily burdensome.

*Response:* The commenter again takes issue with the Agency’s test for determining whether title V is unnecessarily burdensome, as developed in the Exemption Rule. Our interpretation of the term “unnecessarily burdensome” is not the subject of this rulemaking. In any event, as explained above, we believe the Agency’s interpretation of the term “unnecessarily burdensome” is a reasonable one. To the extent the commenter asserts that our application of the fourth factor is flawed, we

disagree. The fourth factor involves a determination as to whether there are implementation and enforcement programs in place that are sufficient to assure compliance with the rule without relying on the title V permits. In discussing the fourth factor in the proposal, EPA states that prior to delegating implementation and enforcement to a State, EPA must ensure that the State has programs in place to enforce the rule. EPA believes that these programs will be sufficient to assure compliance with the rule. EPA also retains authority to enforce this NESHAP anytime under CAA sections 112, 113 and 114. EPA also noted other factors in the proposal that together are sufficient to assure compliance with this area source.

The commenter argues that EPA cannot exempt these area sources from title V permitting requirements because “[t]he agency does not identify any aspect of any of the underlying NESHAP showing that with respect to these specific NESHAP—*unlike all the other major and area source NESHAP it has issued without title V exemptions*—title V compliance is unnecessary” (*emphasis added*). As an initial matter, EPA cannot exempt major sources from title V permitting. 42 U.S.C. 502(a). As for area sources, the standard that the commenter proposes—that EPA must show that “title V compliance is unnecessary”—is not consistent with the standard the Agency established in the Exemption Rule and applied in the proposed rule in determining if title V requirements are unnecessarily burdensome for the three source categories at issue.

Furthermore, we disagree that the basis for excluding the three area source foundry categories from title V requirements is generally applicable to any source category. As explained in the proposal preamble and above, we balanced the four factors considering the facts and circumstances of the three source categories at issue in this rule. For example, in assessing whether the costs of requiring the sources to obtain a title V permit was burdensome, we concluded that because greater than 90 percent of the sources did not have a title V permit, the costs imposed on the source categories were significant compared to the additional compliance benefits offered by the title V permitting process.

*Comment:* One commenter stated that the legislative history of the CAA shows that Congress did not intend EPA to exempt source categories from compliance with title V unless doing so would not adversely affect public health, welfare, or the environment. See

74 FR 6522. Nonetheless, according to the commenter, EPA does not make any showing that its exemptions would not have adverse impacts on health, welfare and the environment. The commenter stated that, instead, EPA offered only the conclusory assertion that “the level of control would remain the same” whether title V permits are required or not (74 FR 6522). The commenter continued by stating that EPA relied entirely on the conclusory arguments advanced elsewhere in its proposal that compliance with title V would not yield additional compliance with the underlying NESHAP. The commenter stated that those arguments are wrong for the reasons given above, and therefore EPA’s claims about public health, welfare and the environment are wrong too. The commenter also stated that Congress enacted title V for a reason: to assure compliance with all applicable requirements and to empower citizens to get information and enforce the CAA. The commenter said that those benefits—of which EPA’s proposed rule *deprives* the public—would improve compliance with the underlying standards and thus have benefits for public health, welfare and the environment. According to the commenter, EPA has not demonstrated that these benefits are unnecessary with respect to any specific source category, but again simply rests on its own apparent belief that they are never necessary. The commenter concluded that, for the reasons given above, the attempt to substitute EPA’s judgment for Congress’ is unlawful and arbitrary.

*Response:* Congress gave the Administrator the authority to exempt area sources from compliance with title V if, in his or her discretion, the Administrator “finds that compliance with [title V] is impracticable, infeasible, or unnecessarily burdensome.” See CAA section 502(a). EPA has interpreted one of the three justifications for exempting area sources, “unnecessarily burdensome”, as requiring consideration of the four factors discussed above. EPA applied these four factors to the three foundry area source categories subject to this rule and concluded that requiring title V for these area source categories would be unnecessarily burdensome.

In addition to determining that title V would be unnecessarily burdensome on the area source categories for which we proposed exemptions, as in the Exemption Rule, EPA also considered whether exempting the area source categories would adversely affect public health, welfare or the environment. As explained in the proposal preamble, we concluded that exempting the area

source categories at issue in this rule would not adversely affect public health, welfare or the environment because the level of control would be the same even if title V applied. We further explained in the proposal preamble that 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. The commenter has not provided any information that exemption of these area source categories from title V will adversely affect public health, welfare or the environment.

#### *I. Miscellaneous*

*Comment:* One commenter stated that in order for these rules to be implemented properly, EPA should provide sufficient additional funds to State and local clean air agencies. The commenter said that in recent years, Federal grants for State and local air programs have amounted to only about one-third of what they should be, and budget requests for the last two years have called for additional cuts. According to the commenter, additional area source programs, which are not eligible for title V fees, will require significant increases in resources for State and local air agencies beyond what is currently provided. The commenter claims that without increased funding, some State and local air agencies may not be able to adopt and enforce additional area source rules.

*Response:* State and local air programs are an important and integral part of the regulatory scheme under the CAA. As always, EPA recognizes the efforts of State and local agencies in taking delegations to implement and enforce CAA requirements, including the area source standards under section 112. We understand the importance of adequate resources for State and local agencies to run these programs; however, we do not believe that this issue can be addressed through today’s rulemaking.

EPA today is promulgating standards for the Aluminum, Copper, and Other Nonferrous Foundries area source categories that reflect what constitutes GACT for the Urban HAP for which the source categories were listed. GACT standards are technology-based standards. The level of State and local resources needed to implement these rules is not a factor that we consider in determining what constitutes GACT.

Although the resource issue cannot be resolved through today’s rulemaking for

the reason stated above, EPA remains committed to working with State and local agencies to implement this rule. State and local agencies that receive grants for continuing air programs under CAA section 105 should work with their project officer to determine what resources are necessary to implement and enforce the area source standards. EPA will continue to provide the resources appropriated for section 105 grants consistent with the statute and the allotment formula developed pursuant to the statute.

*Comment:* One commenter noticed that EPA includes beryllium in the metal HAP list for the aluminum foundries but not for copper foundries. Due to beryllium's toxicity, the commenter suggests that beryllium also be added to the copper foundries metal HAP list.

*Response:* The copper foundries HAP list was based on the 112(k) listing that identified the selected pollutants for each source category. Beryllium was not included in the 112(k) listing for copper foundries, and we are not aware of any copper foundries reporting emissions of beryllium.

*Comment:* One commenter stated the preamble language was not accurate in the discussion of some copper-based alloys, such as leaded brass, containing up to 3.5 percent lead. The commenter stated many leaded alloys contain more lead than that. The commenter said that "red brass" is very common and contains 7 to 8 percent lead, and various industry metal specifications list some types of lead containing alloys up to 27 percent lead.

*Response:* We appreciate the commenter's information and technical update, and we acknowledge that the provided information is correct.

*Comment:* One commenter noted what appears to be a typo within section 63.11552(d) of the proposed rule. The reference to sources subject to "63.11551(b)" should actually be sources subject to "63.11550(b)."

*Response:* We agree with the commenter and made the suggested correction to the final rule.

## VII. Impacts of the Final Standards

Existing aluminum, copper, and other nonferrous foundries are currently well controlled, and our final 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, Occupational Safety and Health Administration (OSHA) regulations (particularly for lead), and actions taken

to improve efficiency and reduce costs. We estimate that the only impacts associated with the final rule are the compliance requirements (*i.e.*, monitoring, reporting, recordkeeping, and testing).

Approximately 318 aluminum, copper, and other nonferrous foundries are subject to the final rule and will incur initial one-time costs of \$656,000 and a total annualized cost of \$638,000/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.

## VIII. Statutory and Executive Order Reviews

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

This action is a "significant regulatory action" under the terms of Executive Order 12866 (58 FR 51735, October 4, 1993), and is therefore subject to review under the Executive Order.

### B. Paperwork Reduction Act

The information collection requirements in this final 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. 2332.02.

The recordkeeping and reporting requirements in this final rule are 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.

This final NESHAP requires applicable one-time notifications according to the NESHAP General Provisions. Plant owners or operators are 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 are required to conduct daily VE observations with a reduction to

weekly VE observations if VE are not detected after 30 consecutive days of daily observations. Recordkeeping is 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 are 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 7,160 labor hours per year at a cost of approximately \$408,855 for the 318 facilities that would be subject to the final rule, or approximately 68 hours per year per facility. No capital/startup costs or operation and maintenance costs are associated with the final rule information collection requirements. No costs or burden hours are estimated for new area source foundries because none is 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.

### 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 final 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 this final rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. There will not be any significant impacts on new or existing aluminum, copper, or other nonferrous foundries because this final rule will not create any new requirements or burdens other than minimal compliance requirements. This final 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 will incur economic impacts exceeding 1 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 final rule will 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 final rule will not have a significant economic impact on a substantial number of small entities, EPA nonetheless has tried to reduce the impact of this final rule on small entities. The standards represent practices and controls that are common throughout the industry. The standards also require only the essential monitoring, recordkeeping, and reporting needed to verify compliance. The final 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.

#### *D. Unfunded Mandates Reform Act*

This final 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 final rule is not expected to impact State, local, or Tribal governments. The nationwide annualized cost of this final rule for affected industrial sources is \$638,000/yr. Thus, this final rule is not subject to the requirements of sections 202 and 205 of the Unfunded Mandates Reform Act (UMRA).

This final rule is also not subject to the requirements of section 203 of UMRA because it contains no regulatory

requirements that might significantly or uniquely affect small governments. This final rule will not apply to such governments and will not impose any 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 final rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. This final rule does not impose any requirements on State and local governments. Thus, Executive Order 13132 does not apply to this final rule.

#### *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 final rule imposes no requirements on Tribal governments; thus, Executive Order 13175 does not apply to this action.

#### *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 final rule will 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 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.

Under section 63.7(f) and section 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 final rule will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because it will not affect the level of protection provided to human health or the environment.

*K. Congressional Review Act*

The Congressional Review Act, 5 U.S.C. 801, *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of Congress and to the Comptroller General of the United States. EPA will submit a report containing this final rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of this final rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a "major rule" as defined by 5 U.S.C. 804(2). This final rule will be effective on June 25, 2009.

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

Environmental protection, Air pollution control, Hazardous substances, Incorporations by reference,

Reporting and recordkeeping requirements.

Dated: June 15, 2009.

**Lisa P. Jackson**,  
*Administrator.*

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

**PART 63—[AMENDED]**

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

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

**Subpart A—[Amended]**

■ 2. Section 63.14 is amended by 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 as defined in § 63.2 and meets the criteria specified in paragraphs (a)(1) through (4) of this section. Once you are subject to this subpart, you must remain subject to this subpart even if you subsequently do not meet the criteria in paragraphs (a)(1) through (4) of this section.

(1) Your aluminum foundry uses materials containing one or more aluminum foundry HAP as defined in § 63.11556, "What definitions apply to this subpart?"; or

(2) Your copper foundry uses materials containing one or more copper foundry HAP, as defined in § 63.11556, "What definitions apply to this subpart?"; or

(3) Your other nonferrous foundry uses materials containing one or more other nonferrous foundry HAP, as defined in § 63.11556, "What definitions apply to this subpart?"; and

(4) Your aluminum foundry, copper foundry, or other nonferrous foundry has an annual metal melt production (for existing affected sources) or an annual metal melt capacity (for new affected sources) of at least 600 tons per year (tpy) of aluminum, copper, and other nonferrous metals, including all associated alloys. You must determine the annual metal melt production and capacity for the time period as described in paragraphs (a)(4)(i) through (iv) of this section. The quantity of ferrous metals melted in iron or steel melting operations and the quantity of nonferrous metal melted in non-foundry melting operations are not included in determining the annual metal melt production for existing affected sources or the annual metal melt capacity for new affected sources.

(i) If you own or operate a melting operation at an aluminum, copper or other nonferrous foundry as of February 9, 2009, you must determine if you are subject to this rule based on your facility's annual metal melt production for calendar year 2010.

(ii) If you construct or reconstruct a melting operation at an aluminum, copper or other nonferrous foundry after February 9, 2009, you must determine if you are subject to this rule based on your facility's annual metal melt capacity at startup.

(iii) If your foundry with an existing melting operation increases production after calendar year 2010 such that the annual metal melt production equals or exceeds 600 tpy, you must submit a written notification of applicability to the Administrator within 30 days after the end of the calendar year and comply within 2 years after the date of the notification.

(iv) If your foundry with a new melting operation increases capacity after startup such that the annual metal melt capacity equals or exceeds 600 tpy, you must submit a written notification of applicability to the Administrator within 30 days after the capacity increase year and comply at the time of the capacity increase.

(b) This subpart applies to each new or existing affected source located at an aluminum, copper or other nonferrous foundry that is an area source as defined by § 63.2. The affected source is the collection of all melting operations located at an aluminum, copper, or other nonferrous foundry.

(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 or laboratory 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 June 27, 2011.

(b) If you start up a new affected source on or before June 25, 2009, you must achieve compliance with the provisions of this subpart no later than June 25, 2009.

(c) If you start up a new affected source after June 25, 2009, 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 affected 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 when access is needed; including, but not limited to charging, alloy addition, and tapping).

(2) Purchase only metal scrap 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, except metal scrap that is purchased specifically for its HAP metal content for use in alloying or to meet specifications for the casting. This requirement does not apply to material that is not scrap (*e.g.*, ingots, alloys, sows) or to materials that are not purchased (*e.g.*, internal scrap, customer returns).

(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 may include any other management practices that are implemented at the facility to minimize emissions from melting furnaces. You must inform your appropriate employees of the management practices that they must follow. 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 a new or existing affected source that is located at a large foundry as defined in § 63.11556,

you must comply with the additional requirements in paragraphs (b)(1) and (2) of this section.

(1) For existing affected sources located at a large foundry, you must achieve a particulate matter (PM) control efficiency of at least 95.0 percent or emit no more than an outlet PM concentration limit of 0.034 grams per dry standard cubic meter (g/dscm) (0.015 grains per dry standard cubic feet (gr/dscf)).

(2) For new affected sources located at a large foundry, you must achieve a PM control efficiency of at least 99.0 percent or emit no more than an outlet PM concentration limit of at most 0.023 g/dscm (0.010 gr/dscf).

(c) If you own or operate an affected source at a small foundry that subsequently becomes a large foundry after the applicable compliance date, you must meet the requirements in paragraphs (c)(1) through (3) of this section.

(1) You must notify the Administrator within 30 days after the capacity increase or the production increase, whichever is appropriate;

(2) You must modify any applicable permit limits within 30 days after the capacity increase or the production increase to reflect the current production or capacity, if not done so prior to the increase;

(3) You must comply with the PM control requirements in paragraph (b) of this section no later than 2 years from the date of issuance of the permit for the capacity increase or production increase, or in the case of no permit issuance, the date of the increase in capacity or production, whichever occurs first.

(d) These standards apply at all times.

##### **§ 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 large 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 an existing affected source at a large 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 performance 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 in pounds per hour at the inlet and outlet of the control device (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 choose to comply with 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) For a source with a single control device exhausted through multiple stacks, you must ensure that three runs are performed by a representative sampling of the stacks satisfactory to the Administrator or his or her delegated

representative. You must provide data or an adequate explanation why the stack(s) chosen for testing are representative.

#### **§ 63.11552 What are my 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 an existing affected source at a large foundry, you must conduct visible emissions monitoring according to the requirements in paragraphs (b)(1) and (2) of this section.

(1) You must conduct visual monitoring of the fabric filter discharge point(s) (outlets) for any VE according to the schedule specified in paragraphs (b)(1)(i) and (ii) of this section.

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

(ii) If no VE are detected in consecutive daily visual monitoring performed in accordance with paragraph (b)(1)(i) of this section for 30 consecutive days or more 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 melting operations. If VE 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 initial observation and alleviate the cause of the emissions within 3 hours of initial observation by taking whatever corrective action(s) are necessary. You may take more than 3 hours to alleviate a specific condition that causes VE if you identify in the monitoring plan this specific condition as one that could lead to VE in advance, you adequately explain why it is not feasible to alleviate this condition within 3 hours of the time the VE occurs, and you demonstrate that the requested time will ensure alleviation of this condition as expeditiously as practicable.

(3) As an alternative to the monitoring requirements for an existing affected source 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 a new affected source located at a large foundry subject to the PM requirements in § 63.11550(b)(2) that is 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 (4) 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 new or existing affected sources subject to § 63.11550(b), you must submit a request to use an alternative monitoring procedure as required in § 63.8(f)(4).

**§ 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 June 25, 2009 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 § 63.11545 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. Your Notification of Compliance Status must indicate if you are a small or large foundry as defined in § 63.11556, the production amounts as the basis for the determination, and if you are a large foundry, whether you elect to comply with the control efficiency requirement or PM concentration limit in § 63.11550(b). 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 will operate in a manner that minimizes HAP emissions from the melting operations to the extent possible. This includes at a minimum that the owners and/or operators of the affected source will cover or enclose each melting furnace that is equipped with a cover or enclosure during melting operations to the extent practicable as required in 63.11550(a)(1)."

(2) "This facility agrees to purchase 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 or to meet specifications for the casting as required by 63.11550(a)(2)."

(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 at a large foundry 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 is required by the owner or operator that installs bag leak detection systems: "This facility has installed a bag leak detection system in accordance with § 63.11552(b)(3) or (c), 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 practices plan required by § 63.11550 as specified in paragraphs (c)(2)(i) and (ii) 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 and document that the procedures in the management practices plan were followed during the monthly inspections. These records may be in the form of a checklist.

(ii) Records documenting that you purchased 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 or to meet specifications for the casting, you must keep records to document that the HAP metal is included in the material specifications for the cast metal product.

(3) You must keep the records of all performance tests, inspections and monitoring data required by §§ 63.11551 and 63.11552, and the information identified in paragraphs (c)(3)(i) through (vi) 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

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

(4) If you own or operate a new or existing affected source at a small foundry that is not subject to § 63.11550(b), you must maintain records to document that your facility melts less than 6,000 tpy total of copper, other nonferrous metal, and all associated alloys (excluding aluminum) in each calendar year.

(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. For records of annual metal melt production, you must keep the records for 5 years from the end of the calendar year. 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 § 63.11545 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) that are complex shapes. For purposes of this subpart, this definition does not include primary or secondary metal producers that cast molten aluminum to produce simple shapes such as sows, ingots, bars, rods, or billets.

*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.

*Annual copper and other nonferrous foundry metal melt capacity* means, for new affected sources, the lower of the copper and other nonferrous metal melting operation capacity, assuming 8,760 operating hours per year or, if applicable, the maximum permitted copper and other nonferrous metal melting operation production rate for the melting operation calculated on an annual basis. Unless otherwise specified in the permit, permitted copper and other nonferrous metal melting operation rates that are not specified on an annual basis must be annualized assuming 24 hours per day, 365 days per year of operation. If the permit limits the operating hours of the melting operation(s) or foundry, then the permitted operating hours are used to annualize the maximum permitted copper and other nonferrous metal melt production rate. The annual copper and other nonferrous metal melt capacity does not include the melt capacity for

ferrous metal melted in iron or steel foundry melting operations that are co-located with copper or other nonferrous melting operations or the nonferrous metal melted in non-foundry melting operations.

*Annual copper and other nonferrous foundry metal melt production* means, for existing affected sources, the quantity of copper and other nonferrous metal melted in melting operations at the foundry in a given calendar year. For the purposes of this subpart, metal melt production is determined on the basis of the quantity of metal charged to the melting operations. The annual copper and nonferrous metal melt production does not include the melt production of ferrous metal melted in iron or steel foundry melting operations that are co-located with copper and other nonferrous melting operations or the nonferrous metal melted in non-foundry melting operations.

*Annual metal melt capacity*, for new affected sources, means the lower of the aluminum, copper, and other nonferrous metal melting operation capacity, assuming 8,760 operating hours per year or, if applicable, the maximum permitted aluminum, copper, and other nonferrous metal melting operation production rate for the melting operation calculated on an annual basis. Unless otherwise specified in the permit, permitted aluminum, copper, and other nonferrous metal melting operation rates that are not specified on an annual basis must be annualized assuming 24 hours per day, 365 days per year of operation. If the permit limits the operating hours of the melting operation(s) or foundry, then the permitted operating hours are used to annualize the maximum permitted aluminum, copper, and other nonferrous metal melt production rate. The annual metal melt capacity does not include the melt capacity for ferrous metal melted in iron or steel foundry melting operations that are co-located with aluminum, copper, or other nonferrous melting operations or the nonferrous metal melted in non-foundry melting operations.

*Annual metal melt production* means, for existing affected sources, the quantity of aluminum, copper, and other nonferrous metal melted in melting operations at the foundry in a given calendar year. For the purposes of this subpart, annual metal melt production is determined on the basis of the quantity of metal charged to the melting operations. The annual metal melt production does not include the melt production of ferrous metal melted in iron or steel foundry melting operations that are co-located with

aluminum, copper, or other nonferrous melting operations or the nonferrous metal melted in non-foundry melting operations.

*Bag leak detection system* means a system that is capable of continuously monitoring relative PM (*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 PM loadings.

*Copper foundry* means a foundry 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) that are complex shapes. For purposes of this subpart, this definition does not include primary or secondary metal producers that cast molten copper to produce simple shapes such as sows, ingots, billets, bars, anode copper, rods, or copper cake.

*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.

*Deviation* means any instance where an affected source subject to this subpart, or an owner or operator of such a source:

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

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

(3) Fails to meet any emissions limitation in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

*Die casting* means operations classified under the North American Industry Classification System codes 331521 (Aluminum Die-Casting Foundries) and 331522 (Nonferrous (except Aluminum) Die-Casting Foundries) and comprises establishments primarily engaged in introducing molten aluminum, copper, and other nonferrous metal, under high pressure, into molds or dies to make die-castings.

*Large foundry* means, for an existing affected source, a copper or other nonferrous foundry with an annual metal melt production of copper, other

nonferrous metals, and all associated alloys (excluding aluminum) of 6,000 tons or greater. For a new affected source, *large foundry* means a copper or other nonferrous foundry with an annual metal melt capacity of copper, other nonferrous metals, and all associated alloys (excluding aluminum) of 6,000 tons or greater.

*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* (the affected source) 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. Melting operations dedicated to melting ferrous metal at an iron and steel foundry are not included in this definition and are not part of the affected source.

*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) that are complex

shapes. For purposes of this subpart, this definition does not include primary or secondary metal producers that cast molten nonferrous metals to produce simple shapes such as sows, ingots, bars, rods, or billets.

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

*Small foundry* means, for an existing affected source, a copper or other nonferrous foundry with an annual metal melt production of copper, other nonferrous metals, and all associated alloys (excluding aluminum) of less than 6,000 tons. For a new affected source, *small foundry* means a copper or other nonferrous foundry with an annual metal melt capacity of copper, other nonferrous metals, and all associated alloys (excluding aluminum) of less than 6,000 tons.

#### **§ 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 .....	Subpart ZZZZZZ does not require a flare or CPMS, COMS or CEMS.
§ 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.	
§ 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.	