ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA-HQ-OAR-2006-0424; EPA-HQ-OAR-2006-0360; EPA-HQ-OAR-2006-

0940; FRL-

RIN 2060-AM12

National Emission Standards for Hazardous Air Pollutants for Area Sources: Clay Ceramics Manufacturing, Glass Manufacturing, and Secondary Nonferrous Metals Processing

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: EPA is issuing national emission standards for the Clay Ceramics Manufacturing, Glass Manufacturing, and Secondary Nonferrous Metals Processing area source categories. Each of these three final emissions standards reflects the generally available control technology or management practices used by sources within the respective area source category.

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

ADDRESSES: EPA has established dockets for this action under Docket ID No. EPA-HQ-OAR-2006-0424 (for Clay Ceramics Manufacturing), Docket ID No. EPA-HQ-OAR-2006-0360 (for Glass

Manufacturing), and Docket ID No. EPA-HQ-OAR-2006-0940 (for Secondary Nonferrous Metals Processing). All documents in the docket are listed in the www.regulations.gov index. Although listed in the index, some information is not publicly available, e.q., confidential business information 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 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 rule for Clay Ceramics Manufacturing, contact Mr. Bill Neuffer, Office of Air Quality Planning and Standards, Sector Policies and Programs Division, Metals and Minerals Group (D243-02), Environmental Protection Agency, Research Triangle Park, NC 27711; telephone number: (919) 541-5435; fax number: (919) 541-3207; e-mail address: Neuffer.Bill@epa.gov. For questions about the final rule for Glass Manufacturing or Secondary Nonferrous Metals Processing, contact Ms. Susan Fairchild, Office of Air

Quality Planning and Standards, Sector Policies and Programs Division, Metals and Minerals Group (D243-02), Research Triangle Park, NC 27711, telephone number: (919) 541-5167, fax number: (919) 541-3207, e-mail address: Fairchild.Susan@epa.gov.

SUPPLEMENTARY INFORMATION:

The supplementary information presented in this preamble is organized as follows:

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K. Congressional Review Act

I. General Information

A. Does this action apply to me?

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

Category	NAICS code ¹	Examples of regulated entities
Industry:		
Clay Ceramics Manufacturing	327122 327111 327112	Area source facilities that manufacture ceramic wall and floor tile, vitreous plumbing fixtures, sanitaryware, vitreous china tableware and kitchenware, and/or pottery.
Glass Manufacturing	327211 327212 327213	Area source facilities that manufacture flat glass, glass containers, and other pressed and blown glass and glassware.
Secondary Nonferrous Metals Processing	331492 331423	Area source brass and bronze ingot making, secondary magnesium processing, or secondary zinc processing plants that melt post-consumer nonferrous metal scrap to make products including bars, ingots, and blocks, or metal powders. ²

¹ North American Industry Classification System.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this action. To determine whether your facility is regulated by this action, you should examine the applicability criteria in 40 CFR 63.11435 of subpart RRRRRR (national emissions standards for hazardous air pollutants (NESHAP) for Clay Ceramics

² The Secondary Nonferrous Metals Processing area source category was originally established under SIC code 3341, a broader classification which included brass and bronze ingot makers. The corresponding NAICS code for brass and bronze ingot makers is 331423.

Manufacturing Area Sources), 40 CFR 63.11448 of subpart SSSSSS (NESHAP for Glass Manufacturing Area Sources), and 40 CFR 63.11462 of subpart TTTTTT (NESHAP for Secondary Nonferrous Metals Processing). 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 the final action will be posted on the TTN's policy and guidance page for newly proposed or promulgated rules at the following address:

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

C. Judicial Review

Under section 307(b)(1) of the Clean Air Act (CAA), judicial review of these final rules is available only by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit by [INSERT DATE 60 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER]. Under section 307(d)(7)(B) of the CAA, only an objection to these final rules that was raised with reasonable specificity during the period for public comment can

be raised during judicial review. This section also provides a mechanism for us 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, Environmental Protection Agency, Room 3000, Ariel Rios Building, 1200 Pennsylvania Ave., NW., Washington, DC 20460, with a copy to the person 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), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20004. Moreover, under section 307(d)(7)(B) of the CAA, only an objection to these final rules that was raised with reasonable specificity during the period for public comment can be raised during judicial review. Moreover, under section 307(b)(2) of the CAA, the requirements established by these final rules may not be challenged separately in any civil or criminal proceedings brought by EPA to enforce these requirements.

II. Background Information for Final Area Source Standards

Section 112(k)(3)(B) of the CAA requires EPA to identify at least 30 hazardous air pollutants (HAP) which, as the result of emissions from area sources, a pose the greatest threat to public health in urban areas. Consistent with this provision, in 1999, in the Integrated Urban Air Toxics Strategy, EPA identified the 30 HAP that pose the greatest potential health threat in urban areas, and these HAP are referred to as the "urban HAP." See 64 FR 38706, 38715-716, July 19, 1999. 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. EPA listed the source categories that account for 90 percent of the urban HAP emissions in the Integrated Urban Air Toxics Strategy. b Sierra Club sued EPA, alleging a failure to complete standards for the source categories listed pursuant to CAA section 112(c)(3) and 112(k)(3)(B) within the timeframe specified by the statute. See Sierra Club v. Johnson, No. 01-1537, (D.D.C.). On March 31, 2006, the court issued an order requiring EPA to promulgate standards under CAA section 112(d) for those area source categories listed pursuant to CAA section 112(c)(3) and 112(k)(3)(B).

^a An area source is a stationary source of HAP emissions that is not a major source. A major source is a stationary source that emits or has the potential to emit 10 tons per year (tpy) or more of any HAP or 25 tpy or more of any combination of HAP.

Since its publication in the Integrated Urban Air Toxics Strategy in 1999, the area source category list has undergone several amendments.

Among other things, the court order, as amended on October 15, 2007, requires that EPA complete standards for 9 area source categories by December 15, 2007. On September 20, 2007 (72 FR 53838), we proposed NESHAP for the following three listed area source categories: (1) Clay Ceramics Manufacturing; (2) Glass Manufacturing; and (3) Secondary Nonferrous Metals Processing as part of our effort to meet the December 15, 2007 deadline. The standards for the other categories are being issued in separate actions.

Under CAA section 112(d)(5), the Administrator may, in lieu of standards requiring maximum achievable control technology (MACT) under section 112(d)(2), elect to promulgate standards or requirements for area sources "which provide for the use of generally available control technologies or management practices by such sources to reduce emissions of hazardous air pollutants." Under section 112(d)(5), the Administrator has the discretion to use generally available control technology or management practices (GACT) in lieu of MACT. As explained in the proposed NESHAP, we are setting standards for these three source categories pursuant to section 112(d)(5). See 72 FR 53840, September 20, 2007.

III. Summary of Final Rules and Changes Since Proposal

This section summarizes the final rules and identifies changes since proposal. For changes that were made as a result of public comments, we have provided detailed explanations of the

changes and the rationale for the changes in the responses to comments in section V of this preamble.

A. Area Source NESHAP for Clay Ceramics Manufacturing

1. Applicability and Compliance Dates

The only substantive changes to the Clay Ceramics rule made since proposal are clarifications of applicability. There was an error in the wording of the applicable compliance dates, and we have revised the rule since proposal to clarify that an affected source is existing if construction or reconstruction was commenced on or before September 20, 2007, and an affected source is new if construction or reconstruction was commenced after September 20, 2007. These clarifications of existing and new source are consistent with the definitions specified in §63.2.

The final standards apply to any new or existing affected source at a clay ceramics manufacturing facility that is an area source and uses more than 45 megagrams per year (Mg/yr) (50 tons per year (tpy)) of clay. The affected source are all kilns that fire glazed ceramic ware and all atomized spray glaze operations located at such a facility.

The owner or operator of an existing affected source must comply with the standards by [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]. The owner or operator of a new affected source is required to comply with the standards by [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER] or upon startup, whichever is later.

2. Standards

The Clay Products Manufacturing area source category (which included clay ceramics manufacturing) was listed for regulation under section 112(c)(3) for its contribution of the following urban HAP: chromium, lead, manganese, and nickel. No changes have been made since proposal to the standards for clay ceramics manufacturing facilities.

For each kiln firing glazed ceramic ware, the final standards require the facility owner or operator to maintain the kiln peak temperature below 1540°C (2800°F) and either use natural gas, or an equivalent clean-burning fuel, as the kiln fuel. The facility owner or operator has the option of using an electric-powered kiln.

The requirements for atomized spray glaze operations at clay ceramic manufacturing area source facilities differ depending on whether a facility has annual wet glaze usage above or below 227 Mg/yr (250 tpy). Consequently, we are requiring that the facility owner or operator maintain annual wet glaze usage records in order to document whether they are above or below 227 Mg/yr (250 tpy) wet glaze usage.

For each atomized spray glaze operation located at a clay ceramics manufacturing facility that uses more than 227 Mg/yr (250 tpy) of wet glaze(s), the final standards require the facility owner or operator to have an air pollution control device (APCD) on their glazing operations and operate and

maintain the control device according to the equipment manufacturer's specifications. As a pollution prevention alternative to this requirement, we are also providing the option to use glazes containing less than 0.1 (weight) percent clay ceramics metal HAP for those facilities above the threshold, which is expected to provide emissions reductions equivalent or greater than those obtained using particulate matter (PM) controls.

For each atomized spray glaze operation located at a clay ceramics manufacturing facility that uses 227 Mg/yr (250 tpy) or less of wet glaze(s), the final standards require the facility owner or operator to employ waste minimization practices in their glazing operations. In the preamble to the proposed rule, we acknowledged that some of these smaller facilities operate their atomized spray glaze operations with APCDs or use glazes containing less than 0.1 (weight) percent clay ceramics metal HAP. These alternative compliance options achieve reductions in metal HAP emissions that are at least equivalent to the metal HAP reductions from the waste minimization practices. Therefore, the final rule includes the use of glazes containing less than 0.1 (weight) percent clay ceramics metal HAP or an APCD as alternative compliance options for the waste minimization practices.

3. Compliance Requirements

No changes have been made since proposal to the compliance

requirements for clay ceramics manufacturing facilities.

Initial compliance demonstration requirements. The owner or operator is required to include a compliance certification for the standards in their Notification of Compliance Status. For any wet spray glaze operations controlled with an APCD, an initial inspection of the control equipment must be conducted within 60 days of the compliance date and the results of the inspection included in the Notification of Compliance Status.

Monitoring requirements. For each kiln firing glazed ceramic ware, the final standards require the owner or operator to conduct a check of the kiln peak firing temperature on a daily basis. If the peak firing temperature exceeds 1540°C (2800°F), the owner or operator must take corrective action according to the facility's standard operating procedures.

For all sources that operate an APCD for their atomized spray glaze operations, we are requiring daily and weekly visual APCD inspections, daily EPA Method 22 visible emissions (VE) tests (40 CFR part 60, appendix A-7), or an EPA-approved alternative monitoring program to ensure that the APCD is kept in a satisfactory state of maintenance and repair and continues to operate effectively.

The owner or operator is allowed to use existing operating permit documentation to meet the monitoring requirements, provided it includes the necessary monitoring records (e.g., the date, place, and time of the monitoring; the person conducting

the monitoring; the monitoring technique or method; the operating conditions during monitoring; and the monitoring results).

Notification and recordkeeping requirements. We are requiring that affected sources submit Initial Notifications and Notifications of Compliance Status according to the part 63 General Provisions. Facilities must submit the notifications by [INSERT DATE 120 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

B. Area Source NESHAP for Glass Manufacturing

1. Summary of Changes Since Proposal

Applicability

We have revised the applicability criteria of the rule in \$63.11448 to clarify that periodic or pot furnaces are not part of the source category. The final rule applies only to glass manufacturing plants that operate continuous furnaces and use one or more of the glass manufacturing metal HAP as raw materials.

In light of the changes made to the applicability criteria in §63.11448, we added a new paragraph to §63.11449(a)(1), which states that, to be an affected source, the furnace must be a continuous furnace. We added a definition of "continuous furnace" to §63.11459 to further clarify how affected furnace is defined. We made an additional revision to §63.11449(a) to clarify that, consistent with the proposed rule, to be an affected source, a furnace must produce least 45 Mg/yr (50 tpy) of glass that contains one or more of the glass manufacturing

metal HAP as raw materials. In the proposed rule, it was unclear whether a furnace that is used to produce more than 45 Mg/yr (50 tpy) of glass, but less than 45 Mg/yr (50 tpy) of glass containing metal HAP as raw materials, would be an affected source. The revision clarifies that such a furnace would not be an affected furnace. Finally, we inserted a new paragraph \$63.11449(b) to clarify that furnaces that are used exclusively for research and development (R&D) are not part of the source category and are therefore not subject to regulation under this final rule. We also added a definition for "research and development process unit" to \$63.11459.

In addition, we identified an error in the wording of the applicable compliance dates, and we have revised \$63.11449 since proposal to clarify that an affected source is existing if construction or reconstruction was commenced on or before September 20, 2007, and an affected source is new if construction or reconstruction was commenced after September 20, 2007. These clarifications of existing and new source are consistent with the definitions specified in \$63.2. Finally, we added a paragraph to the regulation to clarify that affected facilities must obtain a title V permit.

Performance Test Requirements

We revised §63.11452(a) by adding paragraph (a)(3), which addresses the situation in which a facility operates affected furnaces that are identical. The new paragraph allows the owner

or operator to demonstrate compliance for all such identical furnaces by testing only one of the furnaces. The additional paragraph specifies the criteria for determining if one furnace is identical to another and the conditions under which the furnace must be tested.

Under §63.11452(b), we deleted paragraph (b)(2), which was redundant and renumbered the remaining paragraphs accordingly. We revised §63.11452(b)(8), which formerly was paragraph (b)(9), to state that sampling ports for performance testing are to be located at the outlet to the furnace control device or in the furnace stack. The proposed rule was unclear regarding the exact location for emission testing. We added an alternative test method to Methods 3, 3A, and 3B for gas molecular weight analysis. We reorganized the paragraphs that address testing for PM or metal HAP to clarify which procedures to follow to determine compliance with the PM emission limit and which procedures to follow to determine compliance with the metal HAP emission limit. We also revised the definition of the metal HAP mass emission rate in Equation 2, which is signified as the variable "ERM". This variable specifies which metals are to be included in the analysis of the emission samples that are collected during testing. The revised text clarifies that ERM represents the combined mass emission rates for only those glass manufacturing metal HAP that are added as raw materials in the batch formulation.

Monitoring and Continuous Compliance Requirements

We revised the monitoring requirements by adding paragraph \$63.11454(a)(7), which specifies that the required monitoring must be performed any time the affected furnace is producing glass that is charged with one or more of the glass manufacturing metal HAP. Monitoring also must be performed during all transition phases from glass containing metal HAP to glass that does not contain metal HAP (i.e., until all HAP-containing glass has left the furnace melter). These transition phases encompass the period that begins when the plant stops charging the metal HAP as raw materials and ends when the furnace is producing a saleable product that does not contain the glass manufacturing metal HAP as raw materials.

We revised §63.11455(c) to clarify that the continuous compliance requirements apply whenever the affected furnace is producing glass that contains one or more of the glass manufacturing metal HAP, including any transition phases from metal HAP-containing glass to glass that does not contain the metal HAP. We also revised paragraph §63.11455(c) to clarify the monitoring requirements for existing furnaces versus the monitoring requirements for new furnaces. We further revised §63.11455 by adding paragraph (e) to clarify the continuous compliance requirements for affected furnaces that can meet the emission limits without the use of a control device. In such cases, the only requirements for demonstrating continuous

compliance is to meet the applicable recordkeeping requirements specified in §63.11457.

Notifications

We have revised §63.11456 to simplify the section and clarify that the deadline for submitting the Initial Notification is 120 days after the furnace becomes subject to the rule, regardless of whether the furnace is existing or new.

Definitions

We have revised several of the definitions specified in §63.11459 and added a number of new definitions to the section. We revised the definition of cullet to clarify that cullet is not considered a raw material when determining if a furnace is an affected source. We revised the definition of a glass melting furnace, which is defined in the final rule as the process unit in which raw materials are charged and melted at high temperature to produce molten glass. The previous definition included the raw material charging system and other appendages to the furnace. However, the revised definition is consistent with the procedures for testing furnaces to demonstrate compliance. We revised the definition of particulate matter by replacing the modifier "total" with "filterable." This revision makes the definition consistent with the test methods specified for demonstrating compliance with the PM emission limit. Finally, we revised the definition of raw material to clarify that it excludes cullet and material that is recycled from the furnace control device.

To clarify the applicability requirements in §§63.11448 and 63.11449, we added the definition of continuous furnace. To clarify the performance testing requirements, we have added a definition for furnace stack. We also added a definition for identical furnaces, which pertains to the performance testing requirements for a facility that operates more than one identical furnace. Finally, we added a definition for research and development process unit. This definition was needed to clarify in §63.11449(b) that furnaces used strictly for R&D are not subject to regulation under this final rule. Glass manufacturing furnaces used only for R&D were not part of the 1990 inventory and are not part of the listed source category.

Implementation and Enforcement Authority

We deleted paragraph §63.11460(c), which was redundant. We also added a new paragraph (b)(2) to clarify that EPA retains the authority for approving alternative test methods.

2. Summary of Final Rule

Applicability and Compliance Dates

This NESHAP applies to any glass manufacturing plant that is an area source of HAP emissions and operates one or more continuous furnaces which produce at least 45 Mg/yr (50 tpy) of glass per furnace by melting a mixture of raw materials that includes compounds of one or more of the glass manufacturing metal HAP. The rule does not apply to periodic furnaces or furnaces that are used strictly for research and development.

The compliance date for existing sources is [INSERT DATE 2 YEARS AFTER PUBLICATION IN THE FEDERAL REGISTER]. However, owners or operators of affected sources may request an extension of one additional year to comply with the rule, as allowed under section 112(i)(3)(B) of the CAA and under \$63.6(i)(4)(A), if the additional time is needed to install emission controls. The compliance date for new sources is [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER] or the startup date for the source, whichever is later. The compliance date for facilities with no affected sources as of [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER] and which later change processes or increase production and trigger applicability of the rule, is 2 years following the date on which the facility made the process changes or increased production and thereby became subject to the NESHAP.

Standards

The Glass Manufacturing area source category was listed for regulation under section 112(c)(3) for its contribution of the following urban HAP: arsenic, cadmium, chromium, lead, manganese, and nickel. The glass manufacturing final rule requires each new or existing affected furnace to comply with a PM emission limit of 0.1 gram per kilogram (g/kg) (0.2 pound per ton (lb/ton)) of glass produced or an equivalent metal HAP emission limit of 0.01 g/kg (0.02 lb/ton) of glass produced.

Performance Testing

This final rule requires an initial one-time performance

test on each affected furnace unless the furnace had been tested during the previous 5 years, and the previous test demonstrated compliance with the emission limits in this rule using the same test methods and procedures specified in this rule. This final rule requires testing using EPA Methods 5 or 17 (for PM emissions) or EPA Method 29 (for metal HAP emissions) in 40 CFR part 60, appendix A. This final rule also allows the owner or operator of affected identical furnaces to test only one of the furnaces if certain conditions are met.

Monitoring

The owner or operator of an existing affected glass furnace that is controlled with an electrostatic precipitator (ESP) must monitor the secondary voltage and secondary electrical current to each field of the ESP continuously and record the results at least once every 8 hours. The owner or operator of a new affected furnace equipped with an ESP must install and operate one or more continuous parameter monitoring systems to continuously measure and record the secondary voltage and secondary electrical current to each field of the ESP. Either of these parameters dropping below established levels provides an indication that the electrical power to the ESP field in question has decreased, and collection efficiency may have decreased accordingly.

Owners or operators of an existing affected glass furnace that is controlled with a fabric filter must monitor the fabric

filter inlet temperature continuously and record the results at least once every 8 hours. The owner or operator of a new affected furnace that is equipped with a fabric filter must install and operate a bag leak detector.

As an alternative to monitoring ESP secondary voltage and electrical current or fabric filter inlet temperature, owners or operators of affected furnaces equipped with either of these control devices have the option of requesting alternative monitoring, as allowed under \$63.8(f). The alternative monitoring request must include a description of the monitoring device or monitoring method to be used; instrument location; inspection procedures; quality assurance and quality control measures; the parameters to be monitored; and the frequency with which the operating parameter values would be measured and recorded. The owner or operator of an affected furnace that is equipped with a control device other than an ESP or fabric filter, or that uses other methods to reduce emissions, must submit a request for alternative monitoring, as described in \$63.8(f).

Control Device Inspections

The owner or operator of an affected furnace must conduct initial and periodic inspections of the furnace control device. For fabric filters, the final rule requires annual inspections of the ductwork, housing, and fabric filter interior. For electrostatic precipitators, this final rule requires annual

inspections of the ductwork, hopper, and housing, and inspections of the ESP interior every 2 years.

Notification and Recordkeeping

Owners and operators of all affected glass manufacturing plants that operate at least one continuous furnace that produces at least 45 Mg/yr (50 tpy) of glass using any of the glass manufacturing metal HAP as raw materials must submit an Initial Notification, as required under \$63.9(b). Any facility with an affected source also must submit a Notification of Compliance Status, as specified in \$63.9(h).

Owners and operators of glass manufacturing facilities are required to keep records of all notifications, as well as supporting documentation for the notifications. In addition, they must keep records of performance tests; parameter monitoring data; monitoring system audits and evaluations; operation and maintenance of control devices and monitoring systems; control device inspections; and glass manufacturing batch formulation and production.

C. Area Source NESHAP for Secondary Nonferrous Metals Processing

1. Applicability and Compliance Dates

There was an error in the wording of the applicable compliance dates, and we have revised the rule since proposal to clarify that an affected source is existing if construction or reconstruction was commenced on or before September 20, 2007, and an affected source is new if construction or reconstruction was

commenced after September 20, 2007. These clarifications of existing and new sources are consistent with the definitions specified in §63.2.

The final standards apply to any new or existing affected source at an area source secondary nonferrous metals processing facility. The affected source includes all crushing or screening operations at a secondary zinc processing facility and all furnace melting operations located at a secondary nonferrous metals processing facility.

The owner or operator of an existing affected source must comply with the standards by [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]. The owner or operator of a new affected source is required to comply with the standards by [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER], or upon initial startup, whichever is later.

2. Standards

The Secondary Nonferrous Metals Processing area source category was listed for regulation under section 112(c)(3) for its contribution of the following urban HAP: arsenic, chromium, lead, manganese, and nickel. We proposed to require the use of a fabric filter or baghouse that achieves a PM control efficiency of 99 percent for existing sources and 99.5 percent for new sources. Since our proposal, we learned that a facility had insufficient inlet ductwork to conduct a performance test for determining collection efficiency. The facility requested that

we add an alternate emission limit expressed as an outlet concentration limit to the final standards.

As we noted in the proposed rule, the 10 existing facilities reported using baghouses on crushing or screening operations at secondary zinc facilities and on furnace melting operations at all facilities and that such baghouses performed at a PM collection efficiency of at least 99 percent or achieved an outlet PM concentration not exceeding 0.050 grams per dry standard cubic meter (g/dscm) (0.022 grains per dry standard cubic foot (gr/dscf)) where collection efficiency was not reported. Based on available outlet concentration data from ICR responses in the proposal docket and consideration of baghouse performance at similar sources, we have determined that limiting outlet PM concentrations to 0.034 g/dscm (0.015 gr/dscf) and 0.023 g/dscm (0.010 gr/dscf) would control PM and metal HAP emissions at levels that are equivalent to the levels of control from using a baghouse with a control efficiency of 99 and 99.5 percent, respectively. Because both the proposed control efficiency standards and the equivalent outlet concentration limits reflect the GACT levels of control, we have revised the proposed standards to include the outlet concentration limits as alternatives to the control efficiency standards.

The final standards require the owner or operator of an existing affected source to route the emissions from the affected source through a fabric filter or baghouse that achieves a

control efficiency of at least 99.0 percent or an outlet PM concentration limit of 0.034 g/dscm (0.015 gr/dscf). The owner or operator of a new affected source must route the emissions from the affected source through a fabric filter or baghouse that achieves a control efficiency of at least 99.5 percent or an outlet PM concentration limit of 0.023 g/dscm (0.010 gr/dscf).

3. Compliance Requirements

Performance test requirements. The owner or operator of any existing or new affected source must conduct a one-time initial performance test on the affected source. However, a new performance test is not required for existing affected sources that were tested within the past 5 years of the compliance date if the test was conducted using the same procedures specified in the standards and either no process changes had been made since the test, or the owner or operator demonstrates that the results of the performance test, with or without adjustments, reliably demonstrated compliance despite process changes. The tests for new and existing affected sources are to be conducted using EPA Method 5 in 40 CFR part 60, appendix A-3 or EPA Method 17 in 40 CFR part 60, appendix A-6.

Initial control device inspection. The owner or operator of each existing and new affected source is required to conduct an initial inspection of each baghouse. The owner or operator must visually inspect the system ductwork and baghouse unit for leaks and inspect the inside of each baghouse for structural integrity

and fabric filter condition. The owner or operator must record the results of the inspection and any maintenance action taken.

For each installed baghouse which is in operation during the 60 days after the compliance date, the owner or operator must conduct the initial inspection no later than 60 days after the applicable compliance date. For an installed baghouse which is not in operation during the 60 days after the compliance date, the owner or operator is required to conduct an initial inspection prior to startup of the baghouse. An initial inspection of the internal components of a baghouse is not required if an inspection has been performed within the past 12 months.

Monitoring requirements. For existing affected sources, the owner or operator must conduct either daily visible emission (VE) tests using EPA Method 22 (40 CFR part 60, appendix A-7) or weekly visual inspections of the baghouse system ductwork for leaks, as well as annual inspections of the interior of the baghouse to determine its structural integrity and to determine the condition of the fabric filter. For new affected sources, the owner or operator must operate and maintain a bag leak detection system for each baghouse used to comply with the standards. The final standards require the owner or operator to keep records of the date, place, and time of the monitoring; the person conducting the monitoring; the monitoring technique or

method; the operating conditions during monitoring; and the monitoring results.

Notification and recordkeeping requirements. The owner or operator of an affected source must submit an Initial Notification and Notification of Compliance Status. Notification of Compliance status must include, among other information, the results from the one-time initial performance test and certifications of compliance for the standards. proposed to require facilities to submit both notifications no later than 120 days after the applicable compliance date regardless of whether they were required to conduct a performance test. Since our proposal, we discovered that, although we had intended to allow sources 180 days from the compliance date to conduct the initial performance test and an additional 60 days to submit the results of the performance test, the proposed rule implicitly shortened that time frame by 120 days because it required that the Notification of Compliance status include the performance test results and be submitted within 120 days of the compliance date. Therefore, to afford sources the full time to conduct the performance test and submit the results of the testing, we have revised our proposal in this final rule to require that sources required to do performance testing submit the Notification of Compliance Status before the close of business of the 60th day following the completion of a performance test.

IV. Exemption of Certain Area Source Categories from Title V Permitting Requirements

We did not receive any comments on our proposal to exempt facilities in the Clay Ceramics and Secondary Nonferrous Metals Processing area source categories from title V permitting requirements. Therefore, this final rule does not require facilities in these source categories to obtain an operating permit under 40 CFR part 70 or part 71.

The proposed Glass Manufacturing Area Source NESHAP would have required affected facilities to obtain title V permits.

Although we received public comments requesting that we exempt the Glass Manufacturing Area Source Category from title V, we are finalizing the approach in the proposed rule and are not exempting the source category from title V. The reasons for this decision are summarized in this notice in the Summary of Comments and Responses section for the Area Source NESHAP for Glass Manufacturing.

V. Summary of Comments and Responses

A. Area Source NESHAP for Clay Ceramics Manufacturing

<u>Comment</u>: One commenter noted that the intent of the CAA, as it relates to the Area Source Program, was to bring about reductions in HAP emissions from area sources. The commenter expressed disappointment that some of the rules proposed under the Area Source Program (e.g., Clay Ceramics Manufacturing) will not result in emissions reductions and recommended that future

area source rules incorporate provisions that will provide additional public health protection from the effects of HAP emissions from area sources.

Response: As previously explained, we have determined that GACT for the Clay Ceramics Manufacturing area source category is (1) maintaining the peak firing temperatures of kilns firing glaze ceramic ware below 1540°C (2800°F), (2) implementing the equipment requirement (wet control systems for PM emissions) for glaze spray booths at facilities with wet glaze usage above 227 Mg/yr (250 tpy), and (3) implementing the waste minimization practices for glaze spray booths at facilities with wet glaze usage at or below 227 Mg/yr (250 tpy). The use of PM controls and waste minimization practices has been shown to be very effective in controlling PM and metal HAP emissions from this area source category. Keeping kiln peak firing temperatures below the volatilization temperatures of the clay ceramics metal HAP in the spray glazes would also be effective in preventing volatilization of the clay ceramics metal HAP.

The commenter does not challenge any aspect of EPA's proposed GACT determination for this area source category.

Instead, the commenter makes a blanket assertion that EPA is not acting consistently with the purposes of the area source provisions in the CAA (i.e., sections 112(c)(3) and 112(k)(3)(B)), because it is not requiring emission reductions beyond the level that is currently being achieved from this well-

controlled source category. In support of this assertion, the commenter compares the requirements in the proposed rule to the area source category's current emission and control status. Such a comparison is flawed and irrelevant.

Congress promulgated the relevant CAA area source provisions in 1990 in light of the level of area source HAP emissions at that time. Congress directed EPA to identify not less than 30 HAP which, as a result of emissions from area sources, present the greatest threat to public health in the largest number of urban areas, and to list sufficient area source categories to ensure that sources representing 90 percent of the 30 listed HAP are subject to regulation. As explained in the Integrated Urban Air Toxics Strategy, EPA based its listing decisions on the baseline National Toxics Inventory (NTI) that the Agency compiled for purposes of implementing its air toxics program after the 1990 CAA Amendments (64 FR 38706, 38711, n.10). The baseline NTI reflected HAP emissions from clay manufacturing area sources in Thus, contrary to the commenter's suggestion, the relevant emission level for comparison is the emission level reflected in our baseline NTI, not the current emission level.

Furthermore, in promulgating the area source provisions in the CAA, Congress did not require EPA to issue area source standards that must achieve a specific level of emission reduction. Rather, Congress authorized EPA to issue standards under section 112(d)(5) for area sources that reflect GACT for

the source category. To qualify as being generally available, a GACT standard would most likely be an existing control technology or management practice. Thus, it is not surprising that the GACT standard being finalized today codifies the existing effective HAP control approach being used by sources in the category. For the reasons stated above, this final rule is consistent with sections 112(c)(3), 112(k)(3)(B), and 112(d)(5).

B. Area Source NESHAP for Glass Manufacturing

1. Definition of Source Category

Comment: Three commenters from companies that make stained glass commented that they own small facilities that operate, with one exception, small periodic furnaces (pot furnaces) that are charged with small amounts of the glass manufacturing metal HAP. They claim that their furnaces would be subject to the emission standards because they use the metal HAP and exceed the 45 Mg/yr (50 tpy) threshold. However, these companies allege that the costs of installing controls on their furnaces could put them out of business. One commenter stated that some artisans and schools also would be subject to the proposed rule based on the applicability criteria. Two of the commenters suggested that the rule exempt small businesses due to the burden that would result from complying with the proposed requirements. One commenter stated that the rule was based on an analysis of the glass manufacturing industry using data on large continuous furnaces that did not account differences in the manufacturing process and emissions associated with stained glass manufacturing. The commenter stated that the rule should exempt periodic furnaces.

Response: After reviewing the emissions inventory in support of the listing decisions made pursuant to sections 112(c)(3) and 112(k) and available information, we have concluded that the glass manufacturing area source category was listed based on emissions from relatively large manufacturing plants that operated continuous glass furnaces. Periodic furnaces were not included in the inventory.

The 45 Mg/yr (50 tpy) threshold that was proposed was meant to define the source category to include only these large manufacturers, but did not properly reflect this criterion.

Therefore, we have revised \$63.11448 to specify that periodic or pot furnaces are not subject to the final Glass Manufacturing

Area Source NESHAP. We believe this revision will address most of the concerns of the stained glass manufacturing sector as well as other sectors and organizations, such as artisans, schools, studios, and other small facilities that produce glass using periodic furnaces.

<u>Comment</u>: One commenter stated that flat glass should be excluded from the area source category for several reasons.

According to the commenter, flat glass was not identified in the Integrated Urban Air Toxics Strategy as a source category for regulation. Therefore, the commenter suggests that EPA cannot regulate the flat glass industry under an area source standard.

The commenter added that the administrative record refers only to pressed and blown glass, which has different Standard Industrial Classification (SIC) and North American Industrial Classification System (NAICS) codes than does flat glass manufacturing. The commenter also stated that the administrative record lacks evidence that flat glass manufacturers emit significant quantities of Urban HAP. The commenter pointed out that the Arsenic NESHAP does not apply to flat glass manufacturing for this same reason. Finally, the commenter stated that the proposed rule would not require any flat glass manufacturing plants to install or operate emission control devices.

Response: As explained in the Federal Register Notice announcing the Integrated Urban Air Toxics Strategy (64 FR 38707, July 19, 1999), the process of listing area source categories for regulation would be an iterative ongoing approach that would be refined and modified as we obtained better data on emissions.

Furthermore, as indicated in section 112(e)(4) of the CAA, the listing of a particular source category is not considered final agency action until we issue emission standards for that source category. Therefore, the source category listing is not necessarily limited only to those sources initially identified by the listing. We considered this authority in light of the legislative history regarding glass manufacturing. The flat glass industry sector has always been part of the glass manufacturing industry, as evidenced by environmental statutes

including the glass New Source Performance Standard (NSPS), the Arsenic NESHAP, as well as numerous State rules nationwide. Our study of the glass manufacturing industry includes container glass, pressed and blown glass, and flat glass sectors; these are generally similar with respect to the types of raw materials used and furnaces used to melt those raw materials.

Regarding the comment that the administrative record lacks evidence that flat glass manufacturers emit significant quantities of Urban HAP, we point out that the record does show that some flat glass plants emit some of the glass manufacturing metal HAP. Because several flat glass manufacturers do use the glass manufacturing metal HAP in their formulations, and emit metal HAP as a result, because the raw materials and the melting process are the focal points of the proposed Glass Manufacturing Area Source NESHAP, and because of evidence in the legislative history, we determined that it was appropriate to include flat glass within the area source category.

Based on our knowledge of the flat glass industry, the commenter is correct that no existing flat glass plants would have to install additional controls to comply with this final rule. However, there are existing flat glass plants that use the metal HAP as raw materials and will be subject to the other requirements of this final rule. Our data indicate these plants currently meet the emission limits and keep detailed records. Therefore, their additional burden as a result of this final rule

is only related to notifications, which we believe are justified. The notification requirements apply only if the plant uses one or more of the glass manufacturing metal HAP as raw materials; if the plant does not use any of the glass manufacturing metal HAP, this final rule does not apply. In the event that other flat glass manufacturers decide to change their current glass formulations to include metal HAPs, it is appropriate that those flat glass plants be subject to this final rule. Even in such an instance, an existing facility that changed their formulation such that it became subject to the requirements of the rule would have 2 years following the formulation change to comply with this final rule. For these reasons, we have concluded that inclusion of flat glass manufacturers in the Glass Manufacturing Area Source Category is warranted.

<u>Comment</u>: One commenter requested clarification that the proposed rule applies only to area sources and not major sources of HAP emissions.

Response: As specified in §63.11448, the Glass Manufacturing Area Source NESHAP applies only to area sources of the glass manufacturing metal HAP.

2. Definition of Affected Source

Comment: Two commenters stated that, although the 45 Mg/yr (50 tpy) furnace threshold was meant to exclude small manufacturers, the proposed threshold is less than the amounts that some stained glass manufacturers, glass studios, and schools

produce. The commenters believe that a higher threshold level is warranted to ensure that the small facilities that were meant to be excluded would not be subject to this final rule.

Response: Although we considered revising the definition of affected source in response to the commenters' concerns, we have no data to indicate a specific higher threshold and why that threshold would be more appropriate than the 45 Mg/yr (50 tpy) level specified in the proposed rule. However, based on our review of the comments received on the proposed rule and the available data, we have decided to clarify that this final rule only applies to continuous furnaces and not to periodic furnaces. We believe this clarification ameliorates the commenters' concerns regarding the production threshold. In this final rule, we have revised \$63.11448 to apply only to facilities that use continuous furnaces to produce glass.

<u>Comment</u>: Two commenters expressed concern with the definition of affected source (i.e., furnace). Both commenters stated that the definition in the proposed rule, which was adopted from 40 CFR 60, subpart CC, Standards of Performances for Glass Manufacturing Plants (Glass NSPS), defines furnace to include the "raw material charging system" and "appendages for conditioning and transferring molten glass to forming machines."

One commenter pointed out that, in the proposed rule, compliance is demonstrated by testing the furnace stack. However, emissions from the "charging system" or "appendages" are not generally

ducted to the furnace stack. The commenter stated that furnace was defined as it was in the NSPS to clarify what constitutes a modification; the definition was not meant to identify emission points or where stack testing should be performed. The other commenter explained that one of the company's plants adds colored frit to the molten glass in the forehearth, which is one of the "appendages" referenced in the definition of furnace. The commenter pointed out that emissions from the forehearth are not ducted to the furnace stack. Since the GACT analysis for glass furnaces was based on emissions from furnace stacks, the proposed emission limits should not apply to emissions from forehearths.

Response: In developing the proposed rule, we determined GACT for this source category based on technology used to reduce emissions from glass melting furnace stacks. Glass furnace stacks generally exhaust emissions from the furnace melter, which is the part of the furnace where raw materials are charged and melted. Although furnace stacks may also exhaust emissions from other parts of, or appendages to, the furnace, it was our intent to regulate emissions from the furnace melter. This is consistent with our understanding of the emissions profile of glass manufacturing raw materials; that is, metal HAP are emitted from glass furnaces upon the initial melting step. Later remelting of glass, such as cullet and frit, does not re-emit the metal HAP once the glass has been formed or vitrified.

To clarify this requirement, we have revised §63.11459 of

this final rule to redefine the glass melting furnace as the ". . . process unit in which raw materials are charged and melted at high temperature to produce molten glass." In addition, we have added to \$63.11459 a definition of furnace stack as the conduit or conveyance through which emissions from the furnace melter are released to the atmosphere. We also have revised \$63.11452 in this final rule to clarify that compliance with the emission limits is determined by testing the furnace stack.

 $\underline{\text{Comment}}$: One commenter requested that the rule exempt furnaces that are used strictly for R&D.

Response: We agree with the commenter that this final rule should clarify that sources that are used exclusively for R&D purposes are not regulated by this rule because these sources were not part of the inventory. Therefore, we have added a provision to \$63.11449 that clarifies that such furnaces are not covered by this final rule. We also have added to \$63.11459 of this final rule a definition for research and development process units.

<u>Comment</u>: Three commenters stated that the rule should specify a de minimis level for metal HAP usage, below which plants would have no requirements. Two of the commenters suggested setting annual de minimis levels for each regulated HAP, below which the rule limit would not apply.

Response: With respect to the use of the glass manufacturing metal HAP in relatively small amounts, the proposed

0.01 g/kg (0.02 lb/ton) metal HAP emission limit should address the commenters' concerns. If metal HAP are added to the batch in very small amounts, compliance with the HAP emission limit could be achieved without having to install a control device on the affected furnace.

It is appropriate under the area source program that glass manufacturers using large amounts of metal HAP in their furnaces install controls to reduce those emissions. Therefore, we have concluded that if would not be appropriate to develop de minimis levels for metal HAP usage.

<u>Comment</u>: One commenter stated that the rule does not define reconstruction as it pertains to reconstructed sources. The commenter suggested that the NSPS definition of reconstruction be adopted or incorporated by reference.

Response: Although the proposed rule did not define reconstruction, \$63.11472 states that the definitions specified in the CAA and \$63.2 of the General Provisions to part 63 also apply to the proposed rule. This is the definition of reconstruction that applies to all part 63 standards. Therefore, we believe it is the appropriate definition for the Glass Manufacturing Area Source NESHAP.

Comment: One commenter addressed the applicability of the proposed rule for furnaces that are used both for making glass that does not contain metal HAP and glass that contains metal HAP. The commenter asked if the 45 Mg/yr (50 tpy) threshold that

defines an affected source is based only on the amount of HAP-containing glass produced or on the total amount of glass produced, even if the amount of HAP-containing glass was less than $45~\mathrm{Mg/yr}$ (50 tpy).

Response: It was our intent for the rule to apply to furnaces that produce as least 45 Mg/yr (50 tpy) of glass that contains one or more of the glass manufacturing metal HAP as raw materials. Therefore, a furnace that produces more than 45 Mg/yr (50 tpy) of glass would not be subject to this final rule if the amount of HAP-containing glass produced in the furnace were less than 45 Mg/yr (50 tpy). We have revised the definition of affected source in \$63.11449 to clarify that a source is an affected source only if it produces at least 45 Mg/yr (50 tpy) of glass that contains one or more of the metal HAP as raw materials.

3. Regulated Pollutants

<u>Comment</u>: One commenter stated that the rule should not regulate arsenic because arsenic emissions are already regulated under the Glass Arsenic NESHAP. The commenter believes that the requirements for both rules will create overlapping and sometimes conflicting requirements. The commenter added that the reporting and recordkeeping burden for a second rule to regulate the same pollutant would be excessive.

Response: The listing of glass manufacturing as an area source category was based in part on arsenic, which was

identified in the section 112(k) inventory as one of the HAP emitted by glass manufacturing facilities. Therefore, we are required under sections 112(c)(3) and (d) of the CAA to regulate emissions of arsenic from glass manufacturing plants that are area sources of HAP based on GACT for the glass manufacturing industry.

With respect to the burden associated with complying with both rules, we have tried to minimize the burden associated with the Glass Manufacturing Area Source NESHAP. This final rule will require affected plants to submit an Initial Notification and a Notification of Compliance Status, but will require no additional reporting. Furthermore, the recordkeeping requirements are similar for both the proposed rule and the Glass Arsenic NESHAP. Therefore, we disagree that the reporting and recordkeeping burden associated with complying with both rules will be excessive. With respect to monitoring, the Glass Area Source NESHAP allows affected sources to request approval of alternative monitoring, which likely would result in no changes to the monitoring that is currently performed to comply with the Glass Arsenic NESHAP. In terms of testing, the Glass Area Source NESHAP requires only a one-time test and includes a provision for using data from a previous emission test conducted within the last 5 years, if the test demonstrates compliance with the emission limits specified in the Glass Area Source NESHAP.

4. Title V Permitting

Comment: Two commenters addressed EPA's decision to not exempt the Glass Manufacturing Area Source Category from title V permitting. Both commenters disagreed with the statement in the preamble to the proposed rule that all of the facilities that would be affected by the proposed rule are already subject to title V. One commenter stated that at least one of the company's facilities, which is not subject to title V, would be subject to the proposed rule. The commenter also stated that EPA's reasons for exempting the Clay Ceramics Manufacturing and Secondary Nonferrous Metals Processing Source Categories from title V permitting also apply to the Glass Manufacturing Source Category. The other commenter stated that the company operates two plants that are not currently subject to title V, each with a furnace that would be subject to the proposed rule. Although both furnaces are scheduled for shutdown, the company may reconsider this decision to shut them down if market conditions change. same commenter stated that it is possible that there are other non-title V facilities that would be subject to the proposed rule, and that it appears it was EPA's intent for the proposed rule to not cause additional facilities to become subject to title V. Both commenters requested that the proposed rule provide title V exemptions for facilities that are not currently subject to title V permitting.

Response: Section 502(a) of the CAA requires sources subject to regulation under section 112 of the CAA to obtain a

permit to operate. However, Section 502(a) authorizes the Administrator, in his discretion, to "promulgate regulations to exempt one or more source categories (in whole or in part) from the requirement of (title V) if the Administrator finds that compliance with such requirements is impracticable, infeasible, or unnecessarily burdensome on such categories . . ." EPA promulgated a rule interpreting section 502(a) and therein stated that EPA may only exempt a category from title V permitting if we find compliance to be "impracticable, infeasible, or unnecessarily burdensome" and we determine that exempting the category would not adversely affect public health, welfare, or the environment (see 70 FR 75,320, 75,323 (Dec. 19, 2005)).

Nowhere in the rule did we establish a presumption in favor of exempting sources from title V permitting, and the statute leaves such determinations to the discretion of the Administrator.

The commenters have identified three glass manufacturer area source plants that are currently not subject to the operating permit requirements of CAA title V, which renders incorrect our assertion at proposal that all glass manufacturers that would be subject to this final rule were already subject to title V requirements. Notwithstanding this error, comments and other information in the record for this rulemaking do not demonstrate that compliance with title V permitting would be impracticable, infeasible, or unnecessarily burdensome for the sources in this category. Other than these two comments, we did not receive

information during the comment period indicating that there are other sources that will be subject to this rule that do not have title V permits already. In this case, more than 80 percent of the sources in the category have title V permits, and of the 3 facilities that do not have such permits, the affected furnaces at two of those facilities are currently scheduled for shutdown. Based on these facts, it is not readily apparent why it would be impracticable, infeasible, or unnecessarily burdensome for sources in this category to comply with the title V requirements.

The two commenters that opposed our decision to not exempt the Glass Manufacturing Area Source Category from title V permitting did not identify their plants in question, did not explain how those plants differed in any way from other plants in this category that currently hold a title V permit, and did not explain how those differences would be relevant to the criteria for an exemption from title V.

For example, one commenter supported its request for exempting its two plants from title V by stating a desire for flexibility in the event that one or more of the affected furnaces at the plants actually do not shut down. (As noted above, the commenter's current plan is to shut down the affected furnaces at these two facilities.) Source flexibility, while important, is not a factor EPA considers in determining whether to exempt a source from title V permitting requirements.

The second commenter seeking a title V exemption for the

glass manufacturing source category asserted that the reasons for exempting the other two source categories addressed in today's notice (Clay Ceramics Manufacturing and Secondary Non-ferrous Metals Processing area sources) applied equally to this category. The commenter, however, offered no information substantiating this assertion, and we cannot dismiss obvious differences between the glass manufacturing source category and the source categories which received a title V exemption. These differences include whether most of the category already has a title V permit and whether most of the category is composed of small businesses that would incur economic hardship were title V requirements imposed on them.

The decision to exempt a source category is made on a case-by-case basis according to the facts of the industry. According to information we have collected on the glass manufacturing area source category, we conclude, in the absence of contrary information, that a title V exemption for this area source category is not warranted. Therefore, in light of the lack of information supporting an exemption of this source category from the title V requirements, we have not exempted the Glass Manufacturing Area Source Category from title V under today's rule.

5. Emission Limits

<u>Comment</u>: One commenter stated that, although emissions from glass furnaces vary by the type of glass produced, the proposed

emission limits do not account for the relationship between PM emissions and glass type. The commenter noted that the Glass NSPS accounts for these differences by specifying different PM emission limits depending on the glass formulation and fuel type. The commenter explained that the differences in PM emissions result from differences in the volatilization rate of the constituents of the glass recipe. The commenter suggested that the proposed rule adopt the NSPS emission limits to account for these differences and to avoid confusion.

Response: While the Glass NSPS does regulate glass manufacturing furnaces for emissions of PM, the purpose of the proposed area source NESHAP is to address metal HAP emissions from continuous glass manufacturing furnaces.

Section 112(d)(5) of the CAA requires us to develop emission limits to reduce HAP emissions from area sources based on GACT. For the Glass Manufacturing Area Source Category, we determined GACT to be the level of control achieved by an ESP. In developing the PM emission limit for the proposed rule, our approach was to consider all of the available data on ESP-controlled PM emissions from glass manufacturing furnaces. Those data do not indicate that the variations in PM emissions due to glass formulation that are reflected in the emission limits of the Glass NSPS are appropriate for this rule. For example, the NSPS emission limits (in the format of PM emission factors) are higher for pressed and blown glass formulations than for

container or flat glass formulations. However, the data used in developing the proposed PM emission limit do not indicate that controlled PM emissions from pressed and blown glass furnaces are higher than PM emissions from container or flat glass furnaces. In fact, the data with the lowest emission factors are from controlled pressed and blown glass furnaces. Although there are several possible explanations for this discrepancy, we point out that the NSPS emission limits are based on data from the 1970s and may not be representative of current glass manufacturing furnace PM emissions and control device performance. In conclusion, we developed the proposed PM emission limit based on the best available data, and because those data do not indicate variations in controlled PM levels due to glass formulation, we are not adopting the NSPS emission limits or differentiating by glass formulation, as suggested by the commenter.

Comment: One commenter pointed out that many existing glass furnaces comply with the Glass NSPS using modified processes without having to install emission controls. The commenter urged EPA to consider incorporating in this final rule the alternate emission limits for modified processes established in the NSPS. The commenter explained that the cost to retrofit a glass furnace with a control device is prohibitive, particularly in view of the amount of metal HAP reduced by such controls.

Response: The Glass NSPS defines modified process as "... any technique designed to minimize emissions without the use of

add-on pollution controls." Thus, even though the regulated pollutant for the Glass NSPS is PM, the term "modified process" can apply to emissions of any pollutant. Several glass manufacturing furnaces subject to the NSPS have used this provision for meeting the less stringent PM emission limits for modified processes by installing controls or process modifications to reduce emissions of other pollutants, such as nitrogen oxides (NO_x) . However, under Section 112(d) of the CAA, we are required to establish area source standards specifically for emissions of the Urban HAP. Furthermore, we are required to base those emission standards on GACT. As noted above, we determined GACT for this source category based on the level of control achieved by an ESP in controlling metal HAP emissions, and for controlling PM emissions as a surrogate for metal HAP emissions.

We understand that the costs of installing an ESP or equivalent control device on a glass furnace can be high. For example, we estimate the capital costs for installing a control device on a typical container furnace to be \$800,000. However, our economic analysis of the industry indicates that the compliance costs for this final rule would be no more than 1 percent of sales, which we do not consider to be prohibitive. Although the metal HAP emissions reductions from an affected facility may be relatively low in terms of control costs, we note that, for facilities that use very small amounts of metal HAP in

their glass formulations, the 0.01 g/kg (0.02 lb/ton) metal HAP emission limit can be met without having to install a control device. Finally, in addition to reductions in HAP emissions, the Glass Manufacturing Area Source NESHAP also will achieve significant reductions in fine PM emissions and will result in significant health benefits as a result of those reductions.

Comment: One commenter stated that the proposed rule should incorporate factors to account for emissions during periods of low production, similar to the "zero production rate" factors specified in the Glass NSPS. The commenter reasoned that, without these factors, there will be confusion. Although the PM emission limit in the proposed rule (0.1 g/kg (0.2 lb/ton)) is the same as the NSPS limit for container glass furnaces and for soda lime and lead pressed and blown glass furnaces, the NSPS includes the zero production rate factor, whereas the proposed rule does not incorporate such a factor.

Response: We appreciate the need to avoid confusion and to promote clarity in rulemaking, and we are sensitive to the need to implement the rule with easily understood materials and clear instruction. To that end, EPA currently plans to provide implementation guidance to minimize confusion that may be caused by the applicability of three Federal air pollution regulations that apply to this industry sector: the Arsenic NESHAP, the Glass NSPS, and this Area Source NESHAP. However, we have concluded that it would not be appropriate to incorporate one or

more zero production rate factors in the final rule as suggested by the commenter. As specified in §63.11452(b)(4), compliance with the emission limits in the proposed rule must be determined through emission testing when the furnace is operating at maximum production rate. Therefore, emission levels when the furnace is operating at low production rates are not relevant with respect to compliance with the emission limits. If the rule were to require demonstrating compliance with the emission limits on a continuous basis, such as by using a continuous emissions monitoring system, it could be argued that there is reason to incorporate a zero production rate factor. In such a case, the emission factor would likely increase as production approached zero, and at zero production, the emission factor would be undefined. However, that is not the case for the proposed rule, which requires parameter monitoring and recordkeeping to demonstrate continuous compliance. Finally, it should be noted that the proposed emission limits were developed from data that did not account for zero production rate emissions. Furthermore, specifying an emission limit without zero production rate factors is consistent with other NESHAP.

<u>Comment</u>: One commenter questioned whether the proposed emission limits were based on data exclusively from large furnaces. The commenter explained that, when emissions are normalized for production, as is the case for the proposed emission factor format, they may not be representative of

emissions from small furnaces if the limits are based on data from large furnaces. The commenter stated that, since the rule is likely to apply to small furnaces, the proposed limits should account for the higher emission factors characteristic of smaller furnaces. The commenter's company operates a small furnace that would be subject to the rule, as proposed, but would not be able to meet the proposed emission limit, even though the furnace is exhausted to a fabric filter. The commenter stated that a control efficiency of 99.91 percent would be needed for the furnace to meet the proposed limit. The commenter suggested including a correction factor for small furnaces, such as the zero production rate factors specified in the Glass NSPS, to account for this difference in emission levels between large and small furnaces.

Response: In developing the emission limits for the proposed rule, we reviewed all available emission test data on controlled furnaces, which included the results of tests on a wide range of furnace sizes or production rates. Because the production data for many of the furnaces were claimed as confidential business information, we cannot release the actual production rates to the public. However, we can provide information on the range of the data. The production data for the furnaces used to develop for the PM emission limit ranged from less than 0.9 megagram per hour (Mg/hr) (1 ton per hour (tph)) to just under 27 Mg/hr (30 tph). Of the 19 data points

used, 3 data points were for furnaces with production rates of less than 0.9 Mg/hr (1 tph) and 9 data points were for furnaces with production rates less than 4.5 Mg/hr (5 tph). To develop the metal HAP emission limit, the furnace production rates ranged from less than 0.9 Mg/hr (1 tph) to just under 23 Mg/hr (25 tph). Of the 15 data points used, the production rates for 2 furnaces were less than 0.9 Mg/hr (1 tph), and the rates for 9 furnaces were less than 4.5 Mg/hr (5 tph). Although the commenter did not specify the actual production rate for the furnace in question, furnaces with production rates less than 4.5 Mg/hr (5 tph) would most likely be considered small and furnaces with production rates less than 0.9 Mg/hr (1 tph) would certainly be considered small. Therefore, we disagree with the commenter's assumption that only data from large furnaces were used to develop the proposed emission limits.

Although the commenter's suggestion about including a zero production rate factor would reduce the stringency of the standard for small furnaces, we do not believe such a factor is needed for the reasons described in the previous paragraph. Furthermore, as discussed in our response to the previous comment, we do not believe a zero production rate factor is relevant for an emission limit that must be demonstrated by testing when the source is operating at the maximum production rate.

Comment: One commenter stated that the process of

manufacturing glass tableware is significantly different from container glass due to the need for higher quality requirements. The raw material formulations differ, and tableware furnaces operate at higher temperatures with longer residence times. Tableware furnaces also are smaller. The commenter stated that the South Coast Air Quality Management District uses an emission factor for tableware furnaces that is nearly five times the factor used for container glass furnaces.

Response: We acknowledge that PM emissions from glass furnaces can vary as a function of the type of glass produced. We also recognize that glass tableware manufacturing is generally classified as a type of pressed and blown glass rather than container glass, and PM emission factors for pressed and blown glass furnaces typically are greater than PM emission factors for container glass furnaces. When determining GACT for the proposed rule, we used all the available data on emissions of PM and metal HAP from furnaces controlled with ESP. Most of the data used in developing the proposed emission factors were from emission tests on pressed and blown glass furnaces. Therefore, we believe those emission limits are generally representative of the emission levels that can be achieved by an ESP-controlled furnace manufacturing pressed and blown glass. We also point out that the NESHAP specifies a metal HAP emission limit which may be more appropriate for specific furnaces that have unusually high PM emissions.

Commenter: One commenter noted that the proposed GACT does not take into consideration the unique nature of the stained glass industry, which generally uses small periodic furnaces rather than large continuous furnaces to produce glass. The commenter believes stained glass manufacturing should be a separate subcategory with GACT defined in terms of the practices and emission reduction methods followed by stained glass manufacturers.

Response: Although we conducted an extensive information gathering effort to compile data for developing the proposed NESHAP, we had little data on the stained glass sector and no basis for identifying stained glass as a separate subcategory of the glass manufacturing industry. We agree with the commenter that GACT for stained glass, if identified as a subcategory, should be based on methods and practices used by that sector to reduce metal HAP emissions. Although we still do not have the data to warrant creating a separate subcategory for stained glass, we have revised \$63.11448 of the rule to clarify that the rule applies to continuous furnaces and not to periodic furnaces. In doing so, we believe we have addressed the commenter's concerns.

6. Compliance Dates

<u>Comment</u>: One commenter stated that most glass manufacturing furnaces are rebuilt every 10 to 15 years. The commenter suggested that the compliance date for an existing furnace should

coincide with the next rebuild planned for that furnace.

Otherwise, affected facilities would have to install controls "on the fly," and doing so would interrupt glass production by forcing the facility to shut down affected furnaces for long periods. These shutdowns would result in significant costs to the affected facilities. The commenter pointed out that these costs were not accounted for in the estimated cost effectiveness and impacts for the proposed rule.

Response: Section 112(i) of the CAA specifies that NESHAP require compliance ". . . as expeditiously as practicable, but in no event later than three years after the effective date. . ." of the standard. Since we had no information indicating this would be the case for the glass manufacturing industry, we proposed a compliance date of 2 years after promulgation of this final rule, which is consistent with the compliance date for other NESHAP. We believe this provision should allow adequate time for affected sources to install the controls needed to comply with this final rule. However, in the event that 2 years in not adequate, \$63.6(i)(3) of the General Provisions to part 63 allows owners or operators of affected facilities to request a 1-year extension of the compliance date if they can demonstrate that they need the additional time to install controls.

<u>Comment</u>: One commenter noted that additional time is needed for reconstructed furnaces to install controls. The company is rebuilding several furnaces in 2008, which would make them

reconstructed furnaces. The compliance date for reconstructed sources would be the startup date (sometime in 2008), but it will take additional time to design, receive, and install a control device on the reconstructed furnaces.

Response: The General Provisions to 40 CFR part 63 define "new source" to include reconstructed sources, and for sources subject to 40 CFR part 63 standards, the compliance date for new sources is dictated by \$63.6(b) of the General Provisions to part 63. That is, new sources must be in compliance on the effective date of the rule or upon startup, whichever is later. Based on the limited facts submitted by the commenter, it is unclear if the subject furnaces would be considered existing furnaces or new furnaces. The General Provisions to part 63 define "commenced" as it relates to reconstruction as entering ". . . into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or reconstruction." The commenter should evaluate the facts of its particular situations in light of the definitions incorporated into this final rule.

7. Other Compliance Requirements

<u>Comment</u>: One commenter identified an issue concerning furnaces that are used both for making glass that does not contain metal HAP and for making glass that contains metal HAP. The commenter requested clarification of the compliance requirements when the affected furnace is not producing glass

that contains metal HAP.

Response: We agree with the commenter that additional clarification is needed on furnaces that are used to produce HAP-containing glass and non-HAP glass. Our intent was that the emission limits and other compliance requirements would apply when the affected furnace is producing glass that contains one or more of the glass manufacturing metal HAP. We have revised \$63.11454 to clarify that the monitoring requirements apply only during times when any of the glass manufacturing metal HAP are used in the glass being produced. We also have revised \$63.11455 to clarify that the continuous compliance requirements apply under the same conditions. However, owners and operators must still keep the applicable records specified in \$63.11457, including records of production data, during any period when an affected furnace is operated, regardless of the batch formulation used.

<u>Comment</u>: One commenter stated that the rule is unclear on the continuous compliance requirements for existing sources, particularly for sources that meet the metal HAP emission limit without having to install a control device.

Response: We agree with the commenter that additional clarification is needed regarding continuous compliance requirements for affected furnaces that meet the emission limit without the use of an emission control device. We have revised \$63.11455 of this final rule to clarify how owners or operators

of affected sources must demonstrate continuous compliance. For the specific case cited by the commenter, the only continuous compliance requirement would be the recordkeeping requirements specified in §63.11457.

<u>Comment</u>: One commenter stated that, even if a plant could meet the emission limit without installing a control device, the reporting and recordkeeping requirements of the rule are unnecessarily burdensome.

Response: We disagree that the reporting and recordkeeping requirements of the proposed rule are overly burdensome. This final rule will require affected plants to submit an Initial Notification and a Notification of Compliance Status, but will require no reporting. As for the recordkeeping requirements, the proposed rule incorporates the basic requirements specified in the General Provisions to part 63, and our understanding is that most facilities routinely maintain these records.

8. Emission Testing

Comment: Two commenters requested clarification of how emissions are tested and analyzed to show compliance with the proposed metal HAP emission limit. Both pointed out that the test method (Method 29) quantifies a wide range of metals, including metals that are not urban HAP and urban HAP metals that may not have been charged to the furnace as raw materials but could be present as contaminants in charge materials or fuels. The commenters stated that the rule should specify that emissions

should be analyzed only for the metal HAP that are intentionally added to the batch as raw materials.

Response: We agree with the commenters that the testing requirements specified in the proposed rule need further clarification regarding how the sampled emissions are analyzed. We have revised \$63.11452 in this final rule to clarify Equation 2, which is used to determine compliance with the metal HAP emission limit. We have defined the variable "ERM" in this final rule as the sum of the mass emission rates for the glass manufacturing metal HAP that are charged to the furnace as raw materials. We believe this revision addresses the commenters' concern.

Comment: One commenter noted the definition of PM in the rule is ambiguous and could be interpreted to include filterable PM and condensible PM. Because the rule requires testing by Methods 5 or 17, and both of those methods measure filterable PM, the rule needs to clarify that the proposed PM emission limit refers to filterable PM. The commenter suggested that removing the word "total" from the definition would eliminate this ambiguity.

Response: We agree with the commenter and have revised the definition of PM in \$63.11458 by replacing the phrase "total particulate emissions" with "filterable particulate emissions."

This revised definition is consistent with the test methods

(Methods 5 and 17) that are specified for determining compliance.

<u>Comment:</u> One commenter operates several identical furnaces that would be subject to the proposed rule. The commenter requested that the rule require testing on only one such furnace rather than on all of them.

Response: We agree with the commenter that it should not be necessary to test multiple identical furnaces to demonstrate that all of the furnaces meet the emission limit. To address this issue, we revised §63.11452(a) by adding paragraph (a)(3), which specifies conditions under which testing of a single furnace would be allowed as the compliance demonstration for other identical furnaces. Specifically, the owner or operator must certify that the furnaces that are not tested are identical in design to the furnace that is tested, including manufacturer, dimensions, production capacity, charging method, operating temperature, fuel type, burner configuration, and exhaust system configuration and design. Furthermore, the compliance test must be performed while the furnace is producing the glass formulation with the greatest potential to emit the glass manufacturing metal HAP, and the owner or operator must provide documentation that demonstrates why the tested glass formulation has the greatest potential to emit metal HAP.

9. Other Issues

<u>Comment</u>: Two commenters requested clarification of the definition of raw material. The commenters stated it was not clear if cullet is considered a raw material, and they suggested

revising the definition to exclude cullet. One of the commenters suggested adding the phrase "excluding glass manufacturing metal HAP that are introduced as cullet, trace constituents, or contaminants of other substances" to §§63.11448 and 63.11449(a)(1) to clarify what is considered a raw material. The other commenter suggested revising the definition of raw material to exclude material captured by control devices and recycled into the process.

Response: We agree with the commenters that the proposed rule is not clear on whether or not cullet is considered a raw material. We also agree that material that is captured in a furnace control device and recycled should not be considered a raw material. We have revised the definition of raw material to state that cullet and material captured by the furnace control device are excluded. However, this definition does not exclude material collected from other sources, such as from fabric filters that are used to control emissions from raw material handling or transporting, because, while pre-vitrified materials do not re-emit metal HAP when remelted, baghouse fines from raw material handling and transporting have not been previously vitrified.

<u>Comment</u>: One commenter stated that the rule is unclear as to the notification requirements for furnaces that, at the time of promulgation, were not subject, but later become subject due to increased production or changes in glass formulation.

Response: To address the commenter's concern, we have revised \$63.11456(a) to indicate that the Initial Notification is due 120 days after the furnace becomes subject to this final rule due to increased production or changes in glass formulation. We also have revised \$63.11456(a) to specify deadlines for submitting the Notification of Compliance Status.

C. Area Source NESHAP for Secondary Nonferrous Metals Processing

Comment: One commenter noted that the intent of the CAA, as it relates to the Area Source Program, was to bring about reductions in HAP emissions from area sources. The commenter expressed disappointment that some of the rules proposed under the Area Source Program (e.g., Secondary Nonferrous Metals Processing) will not result in emissions reductions and recommended that future area source rules incorporate provisions that will provide additional public health protection from the effects of HAP emissions from area sources.

Response: As previously explained, we have determined that GACT for the Secondary Nonferrous Metals Processing area source category is the use of a baghouse or fabric filter that achieves a control efficiency of 99 percent for existing sources and 99.5 percent for new sources. The use of baghouses and fabric filters has been shown to be very effective in controlling PM and metal HAP emissions from this area source category. The

 $^{^{\}rm c}$ As previously explained, we have determined that outlet concentration limits of 0.034 g/dscm (0.015 gr/dscf) and 0.023 g/dscm (0.010 gr/dscf) reflect the GACT levels of control for existing and new secondary nonferrous processing area sources, respectively.

commenter does not challenge any aspect of EPA's proposed GACT determination for this area source category. Instead, the commenter makes a blanket assertion that EPA is not acting consistently with the purposes of the area source provisions in the CAA (i.e., sections 112(c)(3) and 112(k)(3)(B)), because it is not requiring emission reductions beyond the level that is currently being achieved from this well-controlled source category. In support of this assertion, the commenter compares the requirements in the proposed rule to the area source category's current emission and control status. Such a comparison is flawed and irrelevant.

Congress promulgated the relevant CAA area source provisions in 1990 in light of the level of area source HAP emissions at that time. Congress directed EPA to identify not less than 30 HAP which, as a result of emissions from area sources, present the greatest threat to public health in the largest number of urban areas, and to list sufficient area source categories to ensure that sources representing 90 percent of the 30 listed HAP are subject to regulation. As explained in the Integrated Urban Air Toxics Strategy, EPA based its listing decisions on the baseline NTI that the Agency compiled for purposes of implementing its air toxics program after the 1990 CAA Amendments. 64 FR 38706, 38711, n.10. The baseline NTI reflected HAP emissions from glass manufacturing area sources in 1990. Thus, contrary to the commenter's suggestion, the relevant

emission level for comparison is the emission level reflected in our baseline NTI, not the current emission level.

Based on EPA's baseline NTI, emissions of urban metal HAP from this area source category have been reduced from approximately 25 Mg/yr (28 tpy) to less than 0.9 Mg/yr (1 tpy) since 1990. Furthermore, in promulgating the area source provisions in the CAA, Congress did not require EPA to issue area source standards that must achieve a specific level of emission reduction. Rather, Congress authorized EPA to issue standards under section 112(d)(5) for area sources, and those standards are to reflect GACT for the source category. To qualify as being generally available, a GACT standard would most likely be an existing control technology or management practice. Thus, it is not surprising that the GACT standard being finalized today codifies the existing effective HAP control approach being used by sources in the category. For the reasons stated above, this final rule is consistent with sections 112(c)(3), 112(k)(3)(B), and 112(d)(5).

D. Area Source NESHAP-General

Comment: A commenter expressed his "understanding that Congress only gave EPA [the authority] to establish requirements for new . . . [sic] major sources under the MACT and NSPS standards, and not new area sources." The commenter further claimed that new area sources are the "jurisdiction" of State and local authorities. The commenter also expressed the policy

objection "that to allow EPA to establish new and modified source requirements is tantamount to overriding the authority given the States and locals for establishing Best Available Control Technology (BACT) through their new source review programs." The commenter further questioned which standard would apply to a new area source if EPA established GACT requirements on a new source, and these requirements were to differ from BACT requirements in the NSR permit for the source.

Response: The comment above raises issues of EPA's authority for establishing GACT for new area sources and the appropriateness of potentially "overriding" locally-made BACT determinations for such sources. As generally discussed in the background section of this final rule, section 112 explicitly requires that EPA list categories of major sources, 42 U.S.C. 7412(c)(1), and area sources if those area sources meet the listing criteria in 42 U.S.C. 7412(c)(3). Furthermore, the statute requires EPA to promulgate emission standards for all listed categories whether the category is composed of major sources of HAP or area sources and directs that these standards address new as well as existing sources (42 U.S.C. 7412(d) & 7412(f)(2)). For area sources, Congress has provided EPA the option to promulgate GACT in lieu of MACT standards (42 U.S.C. 7412(d)(5)). In establishing time frames for compliance for "any emission standard, limitation or regulation promulgated under this section [i.e., section 112]," Congress allowed for different compliance dates for new and existing sources (42 U.S.C. 112(i)(3). This provision reinforces Congress's intent that standards under section 112, including the required area source standards, address both new and existing sources. Therefore, the commenter's understanding of EPA's authority does not reflect these express provisions of the statute. Based on these statutory provisions, EPA disagrees with the commenter's position that EPA lacks authority to establish GACT for new area sources.

Regarding the appropriateness of what the commenter calls "overriding" the authority to set BACT and BACT limits, we agree that there is a theoretical possibility inherent in the statute to have a GACT standard differ in stringency with a BACT limit in a permit. Initially, we note that BACT is triggered by the emission of different pollutants than those regulated under section 112 (see 42 U.S.C. 7412(b)(6)). The applicability provisions differ, and a major source under one program may or may not be a minor or area source under the other. Nevertheless, in many circumstances, a BACT limit targeting one pollutant may also, in effect, limit HAP emissions, and a HAP limit may incidentally limit a pollutant to which BACT would apply. It is a requirement for the owner or operator of a stationary source to comply with all air pollution control obligations that apply to the source under the CAA. To the extent that these obligations conflict and cannot be met simultaneously, the statute and EPA's regulations provide several mechanisms for resolving conflicts

(e.g., provisions for developing alternate control and monitoring requirements, delegation mechanisms that allow States and local agencies to develop approvable alternate standards, etc . .).

Comment: One commenter recommended that EPA provide State and local agencies with sufficient additional grants so that they may participate in the implementation of additional area source rules. According to the commenter, Federal grants currently fall far short of what is needed to support State and local agencies in carrying out their existing responsibilities, and budget requests for the last two years have called for additional cuts. The commenter claimed that, without additional funding, some State and local air agencies may not be able to adopt and enforce additional area source rules. The commenter further stated that, even for permitting authorities that do not adopt these area source rules, it is possible that these rules will increase their work loads and resource needs. The commenter stated that, for example, synthetic minor permits (or Federally Enforceable State Operating Permits) will need to incorporate all applicable requirements, including area source standards. Noting that the title V permit fee funds are not available for these efforts, the commenter asserted that many State and local air agencies do not have sufficient resources for these responsibilities.

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 this rulemaking.

EPA today is promulgating standards for the Secondary

Nonferrous Metals Processing, Glass Manufacturing, and Clay

Ceramics Manufacturing area source categories that reflect the

practices currently in use by sources in these area source

categories, and these standards represent what constitutes GACT

for these categories under section 112(d)(5). 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 under section

112(d)(5). Moreover, we note that the commenter did not

challenge our proposed determination to exempt from title V the

Secondary Nonferrous Metals Processing or Clay Ceramics

Manufacturing area source categories.

Although the resource issue cannot be resolved through this rulemaking for the reason stated above, EPA remains committed to working with State and local agencies to implement this final 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.

VI. Impacts of the Final Area Source Standards

A. Glass Manufacturing

1. Air Quality Impacts

For the three sources that will be required to install emission controls to meet the emission limits specified in this final rule, we estimate nationwide emissions of the glass manufacturing metal HAP to be 26.2 Mg/yr (28.9 tpy). We estimate that this final rule will reduce nationwide emissions of the glass manufacturing metal HAP by about 25.6 Mg/yr (28.2 tpy). This final rule will also reduce emissions of PM by 377 Mg/yr (415 tpy). These estimates are based on the assumption that an ESP will be installed on one pressed and blown glass furnace, and that fabric filters will be installed on two pressed and blown glass furnaces.

We project that, during the first three years of the standard, nine new furnaces will be constructed and that all nine furnaces will be in the container glass sector. Because none of these new furnaces are expected to use any of the glass manufacturing metal HAP as raw materials, we project that none of the nine new furnaces will be affected by this final rule. Therefore, we estimate that this final rule will have no air quality impacts on new sources.

Indirect or secondary air impacts of this final rule will result from the increased electricity usage associated with the operation of control devices. Assuming that plants will purchase electricity from a power plant, we estimate that the final standards will increase secondary emissions of criteria pollutants, including PM, sulfur dioxide (SO_2) , NO_X , and carbon monoxide (CO) from power plants. For the three existing sources that will be required to install emission controls, this final rule will increase secondary PM emissions by 0.28 Mg/yr (0.31 tpy); secondary SO_2 emissions by about 11.1 Mg/yr (12.2 tpy); secondary NO_X emissions by about 5.5 Mg/yr (6.1 tpy); and secondary CO emissions by about 0.18 Mg/yr (0.20 tpy).

For the estimated nine new sources within the Glass
Manufacturing industry over the next three years, we estimate no
secondary air impacts because we project that none of the new
sources will be affected sources under this rule.

2. Water and Solid Waste Impacts

To comply with this final rule, we expect that affected facilities will control emissions by installing and operating ESP or fabric filters, neither of which generates wastewater.

Therefore, we project that this final rule will have no water impacts. Glass manufacturers typically purchase highly refined and purified raw materials, and they usually recycle internal captured baghouse and ESP fines into the raw material to be fed back into the furnace. Therefore, we expect the solid waste

impacts to be far less than if facilities were to dispose of their ESP and baghouse fines. We estimate that this final rule will generate 37.7 Mg/yr (41.6 tpy) of solid waste from existing sources. These estimates are based on the assumption that an ESP will be installed on one pressed and blown glass furnace, and that fabric filters will be installed on two pressed and blown glass furnaces. For new sources, we estimate that this final rule will have no impacts on solid waste generation.

3. Energy Impacts

Energy impacts consist of the electricity and fuel needed to operate control devices and other equipment that are required under this final rule. We assume that affected facilities will comply with this final rule by installing and operating either ESP or fabric filters, which require electricity to operate. Specifically, we assumed that an ESP will be installed on one pressed and blown glass furnace, and that fabric filters will be installed on two pressed and blown glass furnaces. Under this scenario, we project that this final rule will increase overall energy demand (i.e., electricity demand) for existing sources by about 1,970 megawatt-hours per year, or 7.1 thousand gigajoules per year (6.7 billion British thermal units per year). estimate that none of the nine new sources projected to go into operation during the first three years of the standard will be affected by this final rule. Therefore, we are not expecting any energy impacts for new sources.

4. Cost Impacts

The estimated total capital costs of this final rule for existing sources are \$1.42 million. These capital costs include the costs to purchase and install ESP or fabric filters on the three affected furnaces that are not currently controlled. The estimated annualized cost of this final rule for existing sources is \$491,000 per year. The annualized costs account for the annualized capital costs of the control and monitoring equipment, operation and maintenance expenses, performance testing, and recordkeeping costs for the three existing facilities within the source category that will be required to install new emission controls. The other affected facilities will incur costs only for submitting the notifications and for annual control device inspections because those facilities already meet the testing, monitoring, and recordkeeping requirements that are required under this final rule.

We estimate that none of the nine new sources projected to go into operation during the first three years of the standard will be affected sources under this final rule. Therefore, we estimate no cost impacts for new sources.

5. Economic Impacts

Both the magnitude of control costs needed to comply with this final rule and the distribution of these costs among affected facilities can have an impact in determining how the market will change in response to the rule. Total annualized costs for this final rule are estimated to be approximately \$0.48 million. Only three facilities are estimated to require additional capital costs because of this final rule.

We obtained revenue data for two of the three companies that operate facilities that will be required to install emission controls under this final rule. Based on those data, cost-to-sales estimates for those two affected facilities are 0.66 percent and 1.0 percent, respectively. Revenue data were not available for the other facility that will be affected by this final rule, so the national average value of shipments per worker from the 2002 Census of Manufacturers was used along with the average number of workers per facility to estimate revenues. The resulting costs for this and the other two facilities are relatively small and are not expected to result in a significant market impact whether they are passed on to the purchaser or absorbed by the company.

B. Clay Ceramics Manufacturing

Unlike the glass manufacturing industry, which still has some uncontrolled sources of urban HAP, sources in the clay ceramics manufacturing source category have made significant emission reductions through process changes and installation of control equipment. Affected sources are well-controlled, and our GACT determination reflects such controls. We estimate that the only impact to affected sources is the labor burden associated with the reporting and recordkeeping requirements. The cost

associated with recordkeeping and the one-time reporting requirements is estimated to be \$974 per facility.

C. Secondary Nonferrous Metals Processing

Similar to the clay ceramics manufacturing industry, all of the affected sources in the secondary nonferrous metal processing category have installed control equipment on their furnace melting operations. Affected sources are well-controlled, and our GACT determination reflects such controls. We estimate that the only impact associated with this final rule is the reporting and recordkeeping requirements. The cost associated with recordkeeping and the one-time reporting requirements is estimated to be \$390 per facility.

VII. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review

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

B. Paperwork Reduction Act

The information collection requirements in these NESHAP for Clay Ceramics Manufacturing Area Sources, Glass Manufacturing Area Sources, and Secondary Nonferrous Metals Processing Area

Sources have been submitted for approval to OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. The information collection requirements are not enforceable until OMB approves them.

The recordkeeping and reporting requirements in these final rules are based on the information collection requirements in the part 63 General Provisions (40 CFR part 63, subpart A). These recordkeeping and reporting requirements are mandatory pursuant to section 114 of the CAA (42 U.S.C. 7414). All information submitted to EPA pursuant to the information collection requirements for which a claim of confidentiality is made is safeguarded according to EPA's implementing regulations at 40 CFR part 2, subpart B.

The NESHAP for Clay Ceramics Manufacturing area sources requires applicable one-time notifications required by the General Provisions. Plant owners or operators are required to include compliance certifications for the management practices in their Notifications of Compliance Status. The affected sources are expected to already have the required control and monitoring equipment in place and already conduct the required monitoring and recordkeeping activities.

The annual burden for this information collection averaged over the first three years of this ICR is estimated to total 196 labor hours per year at a cost of approximately \$16,600 for 17 existing clay ceramics manufacturing area sources (51 existing

sources averaged over three years). No capital/startup costs or operation and maintenance costs are associated with the information collection requirements. No costs or burden hours are estimated for new clay ceramics manufacturing area sources because no new area sources are projected for the next three years.

The NESHAP for Glass Manufacturing also requires applicable one-time notifications required by the General Provisions, monitoring of control device parameters, and recordkeeping. annual burden for this collection of information averaged over the first three years of this ICR is estimated to total 190 labor hours per year at a cost of \$16,130 for the 21 glass manufacturing area source facilities that will be subject to this final rule. This burden estimate includes time for acquisition, installation, and use of monitoring technology and systems, onetime notifications, and recordkeeping. Total capital/startup costs associated with the monitoring requirements (e.g., costs for hiring performance test contractors and purchase of monitoring and file storage equipment) over the three-year period of the ICR are estimated at \$15,990, with operation and maintenance costs of \$9,850/yr. No costs or burden estimates are estimated for new sources because no new sources are project for the next three years.

The NESHAP for Secondary Nonferrous Metals Processing area sources requires one-time notifications required by the General

Provisions. Plant owners or operators are required to conduct performance tests and include compliance certifications for the percent PM reduction achieved by the required control device in their Notifications of Compliance Status. The affected sources are expected to already have the required control and monitoring equipment in place and already conduct the required monitoring and recordkeeping activities.

The annual burden for this information collection averaged over the first three years of this ICR is estimated to total 15 labor hours per year at a cost of approximately \$1,300 for three existing secondary nonferrous metals processing area sources (10 existing sources averaged over three years). No capital/startup costs or operation and maintenance costs are associated with the information collection requirements. No costs or burden hours are estimated for new secondary nonferrous metals processing area sources because no new area sources are projected for the next three years.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any

previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is not required to, respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in 40 CFR part 63 are listed in 40 CFR part 9. When this ICR is approved by OMB, the Agency will publish a technical amendment to 40 CFR part 9 in the Federal Register to display the OMB control number for the approved information collection requirements contained in these final rules.

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 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 to 750 employees for Clay Ceramics Manufacturing, less than 750 to 1,000 employees for Glass Manufacturing, and less than 750 employees for Secondary Nonferrous Metals Processing, depending on the size definition for the affected NAICS code); (2) a small governmental jurisdiction that is a government of a city, county, town, school district, or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise, which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of these final rules on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. Based on our estimates, EPA does not expect any new clay ceramic or secondary nonferrous metal processing sources to be constructed in the foreseeable future and so, therefore, did not estimate the impacts for new clay ceramics manufacturing or secondary nonferrous metal processing sources. There would be no significant impacts on new or existing clay ceramics manufacturing facilities or secondary nonferrous metals processing facilities because these final rules do not create any new requirements or burdens other than minimal notification requirements. The minimal notification requirements consist of reading this final rule and providing two initial notifications

to EPA: one notifying EPA that the facility is subject to this final rule and one notifying EPA that the facility is in compliance with this final rule. These notifications may be submitted together. We estimate the cost of these one-time notification requirements to be \$974 for each clay ceramics manufacturing facility and \$390 for each secondary nonferrous metals processing facility. These costs were estimated based on the costs of technical, management, and clerical support salaries. We also estimate that 34 clay ceramics facilities and 6 secondary nonferrous metals processing facilities are owned and operated by small businesses. These notification costs would be less than 0.25 percent for any of these small businesses.

Twenty-one glass manufacturing facilities are estimated to require additional costs because of this final rule. Only one of these facilities is a small business.

Although these final rules 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. These final rules are designed to harmonize with existing State and local requirements.

D. <u>Unfunded Mandates Reform Act</u>

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

section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures by State, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most costeffective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory

requirements.

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

E. Executive Order 13132: Federalism

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

These final rules do not have federalism implications. They

will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. These final rules impose requirements on owners and operators of specified area sources and not State and local governments. Thus, Executive Order 13132 does not apply to these final rules.

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

Executive Order 13175 (65 FR 67249, November 6, 2000), requires EPA to develop an accountable process to assure "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications." These final rules do not have tribal implications, as specified in Executive Order 13175. They will not have substantial direct effects on tribal governments, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes, as specified in Executive Order 13175. These final rules impose requirements on owners and operators of specified area sources and not tribal governments. Thus, Executive Order 13175 does not apply to these final rules.

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 EPA.

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

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

The glass manufacturing final rule is not a "significant energy action" as defined in Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001) because it is not likely to have a significant adverse effect on the supply,

distribution, or use of energy. Existing energy requirements for this industry will not be significantly impacted by the additional pollution controls or other equipment that may be required by this final rule. Further, we have concluded that this final rule is not likely to have any significant adverse energy effects.

The clay ceramics manufacturing and the secondary nonferrous metals processing final rules are not "significant energy actions" as defined in Executive Order 13211 (66 FR 28355, May 22, 2001) because they are not likely to have a significant adverse effect on the supply, distribution, or use of energy. The energy requirements for these industries will remain at existing levels. No additional pollution controls or other equipment that would consume energy are required by these final rules. Further, we have concluded that these final rules are not likely to have any adverse energy effects.

I. National Technology Transfer Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) of 1995 (Public Law No. 104-113, Section 12(d), 15 U.S.C. 272 note) directs EPA to use voluntary consensus standards (VCS) in its regulatory activities, unless to do so would be inconsistent with applicable law or otherwise impractical. The VCS are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by VCS bodies. The

NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency does not use available and applicable VCS.

These rules involve technical standards. EPA cites the following standards: EPA Methods 1, 1A, 2, 2A, 2C, 2F, 2G, 3, 3A, 3B, 4, 5, 17, 22, and 29 (40 CFR part 60, appendix A).

Consistent with the NTTAA, EPA conducted searches to identify voluntary consensus standards in addition to these EPA methods. No applicable voluntary consensus standards were identified for EPA Methods 1A, 2A, 2F, 2G, 22, and 29. The search and review results are in the dockets for these final rules.

The search identified one voluntary consensus standard as acceptable alternatives to an EPA Method. The standard ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses," is cited in this rule for its manual method for measuring the oxygen, carbon dioxide, and carbon monoxide content of the exhaust gas. This part of ASME PTC 19.10-1981 is an acceptable alternative to EPA Method 3B.

The search for emissions measurement procedures identified 12 other voluntary consensus standards. EPA determined that these 12 standards identified for measuring emissions of the HAP or surrogates subject to emission standards in these final rules were impractical alternatives to EPA test methods for the purposes of the rules. Therefore, EPA does not intend to adopt these standards for these purposes. The reasons for the

determinations for the 12 methods are discussed in the dockets to these final rules.

Under §63.7(f) and §63.8(f) of Subpart A of the General Provisions, a source may apply to EPA for permission to use alternative test methods or alternative monitoring requirements in place of any required testing methods, performance specifications, or procedures.

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

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

EPA has determined that these final rules will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because they increase the level of environmental protection for all affected populations without having any disproportionately high and adverse human health or environmental effects on any population,

including any minority or low-income population. These final rules establish national standards for each area source category.

K. Congressional Review Act

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

National Emission Standards for Hazardous Air Pollutants for Area Sources: Clay Ceramics Manufacturing, Glass Manufacturing, and Secondary Nonferrous Metals Processing Page 89 of 156

List of Subjects in 40 CFR Part 63

Enviro	nmental prote	ction, A	ir pollut	cion contro	ol, Hazardous
substances,	Incorporatio	ns by re	ference,	Reporting	and
recordkeepin	ng requiremen	ts.			

Dated:				
Stephen L. Johnson,				
Administrator.				

For the reasons stated in the preamble, title 40, chapter I, part 63 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), Table 5 of subpart DDDDD of this part, 63.11452(b)(11), and 63.11466(c)(1)(iii).

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

Subpart RRRRR--National Emission Standards for Hazardous Air Pollutants for Clay Ceramics Manufacturing Area Sources Sec.

Applicability and Compliance Dates

- 63.11435 Am I subject to this subpart?
- 63.11436 What parts of my plant does this subpart cover?
- 63.11437 What are my compliance dates?

Standards, Compliance, and Monitoring Requirements

- 63.11438 What are the standards for new and existing sources?
- 63.11439 What are the initial compliance demonstration requirements for new and existing sources?
- 63.11440 What are the monitoring requirements for new and existing sources?
- 63.11441 What are the notification requirements?
- 63.11442 What are the recordkeeping requirements?

Other Requirements and Information

- 63.11443 What General Provisions apply to this subpart?
- 63.11444 What definitions apply to this subpart?
- 63.11445 Who implements and enforces this subpart?
- 63.11446 [Reserved]
- 63.11447 [Reserved]

Tables to Subpart RRRRRR of Part 63

Table 1 to Subpart RRRRRR of Part 63--Applicability of General Provisions to Subpart RRRRRR

Applicability and Compliance Dates

§63.11435 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate a clay ceramics manufacturing facility (as defined in §63.11444), with an atomized glaze spray booth or kiln that fires glazed ceramic ware, that processes more than 45 megagrams per year (Mg/yr) (50 tons per year (tpy)) of wet clay and is an area source of hazardous air pollutant (HAP) emissions.

(b) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 71.3(a) for a reason other than your status as an area source under this subpart. You must continue to comply with the provisions of this subpart applicable to area sources.

§63.11436 What parts of my plant does this subpart cover?

- (a) This subpart applies to any existing or new affected source located at a clay ceramics manufacturing facility.
- (b) The affected source includes all atomized glaze spray booths and kilns that fire glazed ceramic ware located at a clay ceramics manufacturing facility.
- (c) An affected source is existing if you commenced construction or reconstruction of the affected source on or before September 20, 2007.
- (d) An affected source is new if you commenced construction or reconstruction of the affected source after September 20, 2007.

§63.11437 What are my compliance dates?

- (a) If you have an existing affected source, you must comply with the standards no later than [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].
- (b) If you have a new affected source, you must comply with this subpart according to paragraphs (b)(1) and (2) of this

section.

- (1) If you start up your affected source on or before [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER], you must comply with this subpart no later than [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].
- (2) If you start up your affected source after [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER], you must comply with this subpart upon initial startup of your affected source.

Standards, Compliance, and Monitoring Requirements \$63.11438 What are the standards for new and existing sources?

- (a) For each kiln that fires glazed ceramic ware, you must maintain the peak temperature below 1540°C (2800°F) and comply with one of the management practices in paragraphs (a)(1) and (2) of this section:
- (1) Use natural gas, or equivalent clean-burning fuel, as the kiln fuel; or
 - (2) Use an electric-powered kiln.
- (b) You must maintain annual wet glaze usage records for your facility.
- (c) For each atomized glaze spray booth located at a clay ceramics manufacturing facility that uses more than 227 Mg/yr (250 tpy) of wet glaze(s), you must comply with the equipment standard requirements in paragraph (c)(1) of this section or the management practice in paragraph (c)(2) of this section.
 - (1) Control the emissions from the atomized glaze spray

booth with an air pollution control device (APCD), as defined in \$63.11444.

- (i) Operate and maintain the APCD in accordance with the equipment manufacturer's specifications; and
- (ii) Monitor the APCD according to the applicable requirements in §63.11440.
- (2) Alternatively, use wet glazes containing less than 0.1 (weight) percent clay ceramics metal HAP.
- (d) For each atomized glaze spray booth located at a clay ceramics manufacturing facility that uses 227 Mg/yr (250 tpy) or less of wet glaze(s), you must comply with one of the management practices or equipment standards in paragraphs (d)(1) and (2) of this section.
- (1) Employ waste minimization practices, as defined in \$63.11444; or
- (2) Alternatively, comply with the equipment standard requirements described in paragraph (c)(1) of this section or the management practice described in paragraph (c)(2) of this section.
- (e) Surface applications (e.g., wet glazes) containing less than 0.1 (weight) percent clay ceramics metal HAP do not have to be considered in determination of the 227 Mg/yr (250 tpy) threshold for wet glaze usage.
- §63.11439 What are the initial compliance demonstration requirements for new and existing sources?

- (a) You must demonstrate initial compliance with the applicable management practices and equipment standards in §63.11438 by submitting a Notification of Compliance Status. For any wet spray glaze operation controlled with an APCD, you must conduct an initial inspection of the control equipment as described in §63.11440(b)(1) within 60 days of the compliance date and include the results of the inspection in the Notification of Compliance Status.
- (b) You must demonstrate initial compliance with the applicable management practices or equipment standards in \$63.11438 by submitting the Notification of Compliance Status within 120 days after the applicable compliance date specified in \$63.11437.

§63.11440 What are the monitoring requirements for new and existing sources?

- (a) For each kiln firing glazed ceramic ware, you must conduct a daily check of the peak firing temperature. If the peak temperature exceeds 1540°C (2800°F), you must take corrective action according to your standard operating procedures.
- (b) For each existing or new atomized glaze spray booth equipped with an APCD, you must demonstrate compliance by conducting the monitoring activities in paragraph (b)(1) and either paragraph (b)(2) or (3) of this section:
 - (1) Initial control device inspection. You must conduct an

initial inspection of each particulate matter (PM) control device according to the requirements in paragraphs (b)(1)(i) or (ii) of this section. You must conduct each inspection no later than 60 days after your applicable compliance date for each installed control device which has been operated within 60 days of the compliance date. For an installed control device which has not been operated within 60 days of the compliance date, you must conduct an initial inspection prior to startup of the control device.

- (i) For each wet control system, you must verify the presence of water flow to the control equipment. You must also visually inspect the system ductwork and control equipment for leaks and inspect the interior of the control equipment (if applicable) for structural integrity and the condition of the control system. An initial inspection of the internal components of a wet control system is not required if an inspection has been performed within the past 12 months.
- (ii) For each baghouse, you must visually inspect the system ductwork and baghouse unit for leaks. You must also inspect the inside of each baghouse for structural integrity and fabric filter condition. You must record the results of the inspection and any maintenance action as required in paragraph (d) of this section. An initial inspection of the internal components of a baghouse is not required if an inspection has been performed within the past 12 months.

- (2) <u>Periodic inspections/maintenance</u>. Except as provided in paragraph (b)(3) of this section, you must perform periodic inspections and maintenance of each PM control device following the initial inspection according to the requirements in paragraphs (b)(2)(i) or (ii) of this section.
- (i) You must inspect and maintain each wet control system according to the requirements in paragraphs (b) (2) (i) (A) through(C) of this section.
- (A) You must conduct a daily inspection to verify the presence of water flow to the wet control system.
- (B) You must conduct weekly visual inspections of the system ductwork and control equipment for leaks.
- (C) You must conduct inspections of the interior of the wet control system (if applicable) to determine the structural integrity and condition of the control equipment every 12 months.
- (ii) You must inspect and maintain each baghouse according to the requirements in paragraphs (b)(2)(ii)(A) and (B) of this section.
- (A) You must conduct weekly visual inspections of the system ductwork for leaks.
- (B) You must conduct inspections of the interior of the baghouse for structural integrity and to determine the condition of the fabric filter every 12 months.
- (3) As an alternative to the monitoring activities in paragraph (b)(2) of this section, you may demonstrate compliance

by:

- (i) Conducting a daily 30-minute visible emissions (VE) test (i.e., no visible emissions) using EPA Method 22 (40 CFR part 60, appendix A-7); or
- (ii) Using an approved alternative monitoring technique under \$63.8(f).
- (c) If the results of the visual inspection, VE test, or alternative monitoring technique conducted under paragraph (b) of this section indicate an exceedance, you must take corrective action according to the equipment manufacturer's specifications or instructions.
- (d) You must maintain records of your monitoring activities described in paragraphs (a) through (c) of this section. You may use your existing operating permit documentation to meet the monitoring requirements if it includes, but is not limited to, the monitoring records listed in paragraphs (d)(1) through (5) of this section related to any kiln peak temperature checks, visual inspections, VE tests, or alternative monitoring:
 - (1) The date, place, and time;
 - (2) Person conducting the activity;
 - (3) Technique or method used;
 - (4) Operating conditions during the activity; and
 - (5) Results.

§63.11441 What are the notification requirements?

(a) You must submit an Initial Notification required by

- \$63.9(b)(2) no later than 120 days after the applicable compliance date specified in \$63.11437. The Initial Notification must include the information specified in \$63.9(b)(2)(i) through (iv) and may be combined with the Notification of Compliance Status required in paragraph (b) of this section.
- (b) You must submit a Notification of Compliance Status required by \$63.9(h) no later than 120 days after the applicable compliance date specified in \$63.11437. In addition to the information required in \$63.9(h)(2), your notification(s) must include each compliance certification in paragraphs (b)(1) through (3) of this section that applies to you and may be combined with the Initial Notification required in paragraph (a) of this section.
- (1) For each kiln firing glazed ceramic ware, you must certify that you are maintaining the peak temperature below 1540°C (2800°F) according to \$63.11438(a) and complying with one of the management practices in \$63.11438(a)(1) or (2).
- (2) For atomized glaze spray booths, you must certify that your facility's annual wet glaze usage is above or below 227 Mg/yr (250 tpy).
- (3) For atomized glaze spray booths located at a clay ceramics manufacturing facility that uses more than 227 Mg/yr (250 tpy) of wet glaze(s), you must certify that:
- (i) You are operating and maintaining an APCD in accordance with \$63.11438(c)(1), and you have conducted an initial control

device inspection for each wet control system and baghouse associated with an atomized glaze spray booth; or

- (ii) Alternatively, you are using wet glazes containing less than 0.1 (weight) percent clay ceramics metal HAP according to \$63.11438(c)(2).
- (4) For atomized glaze spray booths located at a clay ceramics manufacturing facility that uses 227 Mg/yr (250 tpy) or less of wet glaze(s), you must certify that:
- (i) You are employing waste minimization practices according to \$63.11438(d)(1); or
- (ii) You are complying with the requirements in \$63.11438(c)(1) or (2).

§63.11442 What are the recordkeeping requirements?

- (a) You must keep the records specified in paragraphs(a) (1) and (2) of this section.
- (1) A copy of each notification that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirements in $\$63.10\,(b)\,(2)\,(xiv)$.
- (2) Records of all required measurements needed to document compliance with management practices as required in \$63.10(b)(2)(vii), including records of monitoring and inspection data required by \$63.11440.
 - (b) Your records must be in a form suitable and readily

available for expeditious review, according to §63.10(b)(1).

- (c) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (d) You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to \$63.10(b)(1). You may keep the records offsite for the remaining three years.

Other Requirements and Information

§63.11443 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.

§63.11444 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:

Air pollution control device (APCD) means any equipment that reduces the quantity of a pollutant that is emitted to the air. Examples of APCD currently used on glaze spray booths include, but are not limited to, wet scrubbers, fabric filters, water curtains, and water-wash systems.

Atomization means the conversion of a liquid into a spray or mist (i.e., collection of drops), often by passing the liquid through a nozzle.

Clay ceramics manufacturing facility means a plant site that manufactures pressed tile, sanitaryware, dinnerware, or pottery.

For the purposes of this area source rule, the following types of facilities are not part of the regulated category: artisan potters, art studios, school and university ceramic arts programs, and any facility that uses less than 45 Mg/yr (50 tpy) of wet clay.

Clay ceramics metal HAP means an oxide or other compound of chromium, lead, manganese, or nickel, which were listed for Clay Ceramics Manufacturing in the Revised Area Source Category List (67 FR 70428, November 22, 2002).

Glaze means a coating of colored, opaque, or transparent material applied to ceramic products before firing.

Glaze spray booth means a type of equipment used for spraying glaze on ceramic products.

Kiln means equipment used for the initial curing or firing of glaze on ceramic ware. A kiln may operate continuously or by batch process.

High-volume, low-pressure (HVLP) spray equipment means a type of air atomized spray equipment that operates at low atomizing air pressure (0.1 to 10 pounds per square inch (psi) at the air nozzle) and uses 15 to 30 cubic feet per minute (cfm) of air to minimize the amount of overspray and bounce back.

Nonatomizing glaze application technique means the application of glaze in the form of a liquid stream without atomization. Such techniques include, but are not limited to, dipping, centrifugal disc, waterfall, flow coaters, curtain

coaters, silk-screening, and any direct application by roller, brush, pad, or other means facilitating direct transfer of glaze.

Plant site means all contiguous or adjoining property that is under common control, including properties that are separated only by a road or other public right-of-way. Common control includes properties that are owned, leased, or operated by the same entity, parent entity, subsidiary, or any combination thereof.

Waste minimization practices mean those procedures employed to minimize material losses and prevent unnecessary waste generation, for example, minimizing glaze overspray emissions using HVLP spray equipment (defined in this section) or similar spray equipment; minimizing HAP emissions during cleanup of spray glazing equipment; operating and maintaining spray glazing equipment according to manufacturer's instructions; and minimizing spills through careful handling of HAP-containing glaze materials.

<u>Water curtain</u> means an APCD that draws the exhaust stream through a continuous curtain of moving water to remove suspended particulate. A water curtain may also be called a drip curtain or waterfall.

<u>Water-wash system</u> means an APCD that uses a series of baffles to redirect the upward exhaust stream through a water wash chamber with downward water flow to remove suspended particulate.

§63.11445 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 §§63.11435 and 63.11436, the compliance date requirements in §63.11437, and the management practices and equipment standards in §63.11438.
- (2) 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.
- (3) Approval of a major change to monitoring under \$63.8(f). A "major change to monitoring" is defined in \$63.90.

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

§63.11446 [Reserved]

§63.11447 [Reserved]

Tables to Subpart RRRRRR of Part 63

TABLE 1 TO SUBPART RRRRR OF PART 63--APPLICABILITY OF GENERAL PROVISIONS TO SUBPART RRRRRR

As stated in §63.11443, you must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) shown in the following table:

Citation	Subject
63.1(a)(1)-(a)(4), (a)(6), (a)(10)- (a)(12), (b)(1), (b)(3), (c)(1), (c)(2) ¹ , (c)(5), (e)	Applicability
63.2	Definitions
63.3	Units and Abbreviations
63.4	Prohibited Activities and Circumvention
63.6(a), (b)(1)-(b)(5), (b)(7), (c)(1), (c)(2), (c)(5), (e)(1), (f), (g), (i), (j)	Compliance with Standards and Maintenance Requirements
63.8(a)(1), (a)(2), (b), (c)(1)(i)- (c)(1)(ii), (c)(2), (c)(3), (f)	Monitoring Requirements
63.9(a), (b)(1), (b)(2), (b)(5), (c), (d), (h)(1)-(h)(3), (h)(5), (h)(6), (i), (j)	Notification Requirements
63.10(a), (b)(1), (b)(2)(vii), (b)(2)(xiv), (b)(3), (c), (c)(1), (f)	Recordkeeping and Reporting Requirements
63.12	State Authority and Delegations
63.13	Addresses

	Citation	Subject
63.14		Incorporations by Reference
63.15		Availability of Information and Confidentiality
63.16		Performance Track Provisions

¹ Section 63.11435(b) of this subpart exempts area sources from the obligation to obtain title V operating permits.

4. Part 63 is amended by adding subpart SSSSSS to read as follows:

Subpart SSSSS--National Emission Standards for Hazardous Air Pollutants for Glass Manufacturing Area Sources

Sec.

Applicability and Compliance Dates

- 63.11448 Am I subject to this subpart?
- 63.11449 What parts of my plant does this subpart cover?
- 63.11450 What are my compliance dates?

Standards, Compliance, and Monitoring Requirements

- 63.11451 What are the standards for new and existing sources?
- 63.11452 What are the performance test requirements for new and existing sources?
- 63.11453 What are the initial compliance demonstration requirements for new and existing sources?
- 63.11454 What are the monitoring requirements for new and existing sources?
- 63.11455 What are the continuous compliance requirements for new and existing sources?

Notifications and Records

- 63.11456 What are the notification requirements?
- 63.11457 What are the recordkeeping requirements?

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Applicability and Compliance Dates

§63.11448 Am I subject to this subpart?

You are subject to this subpart if you own or operate a glass manufacturing facility that is an area source of hazardous air pollutant (HAP) emissions and meets all of the criteria specified in paragraphs (a) through (c) of this section.

- (a) A glass manufacturing facility is a plant site that manufactures flat glass, glass containers, or pressed and blown glass by melting a mixture of raw materials, as defined in \$63.11459, to produce molten glass and form the molten glass into sheets, containers, or other shapes.
- (b) An area source of HAP emissions is any stationary source or group of stationary sources within a contiguous area under common control that does not have the potential to emit any single HAP at a rate of 9.07 megagrams per year (Mg/yr) (10 tons per year (tpy)) or more and any combination of HAP at a rate of 22.68 Mg/yr (25 tpy) or more.
- (c) Your glass manufacturing facility uses one or more continuous furnaces to produce glass that contains compounds of one or more glass manufacturing metal HAP, as defined in

§63.11459, as raw materials in a glass manufacturing batch formulation.

§63.11449 What parts of my plant does this subpart cover?

- (a) This subpart applies to each existing or new affected glass melting furnace that is located at a glass manufacturing facility and satisfies the requirements specified in paragraphs (a) (1) through (3) of this section.
- (1) The furnace is a continuous furnace, as defined in \$63.11459.
- (2) The furnace is charged with compounds of one or more glass manufacturing metal HAP as raw materials.
- (3) The furnace is used to produce glass, which contains one or more of the glass manufacturing metal HAP as raw materials, at a rate of at least 45 Mg/yr (50 tpy).
- (b) A furnace that is a research and development process unit, as defined in §63.11459, is not an affected furnace under this subpart.
- (c) An affected source is an existing source if you commenced construction or reconstruction of the affected source on or before September 20, 2007.
- (d) An affected source is a new source if you commenced construction or reconstruction of the affected source after September 20, 2007.
- (e) If you own or operate an area source subject to this subpart, you must obtain a permit under 40 CFR part 70 or 40 CFR

part 71.

§63.11450 What are my compliance dates?

- (a) If you have an existing affected source, you must comply with the applicable emission limits specified in §63.11451 of this subpart no later than [INSERT DATE 2 YEARS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. As specified in section 112(i)(3)(B) of the Clean Air Act and in §63.6(i)(4)(A), you may request that the Administrator or delegated authority grant an extension allowing up to 1 additional year to comply with the applicable emission limits if such additional period is necessary for the installation of emission controls.
- (b) If you have a new affected source, you must comply with this subpart according to paragraphs (b)(1) and (2) of this section.
- (1) If you start up your affected source on or before [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER], you must comply with the applicable emission limit specified in §63.11451 no later than [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].
- (2) If you start up your affected source after [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER], you must comply with the applicable emission limit specified in §63.11451 upon initial startup of your affected source.
- (c) If you own or operate a furnace that produces glass containing one or more glass manufacturing metal HAP as raw

materials at an annual rate of less than 45 Mg/yr (50 tpy), and you increase glass production for that furnace to an annual rate of at least 45 Mg/yr (50 tpy), you must comply with the applicable emission limit specified in §63.11451 within 2 years of the date on which you increased the glass production rate for the furnace to at least 45 Mg/yr (50 tpy).

- an annual rate of at least 45 Mg/yr (50 tpy) and is not charged with glass manufacturing metal HAP, and you begin production of a glass product that includes one or more glass manufacturing metal HAP as raw materials, and you produce at least 45 Mg/yr (50 tpy) of this glass product, you must comply with the applicable emission limit specified in §63.11451 within 2 years of the date on which you introduced production of the glass product that contains glass manufacturing metal HAP.
- (e) You must meet the notification requirements in \$63.11456 according to the schedule in \$63.11456 and in 40 CFR part 63, subpart A. Some of the notifications must be submitted before you are required to comply with emission limits specified in this subpart.

Standards, Compliance, and Monitoring Requirements §63.11451 What are the standards for new and existing sources?

If you are an owner or operator of an affected furnace, as defined in \$63.11449(a), you must meet the applicable emission limit specified in Table 1 to this subpart.

§63.11452 What are the performance test requirements for new and existing sources?

- (a) If you own or operate an affected furnace that is subject to an emission limit specified in Table 1 to this subpart, you must conduct a performance test according to paragraphs (a) (1) through (3) and paragraph (b) of this section.
- (1) For each affected furnace, you must conduct a performance test within 180 days after your compliance date and report the results in your Notification of Compliance Status, except as specified in paragraph (a)(2) of this section.
- (2) You are not required to conduct a performance test on the affected furnace if you satisfy the conditions described in paragraphs (a)(2)(i) through (iii) of this section.
- (i) You conducted a performance test on the affected furnace within the past 5 years of the compliance date using the same test methods and procedures specified in paragraph (b) of this section.
- (ii) The performance test demonstrated that the affected furnace met the applicable emission limit specified in Table 1 to this subpart.
- (iii) Either no process changes have been made since the test, or you can demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance with the applicable emission limit.
 - (3) If you operate multiple identical furnaces, as defined

in §63.11459, that are affected furnaces, you are required to test only one of the identical furnaces if you meet the conditions specified in paragraphs (a)(3)(i) through (iii) of this section.

- (i) You must conduct the performance test while the furnace is producing glass that has the greatest potential to emit the glass manufacturing metal HAP from among the glass formulations that are used in any of the identical furnaces.
- (ii) You certify in your Notification of Compliance Status that the identical furnaces meet the definition of identical furnaces specified in §63.11459.
- (iii) You provide in your Notification of Compliance Status documentation that demonstrates why the tested glass formulation has the greatest potential to emit the glass manufacturing metal HAP.
- (b) You must conduct each performance test according to the requirements in \$63.7 and paragraphs (b)(1) through (12) and either paragraph (b)(13) or (b)(14) of this section.
- (1) Install and validate all monitoring equipment required by this subpart before conducting the performance test.
- (2) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1).
- (3) Conduct the test while the source is operating at the maximum production rate.
 - (4) Conduct at least three separate test runs with a

minimum duration of 1 hour for each test run, as specified in \$63.7(e)(3).

- (5) Record the test date.
- (6) Identify the emission source tested.
- (7) Collect and record the emission test data listed in this section for each run of the performance test.
- (8) Locate all sampling sites at the outlet of the furnace control device or at the furnace stack prior to any releases to the atmosphere.
- (9) Select the locations of sampling ports and the number of traverse points using Method 1 or 1A of 40 CFR part 60, appendix A-1.
- (10) Measure the gas velocity and volumetric flow rate using Method 2, 2A, 2C, 2F, or 2G of 40 CFR part 60, appendices A-1 and A-2, during each test run.
- (11) Conduct gas molecular weight analysis using Methods 3, 3A, or 3B of 40 CFR part 60, appendix A-2, during each test run. 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.
- (12) Measure gas moisture content using Method 4 of 40 CFR part 60, appendix A-3, during each test run.
- (13) To meet the particulate matter (PM) emission limit specified in Table 1 to this subpart, you must conduct the procedures specified in paragraphs (b) (13) (i) through (v) of this

section.

- (i) Measure the PM mass emission rate at the outlet of the control device or at the stack using Method 5 or 17 of 40 CFR part 60, appendices A-3 or A-6, for each test run.
- (ii) Calculate the PM mass emission rate in the exhaust stream for each test run.
- (iii) Measure and record the glass production rate (kilograms (tons) per hour of product) for each test run.
- (iv) Calculate the production-based PM mass emission rate $(g/kg \ (lb/ton))$ for each test run using Equation 1 of this section.

$$MP = \frac{ER}{P}$$
 (Equation 1)

Where:

- MP = Production-based PM mass emission rate, grams of PM per kilogram (pounds of PM per ton) of glass produced.
- ER = PM mass emission rate measured using Methods 5 or 17
 during each performance test run, grams (pounds) per hour.
- P = Average glass production rate for the performance test, kilograms (tons) of glass produced per hour.
- (v) Calculate the 3-hour block average production-based PM mass emission rate as the average of the production-based PM mass emission rates for each test run.
- (14) To meet the metal HAP emission limit specified in Table 1 to this subpart, you must conduct the procedures

specified in paragraphs (b)(14)(i) through (v) of this section.

- (i) Measure the metal HAP mass emission rate at the outlet of the control device or at the stack using Method 29 of 40 CFR part 60, appendix A-8, for each test run.
- (ii) Calculate the metal HAP mass emission rate in the exhaust stream for the glass manufacturing metal HAP that are added as raw materials to the glass manufacturing formulation for each test run.
- (iii) Measure and record the glass production rate (kilograms (tons) per hour of product) for each test run.
- (iv) Calculate the production-based metal HAP mass emission rate (g/kg (lb/ton)) for each test run using Equation 2 of this section.

$$MPM = \frac{ERM}{P}$$
 (Equation 2)

Where:

- MPM = Production-based metal HAP mass emission rate, grams of
 metal HAP per kilogram (pounds of metal HAP per ton) of
 glass produced.
- ERM = Sum of the metal HAP mass emission rates for the glass manufacturing metal HAP that are added as raw materials to the glass manufacturing formulation and are measured using Method 29 during each performance test run, grams (pounds) per hour.
- P = Average glass production rate for the performance test,

kilograms (tons) of glass produced per hour.

- (v) Calculate the 3-hour block average production-based metal HAP mass emission rate as the average of the production-based metal HAP mass emission rates for each test run.

 \$63.11453 What are the initial compliance demonstration requirements for new and existing sources?
- (a) If you own or operate an affected source, you must submit a Notification of Compliance Status in accordance with \$\$63.9(h) and 63.11456(b).
- (b) For each existing affected furnace that is subject to the emission limits—specified in Table 1 to this subpart, you must demonstrate initial compliance according to the requirements in paragraphs (b)(1) through (4) of this section.
- (1) For each fabric filter that is used to meet the emission limit specified in Table 1 to this subpart, you must visually inspect the system ductwork and fabric filter unit for leaks. You must also inspect the inside of each fabric filter for structural integrity and fabric filter condition. You must record the results of the inspection and any maintenance action as required in §63.11457(a)(6).
- (2) For each electrostatic precipitator (ESP) that is used to meet the emission limit specified in Table 1 to this subpart, you must verify the proper functioning of the electronic controls for corona power and rapper operation, that the corona wires are energized, and that adequate air pressure is present on the

rapper manifold. You must also visually inspect the system ductwork and ESP housing unit and hopper for leaks and inspect the interior of the ESP to determine the condition and integrity of corona wires, collection plates, hopper, and air diffuser plates. You must record the results of the inspection and any maintenance action as required in §63.11457(a)(6).

- (3) You must conduct each inspection specified in paragraphs (b)(1) and (2) of this section no later than 60 days after your applicable compliance date specified in §63.11450, except as specified in paragraphs (b)(3)(i) and (ii) of this section.
- (i) An initial inspection of the internal components of a fabric filter is not required if an inspection has been performed within the past 12 months.
- (ii) An initial inspection of the internal components of an ESP is not required if an inspection has been performed within the past 24 months.
- (4) You must satisfy the applicable requirements for performance tests specified in §63.11452.
- (c) For each new affected furnace that is subject to the emission limit specified in Table 1 to this subpart and is controlled with a fabric filter, you must install, operate, and maintain a bag leak detection system according to paragraphs (c) (1) through (3) of this section.
 - (1) Each bag leak detection system must meet the

specifications and requirements in paragraphs (c)(1)(i) through (viii) of this section.

- (i) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per dry standard 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. The owner or operator shall 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 shall 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 develop and submit to the Administrator or delegated authority for approval a site-specific monitoring plan for each bag leak detection system. You must operate and maintain the bag leak detection system according to the site-specific monitoring 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 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. In approving the site-specific monitoring plan, the Administrator or delegated authority may allow owners and operators more than 3 hours to alleviate a specific condition that causes an alarm if the owner or operator identifies in the monitoring plan this specific condition as one that could lead to an alarm, adequately explains why it is not feasible to alleviate this condition within 3 hours of the time the alarm occurs, and demonstrates that the requested time will ensure alleviation of this condition as expeditiously as practicable.
- (3) For each bag leak detection system, you must initiate procedures to determine the cause of every alarm within 1 hour of the alarm. Except as provided in paragraph (c)(2)(vi) of this section, you must 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

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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
 - (vi) Shutting down the process producing the PM emissions.
- (d) For each new affected furnace that is subject to the emission limit specified in Table 1 to this subpart and is controlled with an ESP, you must install, operate, and maintain according to the manufacturer's specifications, one or more continuous parameter monitoring systems (CPMS) for measuring and recording the secondary voltage and secondary electrical current to each field of the ESP according to paragraphs (d)(1) through (13) of this section.
- (1) The CPMS must have an accuracy of ± 1 percent of the secondary voltage and secondary electrical current, or better.
- (2) Your CPMS must be capable of measuring the secondary voltage and secondary electrical current over a range that extends from a value that is at least 20 percent less than the lowest value that you expect your CPMS to measure, to a value that is at least 20 percent greater than the highest value that you expect your CPMS to measure.
- (3) The signal conditioner, wiring, power supply, and data acquisition and recording system of your CPMS must be compatible with the output signal of the sensors used in your CPMS.
 - (4) The data acquisition and recording system of your CPMS

must be able to record values over the entire range specified in paragraph (d)(2) of this section.

- (5) The data recording system associated with your CPMS must have a resolution of one-half of the required overall accuracy of your CPMS, as specified in paragraph (d)(1) of this section, or better.
- (6) Your CPMS must be equipped with an alarm system that will sound when the system detects a decrease in secondary voltage or secondary electrical current below the alarm set point established according to paragraph (d)(7) of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.
- (7) In the initial adjustment of the CPMS, 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.
- (8) You must install each sensor of the CPMS in a location that provides representative measurement of the appropriate parameter over all operating conditions, taking into account the manufacturer's guidelines.
- (9) You must perform an initial calibration of your CPMS based on the procedures specified in the manufacturer's owner's manual.
- (10) Your CPMS must be designed to complete a minimum of one cycle of operation for each successive 15-minute period. To

have a valid hour of data, you must have at least three of four equally-spaced data values (or at least 75 percent of the total number of values if you collect more than four data values per hour) for that hour (not including startup, shutdown, malfunction, or out of control periods).

- (11) You must record valid data from at least 90 percent of the hours during which the affected source or process operates.
- (12) You must record the results of each inspection, calibration, initial validation, and accuracy audit.
- (13) At all times, you must maintain your CPMS including, but not limited to, maintaining necessary parts for routine repairs of the CPMS.
- (e) For each new affected furnace that is subject to the emission limit specified in Table 1 to this subpart and is controlled a device other than a fabric filter or an ESP, you must prepare and submit a monitoring plan to EPA or the delegated authority for approval. Each plan must contain the information in paragraphs (e)(1) through (5) of this section.
 - (1) A description of the device;
- (2) Test results collected in accordance with §63.11452 verifying the performance of the device for reducing PM or metal HAP to the levels required by this subpart;
- (3) Operation and maintenance plan for the control device (including a preventative maintenance schedule consistent with the manufacturer's instructions for routine and long-term

maintenance) and continuous monitoring system;

- (4) A list of operating parameters that will be monitored to maintain continuous compliance with the applicable emission limits; and
- (5) Operating parameter limits based on monitoring data collected during the performance test.

§63.11454 What are the monitoring requirements for new and existing sources?

- (a) For each monitoring system required by this subpart, you must install, calibrate, operate, and maintain the monitoring system according to the manufacturer's specifications and the requirements specified in paragraphs (a)(1) through (7) of this section.
- (1) You must install each sensor of your monitoring system in a location that provides representative measurement of the appropriate parameter over all operating conditions, taking into account the manufacturer's guidelines.
- (2) You must perform an initial calibration of your monitoring system based on the manufacturer's recommendations.
- (3) You must use a monitoring system that is designed to complete a minimum of one cycle of operation for each successive 15-minute period.
- (4) For each existing affected furnace, you must record the value of the monitored parameter at least every 8 hours. The value can be recorded electronically or manually.

- (5) You must record the results of each inspection, calibration, monitoring system maintenance, and corrective action taken to return the monitoring system to normal operation.
- (6) At all times, you must maintain your monitoring system including, but not limited to, maintaining necessary parts for routine repairs of the system.
- (7) You must perform the required monitoring whenever the affected furnace meets the conditions specified in paragraph

 (a) (7) (i) or (ii) of this section.
- (i) The furnace is being charged with one or more of the glass manufacturing metal HAP as raw materials.
- (ii) The furnace is in transition between producing glass that contains one or more of the glass metal HAP as raw materials and glass that does not contain any of the glass manufacturing metal HAP as raw materials. The transition period begins when the furnace is charged with raw materials that do not contain any of the glass manufacturing metal HAP as raw materials and ends when the furnace begins producing a saleable glass product that does not contain any of the glass manufacturing metal HAP as raw materials.
- (b) For each existing furnace that is subject to the emission limit specified in Table 1 to this subpart and is controlled with an ESP, you must meet the requirements specified in paragraphs (b)(1) or (2) of this section.
 - (1) You must monitor the secondary voltage and secondary

electrical current to each field of the ESP according to the requirements of paragraph (a) of this section, or

- (2) You must submit a request for alternative monitoring, as described in paragraph (g) of this section.
- (c) For each existing furnace that is subject to the emission limit specified in Table 1 to this subpart and is controlled with a fabric filter, you must meet the requirements specified in paragraphs (c)(1) or (2) of this section.
- (1) You must monitor the inlet temperature to the fabric filter according to the requirements of paragraph (a) of this section, or
- (2) You must submit a request for alternative monitoring, as described in paragraph (g) of this section.
- (d) For each new furnace that is subject to the emission limit specified in Table 1 to this subpart and is controlled with an ESP, you must monitor the voltage and electrical current to each field of the ESP on a continuous basis using one or more CPMS according to the requirements for CPMS specified in \$63.11453(d).
- (e) For each new furnace that is subject to the emission limit specified in Table 1 to this subpart and is controlled with a fabric filter, you must install and operate a bag leak detection system according to the requirements specified in \$63.11453(c).
 - (f) For each new or existing furnace that is subject to the

emission limit specified in Table 1 to this subpart and is equipped with a control device other than an ESP or fabric filter, you must meet the requirements in \$63.8(f) and submit a request for approval of alternative monitoring methods to the Administrator no later than the submittal date for the Notification of Compliance Status, as specified in \$63.11456(b). The request must contain the information specified in paragraphs (f) (1) through (5) of this section.

- (1) Description of the alternative add-on air pollution control device (APCD).
- (2) Type of monitoring device or method that will be used, including the sensor type, location, inspection procedures, quality assurance and quality control (QA/QC) measures, and data recording device.
 - (3) Operating parameters that will be monitored.
- (4) Frequency that the operating parameter values will be measured and recorded.
- (5) Procedures for inspecting the condition and operation of the control device and monitoring system.
- (g) If you wish to use a monitoring method other than those specified in paragraph (b)(1) or (c)(1) of this section, you must meet the requirements in §63.8(f) and submit a request for approval of alternative monitoring methods to the Administrator no later than the submittal date for the Notification of Compliance Status, as specified in §63.11456(b). The request

must contain the information specified in paragraphs (g) (1) through (5) of this section.

- (1) Type of monitoring device or method that will be used, including the sensor type, location, inspection procedures, QA/QC measures, and data recording device.
 - (2) Operating parameters that will be monitored.
- (3) Frequency that the operating parameter values will be measured and recorded.
- (4) Procedures for inspecting the condition and operation of the monitoring system.
- (5) Explanation for how the alternative monitoring method will provide assurance that the emission control device is operating properly.

§63.11455 What are the continuous compliance requirements for new and existing sources?

- (a) You must be in compliance with the applicable emission limits in this subpart at all times, except during periods of startup, shutdown, and malfunction.
- (b) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in §63.6(e)(1)(i).
- (c) For each affected furnace that is subject to the emission limit specified in Table 1 to this subpart, you must monitor the performance of the furnace emission control device under the conditions specified in \$63.11454(a)(7) and according

to the requirements in §§63.6(e)(1) and 63.8(c) and paragraphs (c)(1) through (6) of this section.

- (1) For each existing affected furnace that is controlled with an ESP, you must monitor the parameters specified in \$63.11454(b) in accordance with the requirements of \$63.11454(a) or as specified in your approved alternative monitoring plan.
- (2) For each new affected furnace that is controlled with an ESP, you must comply with the monitoring requirements specified in §63.11454(d) in accordance with the requirements of §63.11454(a) or as specified in your approved alternative monitoring plan.
- (3) For each existing affected furnace that is controlled with a fabric filter, you must monitor the parameter specified in \$63.11454(c) in accordance with the requirements of \$63.11454(a) or as specified in your approved alternative monitoring plan.
- (4) For each new affected furnace that is controlled with a fabric filter, you must comply with the monitoring requirements specified in \$63.11454(e) in accordance with the requirements of \$63.11454(a) or as specified in your approved alternative monitoring plan.
- (5) For each affected furnace that is controlled with a device other than a fabric filter or ESP, you must comply with the requirements of your approved alternative monitoring plan, as required in §63.11454(g).
 - (6) For each monitoring system that is required under this

subpart, you must keep the records specified in §63.11457.

- (d) Following the initial inspections, you must perform periodic inspections and maintenance of each affected furnace control device according to the requirements in paragraphs (d)(1) through (4) of this section.
- (1) For each fabric filter, you must conduct inspections at least every 12 months according to paragraphs (d)(1)(i) through (iii) of this section.
- (i) You must inspect the ductwork and fabric filter unit for leakage.
- (ii) You must inspect the interior of the fabric filter for structural integrity and to determine the condition of the fabric filter.
- (iii) If an initial inspection is not required, as specified in §63.11453(b)(3)(i), the first inspection must not be more than 12 months from the last inspection.
- (2) For each ESP, you must conduct inspections according to the requirements in paragraphs (d)(2)(i) through (iii) of this section.
- (i) You must conduct visual inspections of the system ductwork, housing unit, and hopper for leaks at least every 12 months.
- (ii) You must conduct inspections of the interior of the ESP to determine the condition and integrity of corona wires, collection plates, plate rappers, hopper, and air diffuser plates

every 24 months.

- (iii) If an initial inspection is not required, as specified in \$63.11453(b)(3)(ii), the first inspection must not be more than 24 months from the last inspection.
- (3) You must record the results of each periodic inspection specified in this section in a logbook (written or electronic format), as specified in \$63.11457(c).
- (4) If the results of a required inspection indicate a problem with the operation of the emission control system, you must take immediate corrective action to return the control device to normal operation according to the equipment manufacturer's specifications or instructions.
- (e) For each affected furnace that is subject to the emission limit specified in Table 1 to this subpart and can meet the applicable emission limit without the use of a control device, you must demonstrate continuous compliance by satisfying the applicable recordkeeping requirements specified in §63.11457.

Notifications and Records

§63.11456 What are the notification requirements?

- (a) If you own or operate an affected furnace, as defined in §63.11449(a), you must submit an Initial Notification in accordance with §63.9(b) and paragraphs (a)(1) and (2) of this section by the dates specified.
- (1) As specified in §63.9(b)(2), if you start up your affected source before [INSERT DATE OF PUBLICATION IN THE FEDERAL

REGISTER], you must submit an Initial Notification not later than [INSERT DATE 120 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] or within 120 days after your affected source becomes subject to the standard.

- (2) The Initial Notification must include the information specified in \$63.9(b)(2)(i) through (iv).
- (b) You must submit a Notification of Compliance Status in accordance with \$63.9(h) and the requirements in paragraphs(b) (1) and (2) of this section.
- (1) If you own or operate an affected furnace and are required to conduct a performance test, you must submit a Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test, according to \$60.8 or \$63.10(d)(2).
- (2) If you own or operate an affected furnace and satisfy the conditions specified in \$63.11452(a)(2) and are not required to conduct a performance test, you must submit a Notification of Compliance Status, including the results of the previous performance test, before the close of business on the compliance date specified in \$63.11450.

\$63.11457 What are the recordkeeping requirements?

- (a) You must keep the records specified in paragraphs(a) (1) through (8) of this section.
 - (1) A copy of any Initial Notification and Notification of

Compliance Status that you submitted and all documentation supporting those notifications, according to the requirements in $\$63.10\,(b)\,(2)\,(\text{xiv})$.

- (2) The records specified in $\S63.10$ (b) (2) and (c) (1) through (13).
- (3) The records required to show continuous compliance with each emission limit that applies to you, as specified in \$63.11455.
- (4) For each affected source, records of production rate on a process throughput basis (either feed rate to the process unit or discharge rate from the process unit). The production data must include the amount (weight or weight percent) of each ingredient in the batch formulation, including all glass manufacturing metal HAP compounds.
- (5) Records of maintenance activities and inspections performed on control devices as specified in §§63.11453(b) and 63.11455(d), according to paragraphs (a)(5)(i) through (v) of this section.
- (i) The date, place, and time of inspections of control device ductwork, interior, and operation.
 - (ii) Person conducting the inspection.
 - (iii) Technique or method used to conduct the inspection.
- (iv) Control device operating conditions during the time of the inspection.
 - (v) Results of the inspection and description of any

corrective action taken.

- (6) Records of all required monitoring data and supporting information including all calibration and maintenance records.
- (7) For each bag leak detection system, the records specified in paragraphs (a)(7)(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; and
- (iii) The date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and whether the alarm was alleviated within 3 hours of the alarm.
- (8) Records of any approved alternative monitoring
 method(s) or test procedure(s).
- (b) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1).
- (c) You must record the results of each inspection and maintenance action in a logbook (written or electronic format). You must keep the logbook onsite and make the logbook available to the permitting authority upon request.
 - (d) As specified in §63.10(b)(1), you must keep each record

for a minimum of 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to \$63.10(b)(1). You may keep the records offsite for the remaining three years.

Other Requirements and Information

§63.11458 What General Provisions apply to this subpart?

You must satisfy the requirements of the General Provisions in 40 CFR part 63, subpart A, as specified in Table 2 to this subpart.

§63.11459 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:

Air pollution control device (APCD) means any equipment that reduces the quantity of a pollutant that is emitted to the air.

Continuous furnace means a glass manufacturing furnace that operates continuously except during periods of maintenance, malfunction, control device installation, reconstruction, or rebuilding.

<u>Cullet</u> means recycled glass that is mixed with raw materials and charged to a glass melting furnace to produce glass. Cullet is not considered to be a raw material for the purposes of this subpart.

Electrostatic precipitator (ESP) means an APCD that removes

PM from an exhaust gas stream by applying an electrical charge to particles in the gas stream and collecting the charged particles on plates carrying the opposite electrical charge.

<u>Fabric filter</u> means an APCD used to capture PM by filtering a gas stream through filter media.

<u>Furnace stack</u> means a conduit or conveyance through which emissions from the furnace melter are released to the atmosphere.

Glass manufacturing metal HAP means an oxide or other compound of any of the following metals included in the list of urban HAP for the Integrated Urban Air Toxics Strategy and for which Glass Manufacturing was listed as an area source category: arsenic, cadmium, chromium, lead, manganese, and nickel.

Glass melting furnace means a unit comprising a refractorylined vessel in which raw materials are charged and melted at high temperature to produce molten glass.

Identical furnaces means two or more furnaces that are identical in design, including manufacturer, dimensions, production capacity, charging method, operating temperature, fuel type, burner configuration, and exhaust system configuration and design.

Particulate matter (PM) means, for purposes of this subpart, emissions of PM that serve as a measure of filterable particulate emissions, as measured by Methods 5 or 17 (40 CFR part 60, appendices A-3 and A-6), and as a surrogate for glass manufacturing metal HAP compounds contained in the PM including,

but not limited to, arsenic, cadmium, chromium, lead, manganese, and nickel.

Plant site means all contiguous or adjoining property that is under common control, including properties that are separated only by a road or other public right-of-way. Common control includes properties that are owned, leased, or operated by the same entity, parent entity, subsidiary, or any combination thereof.

Raw material means minerals, such as silica sand, limestone, and dolomite; inorganic chemical compounds, such as soda ash (sodium carbonate), salt cake (sodium sulfate), and potash (potassium carbonate); metal oxides and other metal-based compounds, such as lead oxide, chromium oxide, and sodium antimonate; metal ores, such as chromite and pyrolusite; and other substances that are intentionally added to a glass manufacturing batch and melted in a glass melting furnace to produce glass. Metals that are naturally-occurring trace constituents or contaminants of other substances are not considered to be raw materials. Cullet and material that is recovered from a furnace control device for recycling into the glass formulation are not considered to be raw materials for the purposes of this subpart.

Research and development process unit means a process unit whose purpose is to conduct research and development for new processes and products and is not engaged in the manufacture of

products for commercial sale, except in a de minimis manner. \$63.11460 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 paragraphs (b)(1) through (4) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.
- (1) Approval of alternatives to the applicability requirements in §§63.11448 and 63.11449, the compliance date requirements in §63.11450, and the emission limits specified in §63.11451.
- (2) Approval of a major change to test methods under \$63.7(e)(2)(ii) and (f) and as defined in \$63.90.
- (3) Approval of major alternatives to monitoring under \$63.8(f) and as defined in \$63.90.
- (4) Approval of major alternatives to recordkeeping under \$63.10(f) and as defined in \$63.90.

\$63.11461 [Reserved]

Tables to Subpart SSSSSS of Part 63

TABLE 1 TO SUBPART SSSSSS OF PART 63--EMISSION LIMITS

As required in §63.11451, you must comply with each emission limit that applies to you according to the following table:

For each	You must meet one of the following emission limits
1. New or existing glass melting furnace that produces glass at an annual rate of at least 45 Mg/yr (50 tpy) AND is charged with compounds of arsenic, cadmium, chromium, manganese, lead, or nickel as raw materials.	a. The 3-hour block average production-based PM mass emission rate must not exceed 0.1 gram per kilogram (g/kg) (0.2 pound per ton (lb/ton)) of glass produced; OR
	b. The 3-hour block average production-based metal HAP mass emission rate must not exceed 0.01 g/kg (0.02 lb/ton) of glass produced.

TABLE 2 TO SUBPART SSSSSS OF PART 63--APPLICABILITY OF GENERAL PROVISIONS TO SUBPART SSSSSS

As stated in §63.11458, you must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A), as shown in the following table:

Citation	Subject
\$63.1(a), (b), (c)(1), (c)(2), (c)(5), (e)	Applicability.
§63.2	Definitions.
§63.3	Units and Abbreviations.
§63.4	Prohibited Activities.
§63.5	Construction/Reconstruction.

\$63.6(a), (b)(1)-(b)(5), (b)(7), (c)(1), (c)(2), (c)(5), (e)(1), (f), (g), (i), (j)	Compliance with Standards and Maintenance Requirements.
§63.7	Performance Testing Requirements.
\$63.8(a)(1), (a)(2), (b), (c)(1)-(c)(4), (c)(7)(i)(B), (c)(7)(ii), (c)(8), (d), (e)(1), (e)(4), (f)	Monitoring Requirements.
\$63.9(a), (b)(1)(i)-(b)(2)(v), (b)(5), (c), (d), (h)-(j)	Notification Requirements.
\$63.10(a), (b)(1), (b)(2)(i)- (b)(2)(xii)	Recordkeeping and Reporting Requirements.
§63.10(b)(2)(xiv), (c), (f)	Documentation for Initial Notification and Notification of Compliance Status.
§63.12	State Authority and Delegations.
§63.13	Addresses.
§63.14	Incorporations by Reference.
§63.15	Availability of Information.
§63.16	Performance Track Provisions.

5. Part 63 is amended by adding subpart TTTTTT to read as follows:

Subpart TTTTT--National Emission Standards for Hazardous Air Pollutants for Secondary Nonferrous Metals Processing Area Sources

Sec.

Applicability and Compliance Dates

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63.11462 Am I subject to this subpart?
63.11463 What parts of my plant does this subpart cover?
63.11464 What are my compliance dates?
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Standards, Compliance, and Monitoring Requirements

63.11465 What are the standards for new and existing sources?

- 63.11466 What are the performance test requirements for new and existing sources?
- 63.11467 What are the initial compliance demonstration requirements for new and existing sources?
- 63.11468 What are the monitoring requirements for new and existing sources?
- 63.11469 What are the notification requirements?
- 63.11470 What are the recordkeeping requirements?

Other Requirements and Information

- 63.11471 What General Provisions apply to this subpart?
- 63.11472 What definitions apply to this subpart?
- 63.11473 Who implements and enforces this subpart?
- 63.11474 [Reserved]

Tables to Subpart TTTTTT of Part 63

Table 1 to Subpart TTTTTT of Part 63--Applicability of General Provisions to Subpart TTTTTT

Applicability and Compliance Dates

§63.11462 Am I subject to this subpart?

- (a) You are subject to this subpart if you own or operate a secondary nonferrous metals processing facility (as defined in \$63.11472) that is an area source of hazardous air pollutant (HAP) emissions.
- (b) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 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.

§63.11463 What parts of my plant does this subpart cover?

- (a) This subpart applies to any existing or new affected source located at a secondary nonferrous metals processing facility.
- (b) The affected source includes all crushing and screening operations at a secondary zinc processing facility and all furnace melting operations located at any secondary nonferrous metals processing facilities.
- (c) An affected source is existing if you commenced construction or reconstruction of the affected source on or before September 20, 2007.
- (d) An affected source is new if you commenced construction or reconstruction of the affected source after September 20, 2007.

§63.11464 What are my compliance dates?

- (a) If you have an existing affected source, you must comply with the standards no later than [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].
- (b) If you have a new affected source, you must comply with this subpart according to paragraphs (b)(1) and (b)(2) of this section.
- (1) If you start up your affected source on or before [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER], you must comply with this subpart no later than [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].
 - (2) If you start up your affected source after [INSERT DATE

OF PUBLICATION IN THE FEDERAL REGISTER], you must comply with this subpart upon initial startup of your affected source.

Standards, Compliance, and Monitoring Requirements \$63.11465 What are the standards for new and existing sources?

- (a) You must route the emissions from each existing affected source through a fabric filter or baghouse that achieves a particulate matter (PM) control efficiency of at least 99.0 percent or an outlet PM concentration limit of 0.034 grams per dry standard cubic meter (g/dscm)(0.015 grains per dry standard cubic feet <math>(gr/dscf)).
- (b) You must route the emissions from each new affected source through a fabric filter or baghouse that achieves a PM control efficiency of at least 99.5 percent or an outlet PM concentration limit of 0.023 g/dscm (0.010 gr/dscf).

§63.11466 What are the performance test requirements for new and existing sources?

- (a) Except as specified in paragraph (b) of this section, if you own or operate an existing or new affected source, you must conduct a performance test for each affected source within 180 days of your compliance date and report the results in your notification of compliance status.
- (b) If you own or operate an existing affected source, 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 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 paragraphs (c)(1) and (2) of this section.
- (1) Determine the concentration of PM according to the following test methods in 40 CFR part 60, appendices:
- (i) Method 1 or 1A (Appendix A-1) to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.
- (ii) Method 2, 2A, 2C, 2F, or 2G (Appendices A-1 and A-2) to determine the volumetric flow rate of the stack gas.
- (iii) Method 3, 3A, or 3B (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 (Appendix A-3) to determine the moisture content of the stack gas.
- (v) Method 5 or 17 (Appendix A-3) to determine the concentration of particulate matter (front half filterable catch

- only). Three valid test runs are needed to comprise a performance test.
- (2) During the test, you must operate each emissions source within ± 10 percent of its normal process rate. You must monitor and record the process rate during the test.

§63.11467 What are the initial compliance demonstration requirements for new and existing sources?

- (a) You must demonstrate initial compliance with the applicable standards in §63.11465 by submitting a Notification of Compliance Status in accordance with §63.11469(b).
- (b) You must conduct the inspection specified in paragraph(c) of this section and include the results of the inspection in the Notification of Compliance Status.
- (c) For each existing and new affected source, you must conduct an initial inspection of each baghouse. You must visually inspect the system ductwork and baghouse unit for leaks. Except as specified in paragraph (e) of this section, you must also inspect the inside of each baghouse for structural integrity and fabric filter condition. You must record the results of the inspection and any maintenance action as required in \$63.11470.
- (d) For each installed baghouse that is in operation during the 60 days after the applicable compliance date, you must conduct the inspection specified in paragraph (c) of this section no later than 60 days after your applicable compliance date. For an installed baghouse that is not in operation during the 60

after the applicable compliance date, you must conduct an initial inspection prior to startup of the baghouse.

- (e) An initial inspection of the internal components of a baghouse is not required if an inspection has been performed within the past 12 months.
- (f) If you own or operate an existing affected source and are not required to conduct a performance test under §63.11466, you must submit the Notification of Compliance Status within 120 days after the applicable compliance date specified in §63.11464.
- (g) If you own or operate an existing affected source and are required to conduct a performance test under §63.11466, you must submit the Notification of Compliance Status within 60 days after completing the performance test.

§63.11468 What are the monitoring requirements for new and existing sources?

- (a) For an existing affected source, you must demonstrate compliance by conducting the monitoring activities in paragraph (a)(1) or (a)(2) of this section:
- (1) You must perform periodic inspections and maintenance of each baghouse according to the requirements in paragraphs(a) (1) (i) and (ii) of this section.
- (i) You must conduct weekly visual inspections of the system ductwork for leaks.
- (ii) You must conduct inspections of the interior of the baghouse for structural integrity and to determine the condition

of the fabric filter every 12 months.

- (2) As an alternative to the monitoring requirements in paragraph (a)(1) of this section, you may demonstrate compliance by conducting a daily 30-minute visible emissions (VE) test (i.e., no visible emissions) using EPA Method 22 (40 CFR part 60, appendix A-7).
- (b) If the results of the visual inspection or VE test conducted under paragraph (a) of this section indicate a problem with the operation of the baghouse, including but not limited to air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM emissions, you must take immediate corrective action to return the baghouse to normal operation according to the equipment manufacturer's specifications or instructions and record the corrective action taken.
- (c) For each new affected source, you must install, operate, and maintain a bag leak detection system according to paragraphs (c)(1) through (3) of this section.
- (1) Each bag leak detection system must meet the specifications and requirements in paragraphs (c)(1)(i) through (viii) of this section.
- (i) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per dry standard 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. The owner or operator shall 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 shall 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 develop and submit to the Administrator or delegated authority for approval a site-specific monitoring plan for each bag leak detection system. You must operate and maintain the bag leak detection system according to the site-specific monitoring 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 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. In approving the site-specific
 monitoring plan, the Administrator or delegated authority may
 allow owners and operators more than 3 hours to alleviate a

specific condition that causes an alarm if the owner or operator identifies in the monitoring plan this specific condition as one that could lead to an alarm, adequately explains why it is not feasible to alleviate this condition within 3 hours of the time the alarm occurs, and demonstrates that the requested time will ensure alleviation of this condition as expeditiously as practicable.

- (3) For each bag leak detection system, you must initiate procedures to determine the cause of every alarm within 1 hour of the alarm. Except as provided in paragraph (c)(2)(vi) of this section, you must 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
- (vi) Shutting down the process producing the PM emissions.
 \$63.11469 What are the notification requirements?

- (a) You must submit the Initial Notification required by \$63.9(b)(2) no later than 120 days after the applicable compliance date specified in \$63.11464. The Initial Notification must include the information specified in \$63.9(b)(2)(i) through (iv) and may be combined with the Notification of Compliance Status required in \$63.11467 and paragraph (b) of this section if you choose to submit both notifications within 120 days.
- (b) You must submit a Notification of Compliance Status in accordance with \$63.9(h) and the requirements in paragraphs (c) and (d) of this section. In addition to the information required in \$63.9(h)(2), \$63.11466, and \$63.11467, your notification must include the following certification(s) of compliance, as applicable, and signature of a responsible official:
- (1) This certification of compliance by the owner or operator of an existing affected source who is relying on a previous performance test: "This facility complies with the control efficiency requirement [or the outlet concentration limit] in \$63.11465 based on a previous performance test in accordance with \$63.11466."
- (2) This certification of compliance by the owner or operator of any new or existing affected source: "This facility has conducted an initial inspection of each control device according to the requirements in §63.11467, will conduct periodic inspections and maintenance of control devices in accordance with §63.11468, and will maintain records of each inspection and

maintenance action required by \$63.11470."

- (3) This certification of compliance by the owner or operator of a new affected source: "This facility has an approved bag leak detection system monitoring plan in accordance with \$63.11468(c)(2)."
- (c) If you own or operate an affected source and are required to conduct a performance test under \$63.11466, you must submit a Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test.
- (d) If you own or operate an affected source and are not required to conduct a performance test under §63.11466, you must submit a Notification of Compliance Status, including the results of the previous performance test, no later than 120 days after the applicable compliance date specified in §63.11464.

§63.11470 What are the recordkeeping requirements?

- (a) You must keep the records specified in paragraphs(a) (1) and (2) 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 the records of all inspection and monitoring data required by \$\$63.11467 and 63.11468, and the information identified in paragraphs (a)(2)(i) through (a)(2)(v)

for each required inspection or monitoring.

- (i) The date, place, and time;
- (ii) Person conducting the activity;
- (iii) Technique or method used;
- (iv) Operating conditions during the activity; and
- (v) Results.
- (b) Your records must be in a form suitable and readily available for expeditious review, according to \$63.10(b)(1).
- (c) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each recorded action.
- (d) 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 three years.

Other Requirements and Information

§63.11471 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.

§63.11472 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:

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

triboelectric, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

Furnace melting operation means the collection of processes used to charge post-consumer nonferrous scrap material to a furnace, melt the material, and transfer the molten material to a forming medium.

Secondary nonferrous metals processing facility means a brass and bronze ingot making, secondary magnesium processing, or secondary zinc processing plant that uses furnace melting operations to melt post-consumer nonferrous metal scrap to make products including bars, ingots, blocks, or metal powders. \$63.11473 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 \$63.11462 and 63.11463, the compliance date requirements in \$63.11464, and the applicable standards in \$63.11465.
- (2) 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.
- (3) Approval of a major change to monitoring under \$63.8(f). A "major change to monitoring" is defined in \$63.90.
- (4) Approval of a major change to recordkeeping/reporting under §63.10(f). A "major change to recordkeeping/reporting" is defined in §63.90.

§63.11474 [Reserved]

Tables to Subpart TTTTTT of Part 63

TABLE 1 TO SUBPART TTTTTT OF PART 63--APPLICABILITY OF GENERAL PROVISIONS TO SUBPART TTTTTT

As stated in §63.11471, you must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) shown in the following table:

Citation Subject

63.1(a)(1)-(a)(4), (a)(6), (a)(10)- Applicability.

(a) (12), (b) (1), (b) (3), (c) $(1)^{\perp}$,

(c)(2),(c)(5),(e)

	_
63.2	Definitions.
63.3	Units and Abbreviations.
63.4	Prohibited Activities and Circumvention.
63.6(a), (b)(1)-(b)(5), (b)(7), (c)(1), (c)(2), (c)(5), (e)(1), (f), (g), (i), (j)	Compliance with Standards and Maintenance Requirements.
63.7	Performance Testing Requirements
63.8(a)(1), (a)(2), (b), (c)(1)(i)- (c)(1)(ii), (c)(2), (c)(3), (f)	Monitoring Requirements.
63.9(a), (b)(1), (b)(2), (b)(5), (c), (d), (h)(1)-(h)(3), (h)(5), (h)(6), (i), (j)	Notification Requirements.
63.10(a), (b)(1), (b)(2)(vii), (b)(2)(xiv), (b)(3), (c), (f)	Recordkeeping and Reporting Requirements.
63.12	State Authority and Delegations.
63.13	Addresses.
63.14	Incorporations by Reference.
63.15	Availability of Information and Confidentiality.
63.16	Performance Track Provisions.

Section 63.11462(b) of this subpart exempts area sources from the obligation to obtain title V operating permits.