

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 63**

[EPA-HQ-OAR-2004-0083; FRL-8509-5]

RIN 2060-AM71

**National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Final rule.

**SUMMARY:** EPA is issuing national emission standards for electric arc furnace steelmaking facilities that are area sources of hazardous air pollutants. The final rule establishes requirements for the control of mercury emissions that are based on the maximum achievable control technology and requirements for the control of other hazardous air pollutants that are based on generally available control technology or management practices.

**DATES:** This final rule is effective on December 28, 2007. The incorporation by reference of certain publications listed in this final rule is approved by the Director of the Federal Register as of December 28, 2007.

**ADDRESSES:** The EPA has established a docket for this action under Docket ID No. EPA-HQ-OAR-2004-0083. All documents in the docket are listed in the Federal Docket Management System index at <http://www.regulations.gov> index. Although listed in the index, some information is not publicly available, e.g., confidential business

information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy form. Publicly available docket materials are available either electronically in <http://www.regulations.gov> or in hard copy at the National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities Docket at the EPA Docket and Information Center in the EPA Headquarters Library, EPA West, Room 3334, 1301 Constitution Ave., NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Air Docket is (202) 566-1742.

**FOR FURTHER INFORMATION CONTACT:** Mr. Phil Mulrine, Sector Policies and Program Division, Office of Air Quality Planning and Standards (D243-02), Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone number (919) 541-5289; fax number (919) 541-3207, e-mail address: [mulrine.phil@epa.gov](mailto:mulrine.phil@epa.gov).

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

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**I. General Information**

*A. Does this action apply to me?*

The regulated category and entities potentially affected by this final action include:

Category	NAICS code <sup>1</sup>	Examples of regulated entities
Industry .....	331111	Steel mills with electric arc furnace steelmaking facilities that are area sources.

<sup>1</sup> North American Industry Classification System.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this action. To determine whether your facility would be regulated by this action, you should examine the applicability criteria in 40 CFR 63.10680 of subpart YYYYY (National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities). If you have any questions regarding the applicability of this action to a particular entity, consult either the air permit authority for the entity or your EPA regional representative as listed in 40 CFR 63.13 of subpart A (General Provisions).

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

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

*C. Judicial Review*

Under section 307(b)(1) of the Clean Air Act (CAA), judicial review of this final rule is available only by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit by February 26, 2008. Under section 307(d)(7)(B) of the CAA, only an objection to this final rule 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 this final rule may not be challenged separately in any civil or criminal

proceedings brought by EPA to enforce these requirements.

Section 307(d)(7)(B) of the CAA further provides that “[o]nly an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review.” This section also provides a mechanism for us to convene a proceeding for reconsideration, “[i]f the person raising an objection can demonstrate to the 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.

## II. Background Information for the Final Rule

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 of area sources,<sup>1</sup> 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 38715, 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.<sup>2</sup> Sierra Club sued EPA, alleging a failure to complete standards for the area source categories listed pursuant to CAA sections 112(c)(3) and (k)(3)(B) within the time frame 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). 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 53814), we proposed NESHAP for the electric arc furnace (EAF) steelmaking area source category. Other final NESHAP will complete the required regulatory action for the remaining area source categories.

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.” As explained in the preamble to the proposed NESHAP, we are issuing standards based on GACT for the control of the Urban HAP arsenic, cadmium, chromium, lead, manganese, and nickel from area source EAF steelmaking facilities.

Section 112(c)(6) requires EPA to list, and subject to standards pursuant to section 112(d)(2) or (d)(4), categories of sources accounting for not less than 90 percent of emissions of each of seven specific HAP: Alkylated lead compounds, polycyclic organic matter, hexachlorobenzene, mercury, polychlorinated biphenyls, 2,3,7,9-tetrachlorodibenzofurans, and 2,3,7,8-tetrachlorodibenzo-p-dioxin. Standards established under CAA section 112(d)(2) must reflect performance of MACT. On September 20, 2007 (72 FR 53817), we added EAF steelmaking facilities that are area sources to this list of source categories under CAA section 112(c)(6) solely on the basis of mercury emissions. As discussed in the preamble to the proposed NESHAP, we are issuing MACT standards pursuant to CAA section 112(d)(2) for mercury emissions from all EAF steelmaking facilities that are area sources of HAP. The notice also announced a revision to

the area source category list developed under our Integrated Urban Air Toxics Strategy pursuant to CAA section 112(c)(3). The revision changed the name of the listed area source category “Stainless and Nonstainless Steel Manufacturing Electric Arc Furnaces (EAF)” to “Electric Arc Furnace Steelmaking Facilities.”

## III. Summary of Final Rule and Changes Since Proposal

### A. Applicability and Compliance Date

The final NESHAP applies to each new or existing EAF steelmaking facility that is an area source of HAP. The owner or operator of an existing area source that does not have to install or modify emissions control equipment to meet the opacity limit for fugitive emissions must comply with all applicable rule requirements no later than June 30, 2008. The owner or operator of an existing area source that must install or modify emission control equipment to meet the opacity limit for fugitive emissions may request a compliance date for the opacity limit that is no later than December 28, 2010 and must demonstrate to the satisfaction of the permitting authority that the additional time is needed. We revised the compliance date from 2 years to 3 years if a facility can demonstrate the additional time is needed to install controls after considering comments on the upgrades that some facilities may need to meet the opacity limit. The owner or operator of a new affected source must comply with all applicable rule requirements by December 28, 2007 (if the startup date is on or before December 28, 2007) or upon startup (if the startup date is after December 28, 2007).

### B. Final MACT Standards for the Control of Mercury

The final standards for mercury are based on pollution prevention and require an EAF owner or operator who melts scrap from motor vehicles either to purchase (or otherwise obtain) the motor vehicle scrap only from scrap providers participating in an EPA-approved program for the removal of mercury switches or to fulfill the alternative requirements described below. EAF facilities participating in an approved program must maintain records identifying each scrap provider and documenting the scrap provider's participation in the EPA-approved mercury switch removal program. A compliance option requires the EAF facility to prepare and operate pursuant to an approved site-specific plan that includes specifications to the scrap

<sup>1</sup> An area source is a stationary source of hazardous air pollutant (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.

<sup>2</sup> Since its publication in the Integrated Urban Air Toxics Strategy in 1999, EPA has revised the area source category list several times.

provider that mercury switches must be removed from motor vehicle bodies at an efficiency comparable to that of the EPA-approved mercury switch removal program (see below). An equivalent compliance option is provided for facilities that do not utilize motor vehicle scrap that contains mercury switches. We have added a new provision to the final rule for scrap that does not contain motor vehicle scrap to require certification and records documenting that the scrap does not contain motor vehicle scrap.

We expect most facilities that use motor vehicle scrap will choose to comply by purchasing motor vehicle scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the Administrator. The NVMSRP<sup>3</sup> is an approved program under this final standard. In response to comments, we are also identifying the Vehicle Mercury Switch Removal Program mandated by Maine State law as an EPA-approved program. Facilities choosing to use an EPA-approved program as a compliance option are required to assume all of the responsibilities for EAF steelmakers as described in the NVMSRP MOU. The NVMSRP is described in detail in section III.D.1 of the preamble to the proposed rule. In response to comments, we are including in the final rule provisions for EPA-approved programs that specify certain responsibilities that the EAF steelmaking industry agreed to in signing the MOU, including developing a plan that demonstrates how the facility is participating in the program, documenting communication and outreach to scrap providers, and corroboration to ensure mercury switches are being removed.

EAF facilities may also obtain scrap from scrap providers participating in other programs if they obtain EPA approval of the program. To do so, the facility owner or operator must submit a request to the Administrator for approval to comply by purchasing scrap from scrap providers that are participating in another switch removal program and demonstrate to the Administrator's satisfaction that the program meets the following specified criteria: (1) There is an outreach program that informs automobile dismantlers of the need for removal of mercury switches and provides training and guidance on switch removal, (2) the program has a goal for the removal of at

least 80 percent of the mercury switches, and (3) the program sponsor must submit annual progress reports on the number of switches removed and the estimated number of motor vehicle bodies processed (from which a percentage of switches removed is derivable).

EAF facilities that purchase motor vehicle scrap from scrap providers that do not participate in an EPA-approved mercury switch removal program have to prepare and operate pursuant to and in conformance with a site-specific plan for the removal of mercury switches. The facility's scrap specifications must include a requirement for the removal of mercury switches, and the plan must include provisions for obtaining assurance from scrap providers that mercury switches have been removed. The plan must be submitted to the permitting authority for approval and demonstrate how the facility will comply with specific requirements that include: (1) A means of communicating to scrap purchasers and scrap providers the need to obtain or provide motor vehicle scrap from which mercury switches have been removed and the need to ensure the proper disposal of the mercury switches, (2) provisions for obtaining assurance from scrap providers that motor vehicle scrap provided to the facility meets the scrap specifications, (3) provisions for periodic inspection, or other means of corroboration to ensure that scrap providers and dismantlers are implementing appropriate steps to minimize the presence of mercury switches in motor vehicle scrap, (4) provisions for taking corrective actions if needed, and (5) requiring each motor vehicle scrap provider to provide an estimate of the number of mercury switches removed from motor vehicle scrap sent to the facility during the previous year and the basis for the estimate. The permitting authority may request documentation or additional information from the owner or operator at any time. The site-specific plan must establish a goal for the removal of at least 80 percent of the mercury switches. All documented and verifiable mercury-containing components removed from motor vehicle scrap counts towards the 80 percent goal. We have clarified in the final rule that the owner or operator must operate according to the plan during the review and approval process, must address any deficiencies noted by the permitting authority within 60 days, and may request changes to the plan.

An equivalent compliance option is provided for EAF owners or operators who do not utilize motor vehicle scrap

that contains mercury. The option requires the facility to certify that the only materials they are charging from motor vehicle scrap are materials recovered for their specialty alloy, such as chromium in certain exhaust systems.

### C. Final GACT Standards for EAF and AOD Vessels

The final rule requires the owner or operator to install, operate, and maintain capture systems for EAF and AOD vessels that convey the collected emissions to a venturi scrubber or baghouse for the removal of PM. We are establishing separate emissions limits for new and existing EAF steelmaking facilities that produce less than 150,000 tpy of stainless or specialty steel, and for larger, non-specialty EAF steelmaking facilities. The small facilities are required to comply with a PM emissions limit of 0.8 pounds of PM per ton (lb/ton) of steel for each control device serving an EAF or AOD vessel. Alternatively, small specialty producers may elect to comply with a PM limit of 0.0052 grains per dry standard cubic foot (gr/dscf). The final rule also includes an opacity limit of 6 percent for melt shop emissions. All other EAF steelmaking facilities (both existing and new) are required to meet a PM limit of 0.0052 grains per dry standard cubic foot (gr/dscf) for emissions from a control device for an EAF or AOD vessel. The opacity of emissions from melt shops from these sources is limited to 6 percent. We have clarified in the final rule that the emission limits apply to AOD vessels and do not apply to ladle metallurgy operations.

Performance tests are required for each emissions source to demonstrate initial compliance with the PM and opacity limits. Provisions are included in the rule for conducting the tests. The owner or operator of an existing EAF steelmaking facility is allowed to certify initial compliance with the emissions limits if a previous test was conducted during the past 5 years using the methods and procedures in the rule and either no process changes have been made since the test, or the owner or operator can demonstrate that the test results, with or without adjustments, reliably demonstrate compliance despite process changes.

All EAF steelmaking facilities are required to have or obtain a title V permit. We have clarified in the final rule that sources that already have a title V permit are not required to obtain a new title V permit as a result of this area source rule. However, sources that already have a title V permit must include the requirements of this rule through a permit reopening or at

<sup>3</sup> Additional details can be found at <http://www.epa.gov/mercury/switch.htm> and in section IV.D.1 of this preamble. In particular, see the signed Memorandum of Understanding.

renewal according to the requirements of 40 CFR part 70 and the title V permit program. See 40 CFR 70.7(f). The final rule requires each EAF steelmaking facility to monitor the capture system, PM control device, and melt shop; maintain records; and submit reports according to the CAM requirements in 40 CFR part 64. The existing part 64 rule requires the owner or operator to establish appropriate ranges for selected indicators for each emissions unit (i.e., operating limits) such that operation within the ranges will provide a reasonable assurance of compliance with the emissions limitations or standards.

The CAM rule requires the owner or operator to submit certain monitoring information to the permitting authority for approval. This information includes: (1) The indicators to be monitored; (2) the ranges or designated conditions for such indicators, or the process by which such indicator ranges or designated conditions will be established; (3) performance criteria for the monitoring; and if applicable, (4) the indicator ranges and performance criteria for a CEMS, COMS, or predictive emissions monitoring system. The owner or operator also must submit a justification for the proposed elements of the monitoring control device (and process and capture system, if applicable) and operating parameter data obtained during the conduct of the applicable compliance or performance test.

If monitoring indicates that the unit is operating outside of the acceptable range established in its permit, the owner or operator must return the operation to within the established range consistent with 40 CFR 64.7(d).

#### *D. Final GACT Standards for Scrap Management*

In addition to meeting PM and opacity limits reflecting GACT, we are also requiring EAF facilities to restrict the use of certain scrap or follow a pollution prevention plan for scrap inspection and selection that minimizes the amount of specific contaminants in the scrap.

The requirements are based on two pollution prevention approaches depending on the type of scrap that is used, and a facility may have some scrap subject to one approach and other scrap subject to the other approach. One provision is for scrap that does not contain certain contaminants and simply prohibits the processing of scrap containing these contaminants (restricted scrap). Compliance is demonstrated by a certification that the scrap does not contain the contaminants. This scrap management

approach is expected to be most useful to stainless and specialty steel producers with stringent scrap specifications that do not permit the use of motor vehicle scrap and scrap containing free organic liquids. The other approach for scrap that may contain certain contaminants is more prescriptive and requires a pollution prevention plan, scrap specifications, and procedures for determining that these requirements are met. This pollution prevention approach was developed primarily for carbon steel producers that accept motor vehicle scrap and many other types of ferrous scrap.

Under the restricted scrap provision, the plant owner or operator must agree to restrict the use of certain scrap, including metallic scrap from motor vehicle bodies, engine blocks, oil filters, oily turnings, machine shop borings, transformers and capacitors containing polychlorinated biphenyls (PCBs), lead-containing components, chlorinated plastics, or free organic liquids. The restriction on lead-containing components does not apply to the production of leaded steel (where lead is obviously needed for production).

The other scrap management provision requires the plant owner or operator to prepare a pollution prevention plan for metallic scrap selection and inspection to minimize the amount of chlorinated plastics, lead (except for the production of leaded steel), and free organic liquids. This plan must be submitted to the permitting authority for approval. The owner or operator is required to keep a copy of the plan onsite and train plant personnel with materials acquisition or inspection duties in the plan's requirements.

The plan must include specifications for scrap materials to be depleted (to the extent practicable) of lead-containing components (except for the production of leaded steel), undrained used oil filters, chlorinated plastics, and free organic liquids. The plan must also contain procedures for determining if these requirements are met (e.g., visual inspection or periodic audits of scrap suppliers) and procedures for taking corrective actions with vendors whose shipments are not within specifications.

#### *E. Recordkeeping and Reporting Requirements*

Area sources subject to the requirements for EAF and AOD vessels are subject to the recordkeeping and reporting requirements of the part 64 CAM rule. The general recordkeeping requirements of the part 64 rule directs the owner or operator to comply with

the recordkeeping requirements for title V operating permits in 40 CFR 70.6(a)(3)(ii), which require records of analyses, measurements, and sampling data. The part 64 rule also requires the owner or operator to maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP), any activities undertaken to implement a QIP, and other supporting information required by the part 64 rule (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

The general reporting requirements of part 64 require the owner or operator to submit monitoring reports to the permitting authority in accordance with the requirements for facilities with title V operating permits. The title V reporting requirements in 40 CFR 70.6(c)(1) and 40 CFR 71.6(c)(1) include a 6-month monitoring report, deviation reports, and annual compliance certifications. The part 64 reporting requirements specify that the 6-month monitoring report include: (1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken; (2) summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and (3) a description of the actions taken to implement a QIP during the reporting period. Upon completion of a QIP, the owner or operator must include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

All EAF steelmaking facilities subject to this NESHAP are also subject to certain specified requirements of the NESHAP general provisions (40 CFR part 63, subpart A). The general provisions include requirements for initial notifications; startup, shutdown, and malfunction records and reports; recordkeeping; and semiannual excess emissions and monitoring system performance reports. The information required in these records and reports is similar to the information required by the CAM rule (40 CFR part 64) and the operating permits rules (40 CFR parts 70 and 71).

The NESHAP also includes specific recordkeeping and reporting requirements for area source facilities subject to requirements for control of contaminants from scrap. The area

source facilities are required to keep records to demonstrate compliance with the requirements for their pollution prevention plan for minimizing the amount of chlorinated plastics, lead, and free organic liquids charged to a furnace or for the use of only restricted scrap and the site-specific plan for mercury or any of the mercury compliance options.

As noted above, facilities subject to the site-specific plan for mercury are required to keep records and submit semiannual reports on the number of mercury switches removed by the scrap providers or the weight of mercury recovered from those switches, an estimate of the percent of mercury switches recovered, and certification that the recovered mercury switches were managed at RCRA-permitted facilities. We have clarified that the requested information can be aggregated in the semiannual report and does not have to be reported separately for every scrap shipment. Facilities participating in an EPA-approved program for switch removal must keep records that identify their scrap providers and document that they participate in an approved switch removal program. The final rule requires more extensive records for a site-specific plan than for an approved program because extensive recordkeeping, reporting, and measurement of success are already required for approval of such a removal program, the NVMSRP being the prime example.

All facilities subject to the requirements for the control of contaminants from scrap are required to submit semiannual reports according to the requirements in § 63.10(e) of the general provisions. The report must identify any deviation from the rule requirements and the corrective action taken.

#### IV. Summary of Comments and Responses

We received a total of 20 comments on the proposed NESHAP from two trade associations representing the steelmaking industry, two trade associations representing the scrap recycling industry, two associations representing State agencies, six environmental groups, four State agencies, two companies, a consultant, and one private citizen during the public comment period. Sections IV.A through IV.E of this preamble provide responses to the significant public comments received on the proposed NESHAP.

#### A. Basis for Area Source Standards

*Comment:* One commenter stated that EPA's decision to issue GACT standards for mercury pursuant to section 112(d)(5), instead of MACT standards pursuant to section 112(d)(2) and (d)(3), is arbitrary and capricious because EPA provided no rationale for its decision to issue GACT standards. The commenter further stated that EPA's proposed GACT for mercury emissions from EAFs does not satisfy section 112(d)(5) of the CAA because EPA is relying on a voluntary program to keep switches that contain mercury out of the EAF rather than evaluating potential reduction measures that are commercially available.

*Response:* The commenter evidently misread the proposed rule. The proposed standard for mercury is based on MACT and is not based on GACT. As we explained at proposal (72 FR 53816), EAF steelmaking facilities were listed under CAA section 112(c)(6) solely on the basis of mercury emissions, and we proposed standards for mercury under CAA section 112(d)(2) that reflect the performance of MACT. We identified the MACT floor (72 FR 53822) as the pollution prevention approach of using scrap only from scrap providers that are first removing mercury switches pursuant to an EPA-approved program. We also evaluated more stringent beyond-the-floor options for MACT (72 FR 53824). Additional discussion of our MACT determination is provided in section IV.B.1 of this preamble. Since the commenter did not address any aspect of the actual proposal, further response is unnecessary.

If, against all natural readings, the comment is construed as stating that EPA must first provide a rationale as to why it is not issuing a MACT standard before it can issue a GACT standard under CAA section 112(d)(5) for HAP other than mercury, we disagree with the commenter for the reasons set forth in the final rules for Acrylic and Modacrylic Fibers Production, Carbon Black Production, Chemical Manufacturing: Chromium Compounds, Flexible Polyurethane Foam Production and Fabrication, Lead Acid Battery Manufacturing, and Wood Preserving (72 FR 38880, July 16, 2007). We reiterate that we do not view the commenter as having raised an issue with respect to GACT vs. MACT for HAP other than mercury; however, we provide this response in an abundance of caution to the extent the comment is, in some way, construed in this manner.

#### B. Proposed MACT Standard for Mercury

We determined at proposal that the MACT floor and MACT for mercury emissions was the pollution prevention practice of removing mercury switches from end-of-life vehicles before the vehicles were crushed and shredded for use in EAFs. MACT would be implemented by EAF owners or operators purchasing scrap only from scrap providers that were participating in an EPA-approved program for switch removal, operating pursuant to an EPA-approved site-specific plan (of equal effectiveness to an EPA-approved program) that ensured scrap providers had removed mercury switches, or by not melting scrap from end-of-life vehicles. We further proposed that the National Vehicle Mercury Switch Recovery Program (NVMSRP) met the requirements of an EPA-approved program. However, we received several comments questioning how the effectiveness of an EPA-approved program would be ensured and suggestions for improving aspects of the rule related to program transparency, enforceability, and implementability. We have incorporated several of these suggested improvements into the final rule, and we address these comments and describe these improvements in detail in section IV.B.3 of this preamble. The improvements include developing and maintaining a plan showing how the facility is participating in the approved program, documentation of communication to suppliers of the need for them to remove mercury switches, or other means of corroboration by the facility to ensure suppliers are implementing switch removal procedures. We note here that the Administrator is committed to evaluating the effectiveness of the approved program on a continuing basis and is a party to the agreement that established the NVMSRP. The parties (including the Administrator) recently reviewed the program's effectiveness after 1 year. The 1-year review showed reasonable progress, with recycling programs now available in every State. The national program was slightly ahead of the schedule projected for start-up. We now expect switch removals to steadily increase over the next year as these programs begin to fully operate. If the Administrator finds the program to be ineffective at the next scheduled review under the MOU, or at any time as provided in the rule, the Administrator may disapprove the program in whole or in part (e.g., for a particular State), and participation in the program would no longer be a

compliance option, leaving EAF owners or operators obliged to develop site-specific programs for EPA approval in order to meet the requirements of this rule. Under the site-specific program, it would fall on the EAF owner or operator to provide a detailed accounting of switches removed and vehicles processed from all of their scrap providers to enable the Administrator or permitting authority to evaluate whether the facility is in compliance with the switch removal requirements. The somewhat lower documentation feature of the NVMSRP provides a strong incentive to all of the parties involved in switch removal to make every effort to ensure the NVMSRP is effective on a continuing basis. However, if the national program were to prove unsatisfactory and be subsequently disapproved as a compliance option, the burden would be on the EAF owner or operator to implement a site-specific approach. In either case (whether a national program or site-specific program), we have codified an approach that provides accountability and measures of effectiveness as described in detail in section IV.B.3 of this preamble.

We also considered a standard based on the performance of activated carbon injection (ACI) with continuous monitoring for mercury as a beyond-the-floor option, and as we discuss in detail in section IV.B.1 of this preamble, we rejected this option for several reasons. In summary, ACI has not been demonstrated for EAFs, its effectiveness is highly uncertain due in large part to the extreme variability in mercury loading from this batch operation (e.g., it is difficult to design and estimate the capacity of the ACI system that would be needed to handle the highly variable loading of mercury), and it would likely result in the landfilling of large quantities of hazardous waste (EAF dust) that is currently recycled (pursuant to RCRA subtitle C standards) to recover its zinc content. In addition, it would be costly, and the continuous monitoring that would be needed to assess the effectiveness of ACI is not feasible for the majority of EAF facilities because they have baghouses without stacks. (See 72 FR 53817.)

#### 1. Emission Controls and an Emission Limit for Mercury

*Comment:* One commenter stated that the proposed standard for mercury does not satisfy the requirements of section 112(d)(5) of the CAA because EPA is relying solely upon a voluntary program to keep switches from cars out of the EAF rather than evaluating the potential reduction measures that are

commercially available. One commenter noted that EPA's calculated cost effectiveness of \$11,000/pound (lb) of mercury for ACI is similar to the cost effectiveness anticipated by EPA for municipal waste combustors and medical waste incinerators, and it is well below the control costs expected from implementation of the utility boiler Clean Air Mercury Rule—all rules where a technology-based standard for mercury is based upon performance of ACI. The commenter notes that without further analysis to determine the non-air quality health and environmental impacts and energy requirements, it appears that ACI is a cost effective control for mercury emissions and was rejected by EPA prematurely. Several commenters recommended that EPA require controls beyond the vehicle switch removal program. One of these commenters stated that ACI is widely used on other combustion sources (e.g., municipal waste combustors, medical waste incinerators, and hazardous waste incinerators) and that ACI has already been successfully applied to iron and steel melters in Europe. The commenter stated that coal-fired boilers use ACI successfully, and no circumstances specific to EAFs have been identified that would indicate that EAFs could not use the same technology efficaciously. The commenter noted that the State of New Jersey estimated the cost to implement source separation and to install ACI on an existing baghouse to be less than \$1.80 per ton of scrap processed. The commenter claimed that the cost of compliance is minimal compared to the price of a ton of steel (\$360 to \$780/ton) or a ton of scrap (\$300/ton) and is not expected to cause any facility to close. The commenter believes these cost estimates indicate that add-on controls for mercury for EAFs are cost effective when the impacts of mercury emissions on human health and the environment are weighed.

Several commenters requested that EPA include a mercury emission limit and monitoring strategy for EAFs rather than relying solely on a voluntary program. Three commenters said it is important to establish an emission limit and require testing for mercury because 40 to 50 percent of the mercury comes from non-automobile sources and would not be removed by the switch removal program. One commenter requested that EPA establish a mercury emission limit, require appropriate testing to verify compliance, and require add-on emission controls if the emission limit is not met. Another commenter suggested that EPA set a mercury

emission standard that uses a tiered approach towards demonstrating compliance, e.g., sources that emit less than a certain amount of mercury per year may be allowed to comply with the pollution prevention standard along with a mercury emissions monitoring requirement. The commenter continues by stating that more stringent mercury monitoring should be required for more significant mercury emitters with the understanding that if a certain level is not reached within a given time frame (e.g., three years), the source must install mercury emissions controls and implement associated monitoring. Another commenter requested a protective backstop for the MACT requirement, including advanced mercury emissions removal technology and continuous emission monitoring systems (CEMS) for facilities that do not meet the mercury pollution prevention standards.

One commenter stated that two EAFs in Michigan have mercury emission limits and must perform stack testing. This commenter asks that if EPA determines that an emission limit is not practical for the area source standard, EPA should consider a percent reduction standard similar to what is required in the State of New Jersey (75 percent). The commenter asks that measures and targets be established and consequences identified if targets are not achieved. The commenter said measures and targets include an estimate of mercury-containing devices collected, inlet and outlet stack testing, and baghouse dust analysis to confirm reduced mercury inputs and emissions. The commenter stated that identifying spikes in the mercury concentration of baghouse dust provides information to conduct additional quality control on scrap shipments.

Two commenters claimed that ACI is not a demonstrated technology for EAFs and that there is a great deal of uncertainty about its potential effectiveness due in large part to the high variability of mercury emission levels. The commenters also stated that the use of ACI would have a negative effect on recycling EAF dust because the mercury in the dust makes it necessary to landfill the dust instead of recycling it. The commenters agreed with EPA's pollution prevention approach and stated that EPA properly explained the technological and economic feasibility difficulties associated with developing and enforcing a mercury emission limit for EAFs, including the fact that continuous monitoring for mercury from EAFs is impractical.

*Response:* At proposal, we determined that the MACT floor for

mercury was a pollution prevention approach based on preventing mercury switches from entering the EAF. We also explained at proposal that standards requiring pollution prevention were not work practices under section 112(h), and even assuming for the sake of argument that they were work practices, it is not feasible to prescribe or enforce an emissions limit for mercury within the meaning of section 112(h) (72 FR 53817). We received no adverse comments on or challenges to our MACT floor determination or our conclusion that pollution prevention standards were not work practices under section 112(h).

We evaluated ACI as a beyond-the-floor control option for mercury emissions and rejected the option for several reasons (72 FR 53824). We also considered the feasibility of establishing an emission limit for mercury and explained in detail why we chose instead an approach based on a pollution prevention standard (72 FR 53816). We disagree that the proposed standard for mercury relies solely on a voluntary program to keep mercury switches out of the scrap supply. First, there is nothing voluntary about the obligations of EAF owners or operators under the rule. They are not in compliance with the rule unless they obtain scrap from dealers participating in an effective program to remove mercury switches. Moreover, the standard contains detailed requirements for preparing and operating a pollution prevention plan that must be approved by the Administrator, specific criteria that will be used by the Administrator to review and approve plans, criteria for approval of switch removal programs to ensure they are effective, and reporting and recordkeeping requirements (including progress reports). The Administrator can evaluate the success of an approved switch removal program based on progress reports that provide the number of mercury switches removed, the estimated number of vehicles processed, and the percent of switches removed. Based on this evaluation, the Administrator may subsequently disapprove a previously approved switch removal program or a site-specific plan. An example of an existing switch recovery program that has been documented as successful is the one implemented by the State of Maine, which was one of the first such programs and was in place in advance of the NVMSRP. The Maine program is now fully operational and reported a recovery rate of over 90 percent for mercury switches in 2006.

The commenters provided no new information or additional facts with

respect to ACI that were not considered and addressed at proposal when we evaluated it as a beyond-the-floor option (72 FR 53824, 53825) and concluded that:

Based on the fact that activated carbon injection is not a demonstrated mercury control technology for EAF facilities, the uncertainty in design and performance of the add-on controls and hence of the actual mercury emission reductions for EAF facilities, the cost impacts per ton of emission reduction, and the adverse energy and solid waste impacts, we determined that control beyond the floor is not warranted for mercury. Therefore, we are proposing that the removal of mercury switches from the scrap before it is melted in the EAF represents MACT for mercury for new and existing EAF facilities.

We emphasize again that ACI was not rejected as a beyond-the-floor option solely on the basis of cost effectiveness. We concluded that ACI has not been demonstrated for EAFs and that there is a great deal of uncertainty in design (e.g., the carbon capacity that would be needed to treat a highly variable inlet loading of mercury) and potential performance (i.e., how much mercury would actually be removed), and hence of the actual mercury emission reductions that might be achieved. We also considered and discussed the adverse energy and solid waste impacts.

## 2. Monitoring for Mercury

*Comment:* Several commenters stated that stack monitoring for mercury emissions from EAFs was needed to assess the effectiveness of the NVMSRP and other programs. These commenters believe it is important to have information on the actual emissions, the emissions impact of pollution prevention measures, and an indication of need for additional actions that may be needed to further reduce mercury emissions. One commenter stated that CEMS are essential to establish that the voluntary switch removal program reduces emissions. Another commenter requested that the monitoring program include a requirement to test emissions within 6 months of publication of the final rule to establish a baseline for each facility.

One commenter stated that although the proposal states that no feasible methods of emissions testing exist for any EAF facility (e.g., continuous emissions monitoring), there are monitoring technologies that are adaptable for use by any facility in this industry. The commenter noted that batch process emissions are tested and monitored in many industrial sectors, and EPA has established emission standards for many batch processes

without requiring the use of continuous monitors, including Pesticide Active Ingredient Manufacturing and Miscellaneous Organic Chemical Manufacturing. The commenter also noted that EPA has recently promulgated the "sorber tube" method for sampling stack gases at coal-fired power plants (40 CFR part 75, appendix K). The commenter believes that because this method of monitoring mercury is capable of sampling flue gases over any period of time (hours or even days), there appears to be little impediment to using this method to sample "batch" processes like those at an EAF. Another commenter also noted that CEMS are available and in use at other types of mercury-emitting facilities.

One commenter stated that data from frequent monitoring will be essential to determine if actual reductions in mercury emissions have been achieved in order to determine whether the "sunset" of the pollution prevention standard in 2017 should be allowed to occur. One commenter was concerned that if there are no mercury emission standards, it may be very difficult for EPA to conduct its residual risk determination. The commenter wonders how EPA will calculate residual risk when there has been no attempt to establish a baseline of mercury emissions, determine the effectiveness of the switch removal program, or measure emissions after controls are implemented. One commenter stated that at least one steel mill of which they are aware has reported higher levels of mercury emissions since starting to participate in the NVMSRP. The commenter notes that frequent monitoring is needed to determine whether the program is effective.

One commenter suggested that EPA require facilities to keep records of the sources of scrap metal entering the facility in a manner that allows correlation of scrap sources with elevated mercury emissions and that these records be available to the Agency and accessible for public review.

*Response:* At proposal, we considered the use of CEMS for mercury (72 FR 53817):

We therefore examined the technological and economic feasibility of continuous monitoring for mercury from these sources. We note first that mercury CEMS are not demonstrated for EAF, raising a threshold question of their technical feasibility for all EAF. Furthermore, most EAF discharge emissions from positive pressure baghouses without stacks. Continuous mercury monitoring would not be technically feasible for these EAF (i.e., stackless EAF), even assuming that mercury CEMS were otherwise

demonstrated for EAF. This is because volumetric flow rate and concentration would need to be determined by CEMS to measure the mass emission rate of mercury, and without a stack, it is nearly impossible to obtain an accurate measurement of volumetric flow rate or to obtain representative measurements of mercury concentration in the discharged emissions. Indeed, EPA has previously determined that the use of continuous opacity monitoring systems (COMS) was not feasible for positive pressure baghouses without stacks for this reason.

The commenters did not address any of these points that we made at proposal. After further consideration of CEMS, we continue to believe that CEMS are not feasible for monitoring baghouses without stacks.

One commenter stated that batch processes such as EAF steelmaking could be monitored for mercury emissions using the sorbent tube method. We agree that there are monitoring methods for mercury that can be used for batch processes; however, the problem with applying CEMS or the sorbent tube method is because of baghouses without stacks, not because steelmaking is a batch process. We received no other comments that addressed, much less refuted, EPA's view of the fundamental shortcomings of applying mercury CEMS to EAFs without stacks that were discussed at proposal.

We discuss in much greater detail in section IV.B.3 of this preamble the monitoring requirements of the rule and how they are used to determine the effectiveness of the standard. We have developed monitoring requirements that are appropriate for the pollution prevention standard, and since we have concluded it is not necessary or appropriate to establish a mercury stack emission limit, it is not appropriate and in most cases it is infeasible to require monitoring for mercury emissions.

The lack of a mercury emission standard will not affect our ability to conduct a residual risk assessment in the future. We will by that time have historical data on the effectiveness of the MACT standard, and mass balance approaches as well as innovative methods for sampling and analysis of sources or ambient air concentrations may provide additional data.

We cannot directly address the commenter who claimed that one plant's mercury emissions had increased since joining the NVMSRP because the commenter provided no details to substantiate the claim. However, there is no doubt that removal of mercury switches before motor vehicle scrap is melted will reduce mercury emissions, whether the

removal takes place under the NVMSRP or under other switch removal programs.

### 3. Effectiveness of the Pollution Prevention Standard for Mercury

*Comment:* Several commenters stated that requirements to verify the effectiveness of the NVMSRP and other switch removal programs are needed and that accountability is not adequately addressed. The commenters claimed that there are no enforceable mechanisms to ensure effective participation in or compliance with the switch removal programs and identified the need for increased recordkeeping and reporting beyond just participation in a switch removal program. One commenter requested that EPA include enforceable measures of accountability that include consequences if the programs do not meet their goals. Two commenters requested that quantifiable performance measures be included to verify the effectiveness of mercury reduction programs. One commenter requested written documentation and audits of program participation of suppliers, evaluation of switch recovery rates, and mercury emissions testing and monitoring requirements. Another commenter suggested incorporating verifiable measurement and accountability systems and using some of the specific language from the MOU to make the scrap plans accountable and enforceable. This commenter also requested that EPA revise the rule to include enforceable scrap specification requirements and binding contracts with scrap suppliers (rather than a "means of communicating") and require recordkeeping, reporting, and certification to assure that scrap meets specifications, as well as contract termination in the event of deviations. This commenter also states that the switch removal requirements must be more than a "goal"; they must be achieved through binding contracts establishing removal requirements and effective tracking, recordkeeping, and reporting requirements. Two commenters noted that since there are no effective performance measures, goals, or consequences for failure to remove switches, there is no strong incentive for the NVMSRP to continue after the initial funding has been expended.

Two commenters requested achievement of specific switch recovery percentages as the rule is implemented. They suggest a ramped capture rate of 30 percent for year one, 50 percent for year two, and 80 percent in year three. The commenters believe it is essential that the rule require increasing mercury

switch capture rates so that a rate of 80 percent or more is achieved within two to three years.

One commenter stated that two studies of switch removal and mercury emission reductions do not constitute evidence of a cause and effect relationship between removal of switches and mercury reductions. The commenter believes that documentation based on a large number of studies can determine the cause and effect relationship. The commenter further states that because no monitoring or testing of mercury emissions are required by the proposed rule, no evidence of correlation between amounts of mercury emitted and the quality of scrap can be demonstrated, and there would be no evidence that the switch removal program is working to reduce mercury emissions.

Several commenters noted that the proposed rule is silent on what happens if the 80 percent switch removal goal is not met. One commenter believes the rule should include a final date when the goal is to be met and identify emission standards to be met as an alternative to the 80 percent removal goal.

One commenter was concerned about using an estimate of the percentage of mercury switches removed to determine whether an approved plan should continue to be approved because the estimate of the percentage of mercury switches removed is highly uncertain and dependant on many assumptions. The commenter stated that determining the effectiveness of site-specific mercury switch removal programs by comparing uncertain statistics with an aggressive removal goal (80 percent) may cause effective programs to have their approval revoked.

*Response:* The NVMSRP resulted from a two-year process of collaboration and negotiation among a diverse group of stakeholders to create a dedicated nationwide effort to remove mercury-containing switches from end-of-life vehicles. The stakeholders included EPA, automakers, steel manufacturers, environmental groups, automobile scrap recyclers, and State agency representatives. These stakeholders signed an MOU detailing their respective responsibilities and commitments in the national switch recovery effort. This effort will result in substantial reductions in mercury emissions from EAFs by removing the majority of mercury from metal scrap. In addition, it will have environmental benefits from reducing mercury emissions from sources other than EAFs and will reduce mercury releases to media other than air. We disagree with



the commenter that without testing for mercury emissions, there would be no evidence that the switch removal program is working to reduce mercury emissions. Many States have implemented switch removal programs, and major environmental groups have participated in and signed agreements supporting the programs, both of which are indications of the participants' belief in the ability of such programs to reduce mercury emissions. EPA recounts this history not to show that the Agency is blindly accepting the negotiated agreement, but that EPA has examined the agreement anew in light of the requirements of section 112(d) and finds that the program resulting from that agreement meets the statutory requirements. The success of the program has been documented by direct measurements of mercury in switches removed, and as of November 28, 2007, over 843,000 switches with 1,855 pounds of mercury have been recovered.

As we stated in detail at proposal, this pollution prevention approach was determined to be the MACT floor and MACT for reducing mercury emissions from EAFs. Emissions of mercury result from the melting of scrap metal that contains mercury components. When these components are removed prior to charging the scrap to an EAF, the mercury emissions are prevented.

Thousands of automobile recyclers have already joined the NVMSRP, although not all members have yet sent in recovered switches. (As we discuss in more detail below, there is a lag time as dismantlers accumulate enough switches to fill a shipping container.) Information on the program, including scrap suppliers who have joined and the number of switches they have turned in to date, can be found on the End of Life Vehicle Solutions Web site (<http://www.elvsolutions.org>).

As we discussed at proposal, there are many elements in the NVMSRP that are designed to measure success and to evaluate its effectiveness. One year following the effective date of the MOU and each year thereafter, the parties or their designees and EPA agreed to meet to review the effectiveness of the program at the State level based upon recovery and capture rates. The parties to the agreement will use the results to improve the performance of the program and to explore implementation of a range of options in that effort. Two and one-half years from the inception of the program, the parties agreed to meet and review overall program effectiveness and performance. This review will include analysis of the number of switches that have been collected and what factors have contributed to

program effectiveness. The Administrator is one of the parties committed to this review and assessment of effectiveness, and the Administrator may disapprove the program as a compliance option (in whole or in part) at any time based on the assessment of effectiveness.

A key element of measuring the success of the program is maintaining a database of participants that includes detailed contact information; documentation showing when the participant joined the program (or started submitting mercury switches); records of all submissions by the participant including date, number of mercury switches; and confirmation that the participant has submitted mercury switches as expected. Another important element is aggregated information to be updated on a quarterly basis, including progress reports, summaries of the number of program participants by State, individual program participants, and records of State and national totals for the number of switches and the amount of mercury recovered. The program is also estimating the number of motor vehicles recycled. The NVMSRP will issue reports quarterly during the first year of the program, every six months in the second and third year of the program, and annually thereafter. The reports prepared by ELVS will include the total number of dismantlers or other potential participants identified; the total number of dismantlers or others contacted; and the total number of dismantlers or others participating. The annual report will include the total mercury (in pounds) and number of mercury switches recovered nationwide; the total pounds of mercury recovered and number of mercury switches by State; and an estimated national capture rate. Other information includes the total number and identity of dismantlers or others dropped due to inactivity or withdrawal from the program. Mercury switch removal is already underway—more than 1,855 pounds of mercury from over 843,000 switches have been recovered to date by program participants. This represents almost 20 percent of our estimated reduction in mercury emissions of 5 tons per year once the final rule and NVMSRP are fully implemented.

The commenters make valid points that the effectiveness of the rule could be improved by incorporating certain elements that the steel manufacturers have already agreed to in the MOU. We have revised the proposed rule to provide more specificity to the EAF owner or operator responsibilities and to improve the effectiveness of EPA-

approved programs, which may include programs other than the NVMSRP. In addition, we are including these same requirements in the option for developing a site-specific plan for switch removal. The rule changes include:

- EAF owners or operators must develop and maintain onsite a plan demonstrating the manner through which their facility is participating in the EPA-approved program. The plan must include facility-specific implementation elements, corporate-wide policies, and/or efforts coordinated by a trade association as appropriate for each facility.
- EAF owners or operators must provide in the plan documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need for the removal of mercury switches from end-of-life vehicles. Upon the request of the permitting authority, the owner or operator must provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols.
- EAF owners or operators must conduct periodic inspections or provide other means of corroboration to ensure that suppliers are aware of the need for and are implementing appropriate steps to minimize the presence of mercury in scrap from end-of-life vehicles.

One commenter claimed that because no monitoring or testing for mercury is required, there is no way to determine if the pollution prevention approach is reducing mercury emissions. We strongly disagree because the number of switches or weight of mercury recovered is a direct measure of the amount of mercury prevented from entering the environment. As we explained at proposal and in an earlier comment response, it is not feasible to require continuous emission monitoring at EAFs with baghouses without stacks, and because of the variability in mercury emissions from this batch process, periodic manual sampling is inadequate and provides only a snapshot in time of the emissions.

Commenters also asked what happens if the 80 percent goal is not met. Another stated that there is a great deal of uncertainty in estimating the percent of switches removed and that the use of this uncertain statistic could cause effective switch removal programs to have their approval revoked. We addressed these issues at proposal (72 FR 53824) and we note again that the 80 percent minimum recovery rate is a goal that all parties to the MOU agreed to work toward. We recognize that 80

percent recovery will not be achieved in the first year or two; however, the parties to the MOU agreed to aim for collection of at least four million switches in the first three years of the NVMSRP and agreed to exceed this amount if possible. We believe that recovery of four million switches (approximately 4.4 tons of mercury at 1 gram per switch) in the first three years is a good beginning for working toward recovery of 80 percent of mercury switches. It is necessary to acknowledge that there will be an initial delay in many States that have recently joined the NVMSRP while individual dismantlers accumulate sufficient switches to make a shipment for recovery. It has been estimated that it may take from 6 to 12 months to fill a switch collection bucket (e.g., according to the ELVS Web site at <http://www.elvsolutions.org>, switches are typically collected in 3.5 gallon buckets that can hold up to 450 mercury pellets from switch assemblies).

Furthermore, the goal of removing 80 percent of the mercury switches is not the only criteria used to evaluate the success of a program. In the proposed rule, we explained that the Administrator can evaluate the success of an EPA-approved program at any time, identify States where improvements might be needed, recommend options for improving the program in a particular State, and if necessary, disapprove the program as implemented in a State from being used to demonstrate compliance with the rule based on an assessment of this performance. The evaluation would be based on progress reports submitted to the Administrator that provide the number of mercury switches removed, the estimated number of vehicles processed, and percent of mercury switches recovered. The Administrator can assess the information with respect to the program's goal for percent switch recovery and trends in recovery rates. For example, as the NVMSRP has ramped up, switch recovery rates have increased from 241,000 switches in 2006 to 602,000 through the first 10 months of 2007.

*Comment:* One commenter noted that in the NVMSRP MOU, funding was negotiated with the understanding that the EAF rule would provide strong incentives for switch removal after the incentive fund was depleted. The commenter states that the proposed rule does not appear to provide such incentives because there are no performance measures, goals, or consequences for failing to remove switches. The commenter further states that to provide accountability and

enhance effectiveness, the rule should stipulate enforceable consequences for the EAF sector in the event that the pollution prevention approach is not sufficient to achieve necessary emission reductions. The commenter suggests that if existing and proposed programs are not successful, then additional emission control and monitoring requirements and/or further EAF financial support to the NVMSRP should be required.

*Response:* The rule provides a strong incentive for EAF owners or operators to continue their support for the NVMSRP even after the incentive fund is depleted. Facilities that do not participate in an EPA-approved program must develop and operate by site-specific switch removal plans that may prove to be more burdensome than that of participating in the NVMSRP. The rule requires that metal scrap purchased for use in an EAF be procured from a supplier that removes mercury convenience light switches. If an EAF owner or operator fails to meet the requirements related to audits of suppliers, reporting, recordkeeping or any other rule provisions, then the owner or operator is at risk of being found in violation of the rule. If the facility is at risk of non-compliance because of the actions of a scrap provider, then it is in the interest of the owner or operator to take corrective actions and fix the problem with the scrap provider or to terminate the scrap purchasing contract because of failure to meet scrap specifications.

*Comment:* One commenter stated that a review of the End of Life Vehicle Solutions (ELVS) database indicates a number of cases where individual dismantlers are participants in the NVMSRP, but have yet to submit collected switches.

*Response:* The ELVS Web site, which provides information on the NVMSRP and its members, includes the date when a particular automobile or scrap recycler joined the program. As the facility-specific data show, some recyclers joined the program during its first year of implementation or even earlier. We do not believe that this should cause undue concern at this time. Some States had instituted statutorily mandated programs prior to the establishment of the national program and, therefore, have been operating for a longer period of time. Automobile and scrap recyclers in these States have had more of incentive to participate early on in the program. It is possible that automobile and scrap recyclers in those States have already submitted switches to be recycled, some of which may have been stored in

anticipation of a future opportunity to dispose or recycle them. States that have just joined the national program are clearly in a ramp-up phase. There will be an initial delay associated with many new programs while individual dismantlers accumulate sufficient switches to make a shipment for recovery. It has been estimated that it may take from 6 to 12 months to fill a switch collection bucket that typically holds about 400 mercury pellets from switches. The same type of lag time in shipping was noted when one of the first switch removal programs in the country was initiated by the State of Maine.

The data show that during its first full year, the program has made significant progress, and as we pointed out earlier, over 1,855 pounds of mercury has been recovered, and this represents almost 20 percent of our estimated annual reduction in mercury emissions (5 tons per year) once the rule is fully implemented. The second year of the program will shift from roll-out to ramping up participation and collection rates. We should see significant progress toward achieving 80 percent recovery of switches in the third year of program implementation.

*Comment:* One commenter questioned the meaning of "80 percent" in the reduction of mercury switches: Does it refer to the convenience switches in one automobile, the total weight of mercury in switches in a vehicle being turned into scrap, the total number of switches and other sources of mercury in one vehicle, or none of the above.

*Response:* "80 percent" switch recovery is the goal, and the percent of switches recovered (the capture rate as defined in the MOU) is the number of mercury switches removed from end-of-life vehicles divided by the total mercury switch population in end-of-life vehicles in a given time period (e.g., each year of the program) times 100.

*Comment:* One commenter objected to the credit allowed in calculating the 80 percent mercury switch removal goal for site-specific plans. The commenter objected to the credit because it allows counting of mercury removed from components other than convenience lighting while the approved plan requires only the removal of mercury switches from convenience lighting. The commenter stated that the provision is not consistent with the MOU, which states that only mercury switches used for convenience lighting will be counted for purposes of measuring program performance. The commenter argued that site-specific plans should not be held to a higher standard than the NVMSRP.

*Response:* While it is true that only switches from convenience lighting apply to the 80 percent minimum goal of the NVMSRP, ELVS accepts all automobile mercury switches (including those from anti-lock brake systems (ABS)), and the automobile or scrap recyclers that remove them are paid the incentive fee of \$1.00 per switch. We believe that this provides an incentive to remove switches from other systems as well as for convenience lighting. In the requirements for site-specific plans, other sources of mercury are included in determining the 80 percent goal, such as ABS, security systems, active ride control, and other applications. Inclusion of these other components in the site-specific programs provides an incentive for their removal. These mercury-containing components contribute less mercury (13 percent compared to 87 percent from convenience light switches), and they are more difficult to locate, identify, and remove. Mercury-containing components in ABS will be the components other than convenience light switches that are most often removed. The removal of these components requires removing the rear seat and dismantling the ABS. We believe that if a dismantler chooses to take the time to remove and recover mercury components from ABS or other components, they should receive some type of credit for doing so, thus they can include them in their 80 percent minimum recovery goal.

*Comment:* One commenter stated that at least two EAF facilities are exempt from the proposed rule because they are collocated with major source integrated iron and steel manufacturing facilities. The commenter noted that if these facilities are not covered by the rule and choose not to participate in the voluntary NVMSRP, then these facilities and their suppliers will enjoy at least two competitive advantages over the 91 facilities that will have to comply with the rule: They will have lower costs and they will be free of any legal requirement to address mercury in the scrap that they receive, generate, and or use as feedstock. The commenter also stated that scrap from any supplier who chooses to ignore mercury will preferentially flow to these facilities because there will be no legal or voluntary obligation for that supply chain to address mercury.

*Response:* As we stated at proposal, we plan to list EAFs as a major source category and develop MACT standards for HAP emissions, including mercury.

*Comment:* One commenter noted that the criteria by which the Administrator will evaluate semiannual reports are not

specified for the option of a site-specific plan for switch removal. The commenter went on to state that there is no incentive to meet the requirements and no penalty for failing to do so. Another commenter is concerned about the proposed rule's mechanism for approval of alternative switch recovery programs since States vary in their level of participation in the NVMSRP and have a variety of statutory and regulatory requirements, State level MOUs, State incentive funds, and other program components. The commenter said that to ensure consistency and enforceability, clear criteria and procedures that ensure any program's effectiveness need to be specified in the rule. One commenter suggested the Administrator specifically consider the participation rate of scrap suppliers to an area steel mill and the collection rate of the largest scrap suppliers to the facility prior to approving the goals. One of the commenters noted that as proposed, the rule directs the Administrator to determine if NVMSRP or alternative programs are adequately recovering switches, but provides no quantitative requirements.

*Response:* As we discussed above, the Administrator will evaluate the number of mercury switches removed, the estimated number of vehicles processed, and percent of mercury switches recovered. (See § 63.10685(b)(1)(v) and (b)(2)(iii)). The Administrator can assess the information with respect to the program's goal for percent switch recovery and trends in recovery rates. The criteria are not hard and fixed because flexibility is needed to consider potentially lower recovery rates as the program is established and higher rates as the number of participants peaks. We have described earlier the database used for documenting and measuring mercury switch recovery. We believe that this database provides sufficient transparency to ensure that the program is making measurable program progress and assuring accountability while at the same time remaining flexible.

We have provided sufficient detail in the rule for the criteria used to approve State and other switch removal programs: (1) There is an outreach program that informs automobile dismantlers of the need for removal of mercury switches and provides training and guidance on switch removal, (2) the program has a goal for the removal of at least 80 percent of the mercury switches, and (3) the program sponsor must submit annual progress reports on the number of switches removed and the estimated number of motor vehicle bodies processed.

#### 4. Other Sources of Mercury in Scrap

*Comment:* Several commenters claimed that a significant amount of mercury comes from sources other than automobile scrap, including household and commercial appliances, heating and air conditioning units, and industrial equipment. Some of these commenters suggested addressing these sources of mercury by expanding the NVMSRP. One commenter stated that the mercury from sources other than automobiles was on the order of 40 to 50 percent of the mercury in scrap. Another commenter noted that the counteracting effect of increased use of ABS, more mercury containing electronic devices in cars, and other mercury-containing items, could conceivably lead to a net increase in the mercury in scrap processed by steel mills.

One commenter stated that the rule should address these mercury sources to scrap metal by incorporation into the NVMSRP or through the establishment and funding (by mercury product manufacturers and the EAF sector) of collection programs targeting other products that contribute to scrap metal. The commenter suggested as an example a possible requirement that mercury thermostat manufacturers and the EAF sector could fund an expansion of the Thermostat Recycling Corporation (TRC) program, a voluntary end-of-life mercury thermostat collection initiative supported by thermostat manufacturers. The commenter stated that the TRC is a well-established program but provides no recovery incentives and has achieved a poor national recovery rate.

*Response:* At proposal, we considered the removal of other mercury-containing components in automobiles, such as switches in ABS, and determined the option was not justified as a beyond-the-floor standard (72 FR 53824). These sensors are considerably more difficult and time consuming to remove than are convenience light switches, and they contribute much less mercury (e.g., 87 percent of the mercury in end-of-life vehicles comes from convenience light switches). The commenters provided no data or rationale to support that the removal of other sources of mercury from the scrap supply was economically and technologically feasible as a beyond-the-floor option.

We have no data or documentation that non-automobile sources contribute 40 to 50 percent of the mercury as the commenters claim, and we have some indications their estimate is quite high. For example, a report (available at <http://www.epa.gov/region5/air/mercury/appliancereport.html>) prepared for the State of Massachusetts

stated that mercury switches in obsolete appliances accounted for less than 1 percent of the mercury in the solid waste stream. Most mercury-containing components in appliances were phased out several years ago, and any that might remain would contribute very little mercury to the scrap supply compared to switches in automobiles. In addition, end-of-life vehicles contribute approximately 7 times more in tons of total metal to the scrap supply than do obsolete appliances; consequently, these factors suggest that end-of-life vehicles are the primary contributor to mercury in the scrap supply. While some ABS contained mercury sensors as we noted at proposal, these too have been phased out and were much less common and contained less mercury than convenience light switches.

#### 5. Role of State Agencies

*Comment:* One commenter claimed that State agencies would have little or no say in approving site-specific pollution prevention plans and that State and/or local agencies should have more authority over such approvals. Another commenter noted that part of the approval process can be delegated to the permitting authority, but there may be many varying programs and elements of programs that individual companies or facilities may wish to implement, some of which States do not have any experience with. The commenter recommends that EPA retain the responsibility for approving programs and provide clear criteria for an acceptable program, and use these criteria to approve existing State programs that are not part of the NVMSRP.

Two commenters were concerned about the ability of air agencies to enforce a pollution prevention program that will, in many cases, be overseen by solid and hazardous waste programs. The commenters noted that the requirements of the switch removal program must be incorporated into air permits, and the provisions must be clearly understood and enforceable by State air agencies in cooperation with their counterparts in other media programs. The commenters are concerned that if these provisions are not explicit in the program, this pollution prevention approach will not be effective.

One State agency commenter asked that EPA approve the vehicle mercury switch recovery program mandated by Maine State law as an EPA-approved program under the rule. The commenter noted that the Maine program has been the most successful switch recovery program to date, with a 2006 recovery

rate of over 90 percent for all mercury switches—not just convenience light switches. The commenter further added that the program meets or exceeds all of the criteria that are identified in the proposed rule as necessary to effect mercury reductions from EAFs.

One commenter recommended that EPA grant pre-approval of existing State programs. The commenter argued that pre-approval of the eight existing State programs (which account for about 1,900 participants), would eliminate the need for scrap providers participating in those programs to obtain EPA approval of their site-specific plans.

*Response:* We agree that State agencies should be involved in reviewing and approving or disapproving site-specific pollution prevention plans. We expect that the State permitting authority will have a better understanding of the facilities in their State and their site-specific operating conditions and any special circumstances. We are clarifying that the rule delegates to the States the authority to implement and enforce those requirements in the rule dealing with contaminants from scrap except for the approval of national, State, or local agency programs under the option for approved mercury programs. We believe that such broad programs should require EPA approval and that it is not appropriate for a State agency to evaluate and approve a national program or their own program. The rule should be implemented by State air programs and not by solid and hazardous waste programs.

We are also identifying the mercury switch recovery program mandated by State law in Maine as an EPA-approved program because they submitted documentation that the requirements are equivalent to (or more stringent than) the approved national program. The program in Maine represents MACT, and we explained at proposal that MACT is a national, State, local or facility-specific switch recovery program that meets specific criteria. No other States made such requests or submitted information showing equivalency; consequently, we are not currently identifying other State programs as EPA-approved in the final rule.

#### 6. Comments on Specific Rule Changes

*Comment:* One commenter stated that in § 63.10685(b)(1)(i) and (ii), the requirement for removal of mercury switches from vehicle bodies used to make scrap does not seem to recognize the possibility of inaccessible switches. The commenter suggests replacing

“mercury switches” with “accessible mercury switches.”

*Response:* We have defined mercury switch to include only those switches that are part of a convenience light switch mechanism. Our information indicates that these switches are accessible and are easily removed, and it is important to the success of the pollution prevention program that they be removed. Consequently, we are not adding the additional requirement that they be “accessible,” which would introduce additional uncertainty because of the judgment that must be made as to what is accessible.

*Comment:* One commenter stated the requirement in § 63.10685(b)(1)(B) for assurances from scrap providers that scrap meets specifications does not seem to allow for uncertainty or error. The commenter suggested that the language read “Provisions for obtaining assurance from scrap providers that to the best of their knowledge, motor vehicle scrap provided to the facility meets the scrap specification”.

*Response:* We disagree that the change recommended by the commenter is necessary because the phrase “to the best of their knowledge” is subjective and likely creates confusion rather than clarity. The EAF owner or operator must obtain assurance to their satisfaction that the scrap meets specifications.

*Comment:* One commenter said the requirement in § 63.10685(b)(1)(ii)(C) for a means of corroboration to ensure that scrap providers and dismantlers are implementing appropriate steps to minimize the presence of mercury switches in motor vehicle scrap should be replaced with appropriate steps “to encourage the removal of accessible mercury switches from motor vehicles to be shredded.”

*Response:* We disagree because corroboration to ensure that scrap providers and dismantlers are implementing appropriate steps to minimize the presence of mercury switches in motor vehicle scrap is necessary to ensure the effectiveness and credibility of the pollution prevention requirements.

*Comment:* One commenter expressed concern that the requirements in § 63.10685(b)(1)(ii)(C), (b)(1)(iii), and (b)(1)(v) may require scrap providers to divulge confidential business information (CBI) or to provide sensitive information to EAF operators to comply.

*Response:* It is in the interest of both the scrap provider and EAF operator to provide the information required by the rule and to establish procedures if necessary to protect confidential information. The requirements cited by the commenter refer to: (1) Periodic

inspections of scrap providers and dismantlers to ensure appropriate steps are being taken to remove mercury switches; (2) estimates of the number of switches removed; and (3) semiannual progress reports that provide the number of switches or weight of mercury removed, number of vehicles processed, estimate of the percent of switches removed, and certification of proper disposal of the switches. This information is an essential monitoring component of the rule to measure the effectiveness of a facility's pollution prevention program. The information on number of vehicles processed can be aggregated for a facility if it is important not to reveal the number of vehicles processed by a given scrap provider. We do not see nor did the commenter identify exactly what component of the requested information would be CBI; however, if the case can be made that there is CBI involved, EPA and the permitting authorities have established procedures for managing and safeguarding CBI and will, of course, utilize them.

*Comment:* One commenter objected to the requirement in § 63.10685(b)(1)(iii), which effectively compels scrap providers to collect switch removal information from all upstream sources of end-of-life vehicles. The commenter stated that to impose such burdensome requirements on the suppliers of the regulated entity far exceeds the Agency's regulatory authority.

*Response:* The burden imposed by the Agency is on the EAF owner or operator to obtain switch removal information because it is a critical monitoring component of the rule. The EAF owner or operator in turn must require this information from scrap providers, and if such information is not obtained, the EAF owner or operator could be found in violation of the rule.

*Comment:* One commenter objected to the proposed requirement for EPA approval of the scrap pollution prevention plan and mercury switch removal plan if prior approval is needed before the plan can be implemented or a change made. The commenter argued that prior approval would require all EAF operations to be shut down from the effective date of the rule until the plan is approved (unless EPA can approve all plans in the limited time available), that the need to respond to scrap that is presently available precludes the ability of the facility to seek prior approval of changes, and that it is unclear that EPA can provide meaningful review of scrap plans. The commenter suggested language that would require facilities to keep a copy of the plan onsite and update the plan

to address any deficiency within 90 days of receiving a written notice from the Administrator. The commenter stated that recordkeeping and compliance certification requirements should be added consistent with the requirement.

*Response:* We continue to believe that the pollution prevention plans must be submitted to the permitting authority for review and approval to ensure they adequately address the requirements in the rule. We are clarifying in the final rule that the owner or operator must operate according to the plan as submitted during the review and approval process, operate according to the approved plan at all times after approval, and address any deficiency identified by the permitting authority within 60 days following disapproval of a plan. We are also clarifying that the owner or operator may request approval to revise the plan and may operate according to the revised plan unless and until the revision is disapproved by the permitting authority.

*Comment:* One commenter pointed to the provision in § 63.10685(b)(2)(iii) which allows the Administrator to revoke approval for all or part of the NVMSRP based on review of the reported data. The commenter asked if the 90-day period between the revocation notice and the effective date of the revocation provide sufficient time for the Administrator to approve 100 site-specific plans under § 63.10685(b)(1) and if there was a process in place for seeking reconsideration of revocation.

*Response:* We are clarifying in the final rule that the authority for the approval of site-specific plans is delegated to the permitting authority. This is what the proposed rule allowed because this authority was not among those listed in the rule as not being delegated. We believe the 90-day period is adequate for the approval process. The rule has no formal process for seeking reconsideration of revocation.

*Comment:* One commenter recommended that the proposed definition of "scrap provider" be revised because the definition includes brokers who have no oversight over scrap preparation and delivery. According to the commenter, a revised definition should allow brokers to be considered "scrap providers" as a contractual matter. The commenter suggested that EPA define "scrap provider" to mean "the final preparer of scrap delivered to a steel mill, or a broker when a brokered transaction specifies that the broker provide information to the steel mill from the

scrap processors participating in the brokered transaction."

*Response:* We disagree because the definition as proposed allows a broker to be considered a scrap provider. The EAF owner or operator must ensure that the broker receives scrap only from suppliers participating in an EPA-approved program, and we have clarified this in the final rule. For the site-specific option, the EAF owner or operator must obtain assurance from all scrap providers that mercury switches have been removed and provide an accounting of the number of switches removed and vehicles processed for all scrap providers, along with all of the other requirements in the site-specific plan.

*Comment:* One commenter recommended that the proposed definition of "motor vehicle scrap" be revised to refer to shredded scrap that contains shredded end-of-life vehicles. The commenter explained that shredded scrap typically includes shredded end-of-life or obsolete appliances as well as other materials. Alternatively, the commenter suggested replacing the definition of "motor vehicle scrap" with a definition of "shredded scrap", which would contain some fraction of shredded end-of-life vehicles.

*Response:* The definition of motor vehicle scrap is specific to vehicles processed in a shredder. We do not see a need to revise the definitions as suggested by the commenter.

*Comment:* One commenter recommended that EPA revise § 63.10685(b) to clarify that scrap that does not contain motor vehicle scrap does not need to meet one of the three compliance options for mercury. The commenter suggested using the term "motor vehicle scrap provider" instead of "scrap provider." Otherwise, the commenter asked that EPA add a fourth compliance option under § 63.19685(b) for scrap that contains no motor vehicle scrap and require certification to that effect for the scrap provider, contract for scrap, or scrap shipment. The commenter stated that recordkeeping and compliance certification requirements should be added consistent with the requirement.

*Response:* We have clarified in the final rule that the mercury switch removal provisions and three compliance options apply to scrap that contains motor vehicle scrap. In addition, we have added a new provision to the rule for scrap that does not contain motor vehicle scrap to require a certification and documentation through records that the scrap does not contain motor vehicle scrap.

*Comment:* One commenter objected to the requirement for facilities to submit a semiannual report of all scrap shipments received under the site-specific compliance option. The commenter recommended that EPA review scrap management records to determine compliance. The commenter provided recommended language for a semiannual report containing a certification of compliance, along with records of how each motor vehicle scrap provider, contract, or shipment complies with the rule.

*Response:* We continue to believe that an accounting of mercury switches and estimated number of vehicles processed must be submitted in semiannual reports because it is an important monitoring provision that is necessary to determine if the site-specific plan is being implemented and to assess its effectiveness. However, we are clarifying that the information can be submitted in aggregate form and does not have to be submitted for each shipment, which could include hundreds of records for some large facilities. However, the owner or operator must maintain records for each motor vehicle scrap provider, contract, or shipment (as the commenter suggests) sufficient to demonstrate compliance with the rule and must make these records available upon the request of the permitting authority.

*Comment:* One commenter stated that the scrap specification requirements for mercury switches make unrealistic and unenforceable demands of metal purchasers. The commenter notes that steel mill staff are required to assure that the scrap is clean by visiting suppliers (who may be hundreds of miles away) by doing visual inspection of their facilities and treated scrap. The commenter further notes that suppliers change frequently, they buy from middlemen, and they ship scrap from combined sources. The commenter believes this shifts responsibility of "ensuring" quality of scrap to the steelmakers and makes no requirements of the steelmakers themselves, but asks them to inspect members of an independent industry at large cost in staffing and travel when it is unlikely to be effective.

*Response:* The rule applies to owners or operators of EAF steelmaking facilities, and it is the responsibility of these facilities to comply with the rule. Among other things, the final rule requires that EAF owners or operators conduct periodic inspections or provide other means of corroboration to ensure that suppliers are aware of the need for and are implementing appropriate steps to minimize the presence of mercury in

scrap from end-of-life vehicles. Periodic audits or inspections of scrap suppliers or dismantlers are one means of complying with this requirement. Although there are certainly other means to comply with this requirement, we note that periodic audits or inspections of scrap suppliers or dismantlers are consistent with the agreement reached in the NVMSRP among many stakeholders, including the scrap providers. Some EAF facilities already perform inspections of suppliers, and EAF facilities have historical experience in ensuring the quality of the scrap they receive because of safety concerns (e.g., radiation or explosion hazards) and the direct effect of scrap quality on steel quality.

The corroboration requirement in the final rule, as described above, is an important element of assuring program effectiveness and achieving the pollution prevention objective of section 112(d)(2)(A). EPA is thus adopting the requirement as an exercise of independent judgment, not simply because it is in the agreement.

#### *C. Proposed GACT Standard for Metal HAP Other Than Mercury*

##### 1. Opacity Limit for the Melt Shop

*Comment:* Two commenters stated that a subcategory for older non-NSPS facilities is justified by the fact that the non-NSPS status of these facilities has a direct bearing on the technical and economic feasibility of retrofitting to achieve the six percent opacity standard during charging and tapping. According to the commenters, these facilities, by virtue of their design, are of a different class and type from the NSPS facilities. The commenters concluded that the alternative standard described in the proposal preamble with an opacity standard of six percent and an allowance of 20 percent opacity during charging and tapping was appropriate for these non-NSPS facilities. The commenters provided a discussion of EPA's authority to establish such a subcategory and information they claimed indicated that EPA's estimates of the costs to retrofit the non-NSPS facilities was understated. The commenters also argued that applying the NSPS to the non-NSPS facilities was not justified because the proposed standard was not as cost effective as EPA had estimated, and in addition, the cost effectiveness for HAP was much higher than what EPA had determined to be unacceptable in other rulemakings.

The commenters noted that CAA section 112 grants the EPA authority to categorize and subcategorize based on class, type, and size of source.

According to the commenters, the Administrator "may distinguish among classes, types, and sizes of sources within a category or subcategory" under section 112(d)(1), and similarly, section 112(c) authorizes EPA to establish categories and subcategories of major and area sources in a manner that is consistent with the list of categories and subcategories under Section 111. The commenters also indicated that section 111(b)(2) provides EPA with authority to "distinguish among classes, types, and sizes within categories," and section 112 further provides that "(n)othing in the preceding sentence (referring to the desire to maintain consistency between source categories under Sections 111 and 112) limits the Administrator's authority to establish subcategories under this section, as appropriate."

The commenters pointed out that in the preamble to the proposed rule (72 FR 53826), EPA stated that it may be appropriate to consider a separate subcategory of facilities based on the technical and economic feasibility of retrofitting pre-1983 (non-NSPS) facilities. According to the commenters, such subcategorization is not new and falls within the Agency's discretion to create subcategories. The commenters continued by stating that while age is not specifically identified as a criterion for subcategorizing under Section 112, age may have a direct correlation to the design of a facility, the production and air pollution control equipment used by the facility, and other factors that allow for "class, type, or size" subcategory distinctions within an industry. The commenters stated that courts have confirmed this relationship between age and allowable subcategorization factors where there is a meaningful, discernable relationship between the age of the facility and the basis for subcategorization (e.g., the cost or feasibility of retrofitting or the effectiveness of anti-pollution devices on emissions) and cited *American Iron and Steel Inst. v. EPA*, 568 F.2d 244, 298 (3rd Cir. 1977) ("AISI") (also cited by EPA in the preamble to the proposed rule). The commenters claimed that the courts have recognized that age may play a direct role in a facility's ability to install anti-pollution devices (i.e., retrofitting costs) and on the effectiveness of reducing emissions (citing *American Iron and Steel Inst. v. EPA*, 526 F.2d 1046, 1048 (3rd Cir. 1975) (also cited by EPA), recognizing the "special problem" in requiring a one-size-fits-all anti-pollution device in industries where there is considerable variation in the age of facilities).

The commenters stated that they are not seeking subcategorization based strictly on the age of the facility, but rather to recognize that non-NSPS facilities (those that were constructed prior to 1983 and not subsequently modified) face design and equipment challenges in achieving the opacity standards that more modern facilities are engineered to meet. According to the commenters, non-NSPS facilities are a different "class" or "type" of facility from NSPS facilities, and consistent with the cases cited, the non-NSPS status of certain EAF steelmaking facilities bears directly on the technical and economic feasibility of reducing fugitive emissions and warrants a separate subcategory. The commenters claimed that non-NSPS facilities vary substantially in design and compliance requirements, but in almost all cases the buildings are not fully closed and the furnace design and emission capture systems are such that modifications are required to achieve the NSPS standards. According to the commenters, these design and equipment differences are reasonable bases on which to justify a non-NSPS subcategory.

The commenters provided information concerning the modifications and retrofitting that would be required at the non-NSPS facilities to meet the six percent opacity limit. In addition, the commenters submitted estimates of the costs and identified additional non-NSPS facilities not previously included in EPA's analysis of impacts. The commenters noted that there are 11 non-NSPS facilities that cannot currently meet the NSPS opacity limit (rather than the six identified at proposal) and estimated that the capital cost to meet the standard as \$85 to \$99 million instead of EPA's estimate at proposal of \$29 million. Among the plants identified by the commenter was one plant that the commenter stated could meet the opacity limit 99 percent of the time, but the commenter claimed that costs would be incurred to address trivial and infrequent excursions to ensure the facility could meet the limit 100 percent of the time.

The commenters stated that applying the NSPS opacity limit to the non-NSPS plants was less cost effective than EPA's estimates at proposal because costs were underestimated and emission reductions were overestimated. The commenters cited the higher capital costs described above and also stated that other costs, such as lost revenue due to downtime to perform upgrades and annual operating costs (including increased power consumption and maintenance labor) had not been

included in EPA's estimates. In addition, the commenters claimed that EPA's estimates of emission reductions were overstated because some of the dust assumed to be collected by the improved capture system would have settled within the melt shop rather than being emitted as fugitive emissions through the melt shop roof. The commenter also stated that the improved capture efficiency estimated for three facilities (from 85 percent to 95 percent) assumed an open roof monitor; however the improvement in capture is more likely from 90 percent to 95 percent because these facilities do not have open roofs. The commenter believes that the emission reductions for these facilities is about half of that estimated by EPA.

The commenter also stated that EPA's cost effectiveness estimate of \$160,000/ton of HAP was higher than what had been accepted in other rulemakings: \$6,800/ton chlorine rejected and \$1,100/ton chlorine accepted (hazardous waste combustors); \$45,000/ton hydrogen chloride rejected (industrial boilers); \$90,000/ton acrylonitrile rejected (acrylic and modacrylic fibers); \$724 to \$9,000/ton of organic HAP accepted (halogenated solvent cleaning); and \$300 to \$10,000/ton of organic HAP accepted (gasoline distribution). The commenters stated that it was inappropriate to compare the particulate matter (PM) cost effectiveness of the proposed rule with that of mobile source programs because those programs were geared towards addressing PM while the area source rule is focused on HAP emissions. The commenters believe the proper comparison is with respect to the cost effectiveness of HAP emission reductions as described above.

*Response:* We proposed a standard of six percent opacity for the EAF melt shop for all plants in the source category (i.e., no subcategories) as GACT because about 90 percent of the existing facilities are subject to and achieve this level of control, and the technology used by these facilities is generally available. We requested comment on an alternative based on a subcategory for older facilities and an alternative standard of six percent opacity except for 20 percent opacity during charging and tapping (72 FR 53826). We also requested supporting documentation in sufficient detail to allow characterization and representativeness of the data.

The commenters claimed that there are meaningful differences between plants that are subject to the NSPS and those that are not subject to it, although they correctly acknowledged that age can only be a proxy for some process

difference (i.e., age in and of itself is not a basis for subcategorization). However, we are not convinced that there is any basis for subcategorization because the non-NSPS plants have no physical differences that are impediments to the installation of the necessary and widely-demonstrated capture and control systems for fugitive emissions. Moreover, as we discuss in detail below, even if (against our view) it is appropriate to subcategorize, GACT would be the same for NSPS plants and non-NSPS plants.

We stated at proposal that GACT for fugitive emissions from the melt shop includes hoods to capture the fugitive emissions escaping during charging, melting, and tapping, and ducting the emissions to a baghouse. All EAF facilities have capture and control systems for emissions from charging, melting, and tapping, and this technology has been applied to many other industries (e.g., iron and steel foundries, integrated iron and steel plants). However, most EAF steelmaking facilities have better capture systems for charging and tapping emissions than do some of the affected non-NSPS plants. We have identified no technical reason that the capture and control systems demonstrated by plants subject to the NSPS to achieve an opacity limit of six percent cannot be applied industry wide. The technology for upgrading the capture and control of emissions from charging and tapping is generally available and includes new or redesigned capture hoods, higher evacuation rates, and in some cases, additional baghouse capacity, all of which have been accounted for in our cost estimates.

Not only is this type of technology routinely utilized, but there is no technical impediment to its applicability in this source category. The commenters stated that "buildings are not fully closed and the furnace design and emission capture systems are such that modifications are required to achieve the NSPS standards", but this merely indicates that some type of upgrade would be required for plants to meet the standards, not that these older plants cannot be physically enclosed so that they were able to achieve the NSPS opacity limit. Moreover, these sources' fugitive emissions consist of the same HAP in the same concentration as all of the NSPS plants. (See the HAP concentration data presented in "Electric Arc Furnace Impacts Analysis", Docket Item 0074 in Docket Number EPA-HQ-OAR-2004-0083.) In addition, a number of pre-NSPS EAFs have in fact upgraded to meet a 6 percent opacity limit. Not only are these

sources' fugitive emissions comparable to those of the remaining non-upgraded facilities, but their costs are comparable as well, as are the cost effectiveness of the emission reductions. (See the results of the cost survey of plants that have previously upgraded as discussed in "Electric Arc Furnace Impacts Analysis", Docket Item 0074 in Docket Number EPA-HQ-OAR-2004-0083.)

EPA therefore does not believe that the remaining non-NSPS plants are of a different class or type than the universe of sources meeting the 6 percent opacity standard. They produce the same product by the same means, are capable of controlling opacity by the same means at the same effectiveness, appear to be identically situated to non-NSPS EAFs which meet the 6 percent standard, and (as discussed below) are capable of meeting that standard at reasonable cost and cost effectiveness.

Moreover, even if (against our views) subcategorization would be appropriate, EPA believes GACT for the subcategory would be the NSPS standard. The standard reflects readily available technology (as just discussed) at reasonable cost and cost effectiveness. EPA carefully reviewed the detailed cost information submitted by the commenters for upgrading non-NSPS plants to meet the proposed opacity limit. The cost estimates are higher than those we developed at proposal reflecting that there are certain unique or site-specific factors for several plants that would result in costs higher than those we generated that did not include site-specific cost elements. We have accordingly revised the cost analysis from proposal and used the commenters' estimates of capital cost for most of the non-NSPS plants (using the average for those cases where a range of costs were provided for a given plant). We have also incorporated the commenters' estimates on the increased operating costs when they provided such estimates (e.g., increased consumption of electricity and labor for operation and maintenance). When estimates of operating cost were not provided, we developed estimates of operating costs for electricity, labor for operation and maintenance, and dust disposal based on the size of the upgraded system.

We did not accept the commenters' full estimate of cost for one non-NSPS plant. The commenters provided a capital cost estimate of \$30.5 million to replace the entire existing melt shop at this plant, including a new and larger EAF to replace two small ones, new EAF transformers, new cranes and other ancillary equipment, and other modifications. We disagree with this

cost estimate because it is based on the cost for a new facility, including new process equipment, in addition to new capture and control equipment for emissions. For our revised impacts analysis, we estimated the cost for emission capture and control equipment only and used a capital cost of \$16.3 million that the commenter attributed to a new baghouse and ancillary equipment associated with emission control; however, we note that it could be more economical to upgrade the existing baghouses, and the cost estimate of \$16 million was based on an EAF steelmaking facility that was several times larger than this plant, making even this estimate highly conservative. (The estimated impacts, including the revised cost estimates, are documented in "Revised Analysis of Impacts" in the rulemaking docket.)

We also reviewed the available information on costs associated with lost production when the upgrades are installed. Prior to proposal, we sent a detailed cost survey to several plants that had made substantial upgrades to improve the capture and control of fugitive emissions. One plant stated that the installation was performed as much as possible over a 1 year period during normal operations, the final tie-in of the control system to the EAF was made during a regularly-scheduled production outage of two weeks, and sufficient inventory was maintained to supply customers. A second plant also said that most of the installation was completed during normal operations, final tie-in was during two different scheduled outages of two weeks, and sufficient inventory was maintained to supply customers. A third plant replied that they could not provide a reliable estimate of any costs that might have been due to lost production during the installation. Based on the actual experience of plants that have made upgrades, we believe that significant costs due to lost production can be avoided by installation as much as possible during normal operation, final tie-in during a regularly-scheduled outage for maintenance, and building sufficient inventory to supply customers during the short period of production shutdown.

The commenter identified one plant that could meet the opacity limit 99 percent of the time, but claimed that costs would be incurred to address trivial and infrequent excursions to ensure the facility could meet the limit 100 percent of the time. The commenter did not include any cost estimates for this plant in their estimates of total costs for meeting the opacity limit and only provided a qualitative discussion and

capital cost estimates for the wholesale replacement of EAFs. The estimates provided by the commenter were for the capital cost of replacing EAFs, including in one case purchasing a used 20-ton EAF to replace existing furnaces with a capital cost of \$4.2 million and in another case installing a new 40-ton furnace at a cost of over \$70 million. We requested several times but did not receive any opacity data showing whether this plant could or could not meet the opacity limit, and we do not think it appropriate to assume a new and larger EAF would need to be installed at a cost of many millions of dollars to address trivial and infrequent excursions even if they had occurred. Excursions that occur one percent of the time or less could well be outliers and a result of an equipment failure that is not preventable (i.e., a malfunction). Moreover, a rare excursion could be caused by a preventable equipment failure or operating error, in which case the event might be considered a deviation. If the excursion occurs because of a particular sequence or overlapping of cycles since this facility has multiple small furnaces, then careful attention to scheduling of operations might be a solution. In any event, the commenter and facility did not provide sufficient information, a credible cost estimate, or any opacity data; consequently, we do not have sufficient information to conclude that the facility would incur significant costs for upgrading.

Our revised estimate of the cost for non-NSPS to meet the NSPS opacity limit is a capital cost of \$69 million and a total annualized cost of \$13 million per year. These costs average less than one percent of sales, will not affect the profit margin significantly, and will not cause plant closures. Consequently, the technology to meet the NSPS is economically feasible, which supports our view that the emission control technology is "generally available."

We also re-examined our estimates of the emission reductions attributable to revised standards (the key input, along with cost, to assessing cost effectiveness). The commenters stated that for three plants, the reductions should be based on improving capture efficiency from 90 percent to 95 percent rather than the improvement of 85 percent to 95 percent that was used in our impacts analysis. We have acknowledged there is a great deal of uncertainty in this estimate; consequently, we have developed estimates of HAP metal (and PM, their surrogate) emission reductions using both ranges for improved capture efficiency. For plants that provided



evacuation rates, we estimated the emission reductions from the design evacuation rate and a PM concentration of 0.01 gr/dscf in the captured emissions. The commenters stated that they believed this estimate is high because some of the dust that is captured by the upgraded system would have settled out in the melt shop and not be emitted as fugitive emissions. However, the estimate of 0.01 gr/dscf is an unbiased average estimate that we believe is roughly accurate within a factor of two. We had information from one plant that indicated the concentration of fugitive emissions before control was 0.02 gr/dscf (a factor of two higher than our estimate). The lower end is bounded by 0.005 gr/dscf (a factor of two lower) because at that concentration a baghouse would not be needed to meet the PM emission limit of 0.0052 gr/dscf. Consequently, we did not revise this aspect of our estimates of emission reductions.

After making the changes to the estimates of costs, emissions, and emission reductions described above, the cost effectiveness is \$15,000/ton for PM and \$250,000/ton for HAP metals. As we stated at proposal, we believe the cost effectiveness for PM is well within the range of acceptability and is in line with the cost effectiveness for PM for other rules (72 FR 53826). We further noted at proposal that the cost effectiveness for PM is within the range we have accepted previously for control of PM emitted by mobile sources, and we continue to believe that these mobile source rules provide a reasonable benchmark for PM cost effectiveness.

We also disagree with the commenters' assertions that the cost effectiveness for metal HAP is unacceptable. The final GACT standard for EAFs will provide reductions of 52 tons per year of compounds of chromium, lead, manganese, and nickel, which are all urban HAP for which this category was listed pursuant to sections 112(c)(3) and 112(k). EPA listed these metal compounds as urban HAP because of their significant adverse health effects. A large portion of the reductions of these urban HAP will occur in the urban areas that EPA identified in the Integrated Urban Air Toxics Strategy. See CAA 112(k)(3)(C).

The primary HAP emitted from melting iron and steel scrap are manganese and lead with smaller levels of chromium and nickel. These metals (especially manganese) are inherent components of the scrap that is melted, and at the high temperatures used in the EAFs, the HAP metals are unavoidably vaporized and emitted. These metal HAP are present in particulate matter

emissions from the EAF, and because they are in particulate form, they can be captured and removed from the gas stream at high efficiency by control devices designed to capture particulate matter (such as baghouses). The nature of these emissions and the HAP composition are unique to iron and steel melting furnaces such as EAFs and are quite different from the emissions from other processes and operations that do not involve melting metal scrap at high temperatures.

There are adverse health effects associated with the metal HAP emitted from EAFs. Hexavalent chromium and certain forms of nickel are known human carcinogens. Lead is toxic at low concentrations, and children are particularly sensitive to the chronic effects of lead. Chronic exposure to manganese affects the central nervous system. Additional details on the health and environmental effects of these HAP can be found at <http://www.epa.gov/ttn/atw/hlthef/hapindex.html>. In addition, approximately 50 percent of the PM emissions are in the form of fine particulate matter, and EPA studies have found that fine particles continue to be a significant source of health risks in many urban areas.

Accordingly, even considered as a separate subcategory, EPA believes that GACT for these sources would be the current NSPS standard, due to technical feasibility at reasonable cost and cost effectiveness.

Furthermore, we have incorporated into this final rule certain provisions of the General Provisions (40 CFR part 63, subpart A) that afford sources additional flexibility. For example, existing sources can request an additional year to comply with the standard if they can demonstrate to the permitting authority that such additional time is needed to install controls. See 40 CFR 63.6(i)(4)(1)(A). In addition, EPA's regulations implementing CAA section 112(l) provide further flexibility. Specifically, 40 CFR part 63, subpart E provides that a State may seek approval of permit terms and conditions that differ from those specified in a section 112 rule, if the State can demonstrate that the terms and conditions of the permit are equivalent to the requirements of this rule. The procedures for seeking approval of such a permit are set forth in detail in 40 CFR 63.94.

*Comment:* One commenter noted the proposal requires that a capture system must collect "gases and fumes," while a capture system is defined as collecting "particulate matter." The commenter believes that neither of these terms is correct; the capture system should be

described as capturing "emissions" generated from the EAF and other metallurgy operations.

*Response:* We agree and have made this revision.

*Comment:* One commenter noted that the proposed rule identifies opacity standards for melt shops exclusive to EAF or ladle metallurgy operations (LMO) and no other sources. The commenter requested that the term "melt shop" be defined so that the applicability of the opacity standard is accurately applied. The commenter further claimed that the current requirement restricting the opacity standard to the operation of an EAF or LMO is unenforceable. The commenter said that based on States' experiences, many different operations occur within a melt shop, and without having at least one other person positioned within the building viewing all operations within, it would be impossible to know whether emissions observed outside of a building were associated with all the activities of a melt shop or solely the EAF or LMO. The commenter suggested removing the exclusivity of the opacity standard to EAF and LMO.

*Response:* We disagree. The procedures for conducting opacity observations are the same as those in the NSPS, and these procedures have been used successfully for over 20 years to enforce the NSPS. In addition, our opacity data and GACT determination were based on the procedures for conducting opacity observations as required by the NSPS.

## 2. Ladle Metallurgy Operations

*Comment:* Two commenters stated that LMO should not be covered by the EAF area source rule because it would be inconsistent with the area source listing of EAF steelmaking facilities (which does not mention LMO). The area source listing reflects the fact that EAF emissions are the source of the vast majority of PM (and potential HAP) emissions at these facilities. The commenters stated that coverage of LMO will require additional controls at many facilities to address minimal HAP emissions. The commenters claimed that EPA has not collected information on LMO emissions or the cost of controlling them and also noted that LMO is not covered by the NSPS. The commenters claim that HAP metals have been removed from the steel in the EAF by the time it reaches the post processing stage of the LMO. The commenters indicated that there are 12 facilities with a separate LMO baghouse (i.e., not ducted to the baghouse associated with the EAF), seven with the LMO located in a separate building,

and six facilities that stated LMO fugitive emissions are separate from EAF melt shop emissions. The commenters stated that these facilities will need to take steps to ensure they can meet the NSPS limits. One commenter also stated that argon-oxygen decarburization (AOD) vessels should not be covered by the area source rule for the same reasons given above for LMO (except that AOD vessels are covered by the NSPS). The commenter provided no information similar to that provided for LMO on AOD vessels with separate baghouses or located in separate buildings.

Another commenter requested that EPA clarify that LMO is not covered by the standard or, if it is subject to the standard, which it complies if it is equipped with a side draft hood or close fitting hood even if there is no additional canopy collection.

*Response:* We agree with the commenters that the area source listing and 1990 emissions inventory for EAFs did not include LMO. The PM emissions from LMO are a small percentage of the emissions from EAF operations, and as the commenters note, the percent HAP in the PM from LMO is lower than that from EAFs because the more volatile HAP metals are removed during the EAF melting process. Consequently, we are clarifying that the area source rule applies only to EAFs and AOD vessels.

We disagree with the one commenter who suggested that AOD vessels also should not be covered by the area source standard for many of the same reasons that were applied to LMO. Although the use of LMO was not very widespread in 1990, AOD vessels have been used at specialty and stainless steel facilities for many years. In fact, AOD vessels were included in the 1983 NSPS, and we included AOD vessels in our GACT determination for EAF steelmaking facilities. Many AOD operations are vented to and controlled by the same baghouses that are used to control EAF emissions; consequently, the 1990 emissions inventory would have included AOD emissions even when the emission source was identified as the EAF. Thus when we listed the EAF steelmaking area source category under section 112(c)(3), we considered and included facilities with AOD emissions as part of the source category that we needed to meet the 90 percent requirement for emissions of the Urban HAP arsenic, cadmium, chromium, lead, manganese, and nickel. The comments with respect to HAP metals are also not applicable to AOD vessels because AOD emissions contain high percentages of chromium and

nickel, which are alloys used in making specialty and stainless steel.

We evaluated the impacts of including AOD vessels in the proposed area source standard. We identified only one plant that did not control AOD vessels with a baghouse, and we estimated the cost of replacing the wet scrubber with a baghouse. For this plant, both the EAF and AOD vessels are vented to a single wet scrubber; consequently, our cost estimate was based on a baghouse designed to control emissions from both operations. We evaluated the cost and cost effectiveness for this plant at proposal in our determination of GACT for small stainless steel producers (72 FR 53827). The commenter did not identify any additional plants that did not have a baghouse for the AOD vessel, and the commenter provided no data or other information showing that any other AOD vessels could not meet the proposed emission limits. Consequently, we believe that we have adequately evaluated the potential impacts of the proposed rule on AOD vessels and conclude that the NSPS limits for AOD vessels represent GACT for these vessels at carbon steel and large specialty steel facilities.

### 3. Small Stainless Steel Subcategory

*Comment:* One commenter submitted two comments on the subcategory for small stainless steel producers. The commenter asked if the 150,000 tons per year threshold applies to actual production or to potential facility production capacity. The commenter also asked that facilities in this subcategory be given the option of complying with the more stringent emission limit of 0.0052 gr/dscf that was proposed for other EAF facilities. The commenter stated that some facilities in the subcategory already have this limit in their permit and that they should not be required to demonstrate compliance with the 0.8 pounds per ton (lb/ton) limit as well. The commenter also claimed that without the option of complying with the 0.0052 gr/dscf limit, small facilities might be discouraged from upgrading pollution control equipment because the permitting authority could translate the lb/ton limit into a concentration limit more stringent than 0.0052 gr/dscf.

One commenter stated that the 0.8 lb/ton limit should not be applied to baghouses because a concentration limit in gr/dscf is more appropriate for baghouses. The commenter said that PM emissions from a baghouse are not linearly related to steel production rates. The commenter asks that EPA clarify

that the lb/ton limit applies only to wet scrubbers.

Another commenter recommended that the PM limit for the small stainless steel subcategory be expressed in grain loading or similar fashion per industry practice instead of a lb/ton format. The commenter explained that it is not possible to demonstrate continuous compliance with the lb/ton format because not all particulate matter is released at the same time (i.e., the control device may continue to release PM after the end of a production run). The commenter stated that the testing provisions do not fully address this problem.

*Response:* The threshold for small stainless steel facilities is based on potential production as determined from the operating capacity of the EAF in tons per year multiplied by the maximum number of operating hours per year. We are clarifying that the potential production can be based on the maximum production or maximum number of permitted operating hours if specified in the facility's operating permit. Otherwise, the potential production would be based on the EAF production capacity and maximum operating hours.

We agree with the commenters that facilities in the small stainless steel subcategory that are equipped with baghouses should be allowed to demonstrate compliance exclusively with the more stringent PM of 0.0052 gr/dscf rather than 0.8 lb/ton as well for several reasons. There are existing plants equipped with baghouses that already must meet the more stringent PM limit of 0.0052 gr/dscf; consequently, requiring them to also demonstrate compliance with the less stringent limit is unnecessarily burdensome. We also agree that a concentration format is more appropriate for baghouses because baghouses are typically designed to meet an outlet concentration expressed in gr/dscf. On the other hand, wet scrubbers are typically designed to achieve a percent reduction in PM, and emissions are more related to steel production (i.e., higher steel production rates result in higher inlet loadings, which usually results in higher emissions at the outlet for wet scrubbers). The test procedures are clear for determining compliance with the lb/ton limit, and the plant with the wet scrubber has previously determined emissions in this format; consequently, we are not revising the testing provisions.

#### 4. Particulate Matter Limit for EAFs

*Comment:* One commenter identified a plant that was not included in the analysis of impacts at proposal. The commenter stated that the facility could meet the opacity limit of six percent; however, compliance with the PM emission limit of 0.0052 gr/dscf will require upgrades to the baghouse, and other modifications will be required. The commenter estimated the capital cost for the upgrades as \$1.9 million.

*Response:* We have evaluated the commenter's estimated cost for upgrades in our revised analysis of impacts. However, it is not clear that these costs should be attributed entirely to the area source standard. Our discussion with plant representatives prior to proposal indicated that a performance test showed that the baghouse achieved 0.0052 gr/dscf or less. In addition, bag replacement is a typical and recurring maintenance expense for baghouses, and bags would be replaced periodically even in the absence of the area source standard. Assuming the new bags and other modifications achieve a nominal reduction of only 0.001 gr/dscf, the improvements are cost effective and reasonable for reductions in PM emissions (\$5,100/ton). Since this is the only plant in the subcategory that might be impacted by the PM emission limit, the estimate of cost effectiveness also represents the industry-wide estimate of cost effectiveness. (All estimates of impacts of the final standard are documented in the rulemaking docket.)

*Comment:* One commenter suggested that the PM limit should be based on the average performance of the best performing 12 percent of sources (i.e., the MACT floor).

*Response:* We discussed in detail in the proposal preamble (72 FR 53816) that the standard is based on GACT rather than MACT for Urban HAP other than mercury. The methodology suggested is the MACT methodology for establishing floors, which is neither required nor appropriate in determining what constitutes GACT.

#### D. Proposed GACT Standards for Scrap To Control HAP Other Than Mercury

*Comment:* One commenter objected to the definition of "free organic liquid" for turnings and borings because most turnings and borings contain significant quantities of oil. The commenter recommended that the prohibition on free organic liquids not include metal working fluids that contain less than one percent chlorinated compounds or less than 0.1 percent of a carcinogen. The commenter explained that this

change would allow the majority of turning and borings to be recycled while avoiding possible emissions of chlorinated compounds.

*Response:* We disagree with the commenter because this provision is designed to prevent significant amounts of oil or other free organic liquids from entering the EAF with the scrap. These organic liquids contribute to the emissions of organic HAP such as benzene and polycyclic organic matter.

*Comment:* One commenter asks EPA to clarify the meaning of taking corrective action under § 63.10685(a)(1)(iii), which requires the facility to include in the scrap management plan procedures for "taking corrective actions with vendors whose shipments are not within specifications." The commenter asked to what extent a scrap provider has any recourse when corrective actions are deemed necessary.

*Response:* The procedures for taking corrective actions must be described by the EAF owner or operator in the site-specific pollution prevention plan and these procedures may vary depending on the type of scrap, scrap provider, and other factors, some of which may be unique to the facility. The concept is not a new one because EAF owners or operators have historically taken corrective actions when scrap does not meet their specifications. The area source rule places no direct requirements on the scrap provider; however, we expect that the scrap provider would work with customers (the EAF owners or operators) to resolve any questions of recourse with respect to corrective actions.

*Comment:* Several commenters believe the following proposed language creates a potential loophole for sources to charge otherwise unacceptable materials: "The requirements for a pollution prevention plan do not apply to the routine recycling of baghouse bags and other internal process or maintenance materials in the furnace." These commenters believe the language presents a loophole that renders the pollution prevention plan unenforceable and should be removed. One commenter suggests these exemptions not be allowed unless specifically identified in the pollution prevention plan and approved by the Administrator. Two commenters noted that under the proposed language, if an inspector found chlorinated plastics, lead or free organic liquids in an EAF's feedstock, the inspector would need to demonstrate that these wastes did not stem from "internal process materials or maintenance materials."

*Response:* The final rule, like the proposal, allows certain materials generated internally (e.g., baghouse bags) to be charged to the EAF. We agree that these materials should be identified and described in the facility's pollution prevention plan, and this is reflected in the final rule language. These materials are only those that are generated internally; consequently, they cannot be used as a loophole for incoming scrap. The inspector should be aware that the presence of chlorinated plastics, lead, or free organic liquids in these internal process materials or maintenance materials should be relatively rare, and if present, only exist in small quantities and only as described in the site-specific pollution prevention plan.

*Comment:* Two commenters stated that the metallic scrap restrictions are vague, difficult, and practically unenforceable. The commenter requests that EPA either define the terms "to the extent practicable" and "standard industry practice", set a particular standard, or make the requirements voluntary. Another commenter asked what the term "to the extent practicable" means in practice, and if there is no definition, how can the compliance provisions lead to corrective actions.

*Response:* We do not see the need to codify a definition of "practicable" but note here that our intent is that something is practicable if it is capable of being put into practice and is feasible. However, we believe that the term "standard industry practice" does not have a significantly clearer meaning, and in fact, may not result in as much removal. We are deleting the term in the final rule and continue to use the term "to the extent practicable" as it relates to the removal of lead-containing components such as batteries and wheel weights.

#### E. Miscellaneous Comments

##### 1. General Provisions

*Comment:* One commenter objected to the requirement for SSM plans and reports because the burden of the recordkeeping and reporting requirements are not commensurate with the small quantity of pollutants covered by the rule. If SSM plans are required in the final rule, the commenter recommended that the plan requirements be limited to the operation of the EAF and LMO and associated control devices. The commenter was concerned that the SSM requirements could be read to apply to problems with the pollution prevention plans. The commenter recommended that Table 1

to Subpart YYYYY should indicate the limitation of the SSM requirements.

*Response:* We agree that the SSM requirements do not apply to the pollution prevention plans. Sources must comply with the pollution prevention plans at all times, including periods of SSM. Therefore, separate requirements governing SSM are not necessary.

*Comment:* One commenter stated that because the rule requires compliance with the compliance assurance monitoring (CAM) provisions, Table 1 to subpart YYYYY should indicate that the monitoring requirements in § 63.8(a) through (c) of the general provisions (40 CFR part 63, subpart A) apply only if a continuous opacity monitoring system or continuous emission monitoring system (CEMS) is used.

*Response:* We agree and will make this clarification.

## 2. Compliance Date

*Comment:* Two commenters requested that three years be allowed for non-NSPS facilities to install or modify controls to meet the opacity limit. The commenters stated that a series of events must occur to improve controls: Conceptual and detailed engineering studies must be conducted to determine what is needed to achieve compliance, a budget must be established and capital funding requests initiated and approved by company management, the project must be contracted out (after a competitive bidding process), necessary building permits obtained, and construction initiated. The commenters asked that EPA provide for the full three-year compliance period allowed under the CAA in order to avoid a proliferation of extension requests.

*Response:* We recognize that certain facilities will require extensive upgrades, including new capture systems, new baghouses, and site-specific modifications to improve control of fugitive emissions and meet the melt shop opacity limit. Consequently, we agree that it is appropriate to allow up to three years to achieve compliance for those facilities that demonstrate to the satisfaction of the permitting authority that additional time is needed to install or modify emission control equipment to meet the opacity limit.

## 3. Title V Permit

*Comment:* One commenter stated that the title V permit program is for major sources of criteria pollutants or HAP. The commenter stated that there was one small specialty steel EAF facility that was not a major source for any pollutant and that the facility has a State

permit that caps emissions below major source thresholds. The commenter asked that the proposed rule be revised to require a title V permit only for those facilities that are major sources.

*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 and 75,323, December 19, 2005.) Nowhere in our 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 decision to exempt a source category from title V requirements is made on a case-by-case basis according to the facts of the particular source category. The commenter has identified one EAF steelmaking facility (in a population of over 90 facilities) that does not currently have a title V permit. The commenter does not explain, however, why an exemption from title V is appropriate for this source category, where, as here, 99 percent of the facilities in the source category have title V permits. We refer the commenter to the detailed justification underlying exemption of other area source categories from title V. (For example, see 72 FR 38871, July 16, 2007.) We continue to believe that title V permitting is necessary for this source category. The record in this case does not demonstrate that compliance with title V permitting would be impracticable, infeasible, or unnecessarily burdensome for the sources in this category.

*Comment:* One commenter stated that § 63.106890(d) should be revised because the language could have the unintended consequence of forcing facilities that already have a title V permit to obtain a new permit. The commenter provided suggested language to clarify the requirement.

*Response:* Although facilities with a title V permit do not have to obtain a new title V permit as a result of this area source rule, sources that already have a title V permit must include the requirements of this rule through a permit reopening or at renewal according to the requirements of 40 CFR part 70 and the title V permit program. See 40 CFR 70.7(f).

## 4. Performance Tests

*Comment:* One commenter recommended that the provision allowing use of a previous performance test to demonstrate compliance be revised to include a time frame for action by the permitting authority. The commenter expressed concern that the facility may be exposed to a compliance risk if the source submits a test and the permitting authority deems the prior test unacceptable. The commenter was concerned that the requirement to test within 180 days of the compliance date would not be adequate if permitting authority has delayed action on the source's notification of compliance status report. The commenter provided rule language that would require that the prior test be deemed approved if not deemed unacceptable within 60 days.

*Response:* We agree that in the rare event that a permitting authority takes months to deem that a prior test is unacceptable, there may not be sufficient time to arrange and conduct a performance test within 180 days of the compliance date. We are revising the provision in the rule to state that if a permitting authority determines a prior performance test is unacceptable to demonstrate compliance, a performance test must be performed with 180 days of the compliance date or within 90 days of receipt of the notification of disapproval of the prior test, whichever is later.

## 5. Funding for State and Local Agencies

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

not be able to adopt and enforce additional area source rules.

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

EPA today is promulgating standards for the EAF Steelmaking area source category that reflect what constitutes MACT for mercury emissions and GACT for the Urban HAP other than mercury for which the source category was listed. MACT and 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 or MACT. Moreover, we note that the rule for EAF steelmaking facilities requires all affected facilities to have a title V permit; consequently, the comment about loss of fees from title V permit exemptions is not pertinent for this rule.

Although the resource issue cannot be resolved through today's rulemaking for the reason stated above, EPA remains committed to working with State and local agencies to implement this rule. State and local agencies that receive grants for continuing air programs under CAA section 105 should work with their project officer to determine what resources are necessary to implement and enforce the area source standards. EPA will continue to provide the resources appropriated for section 105 grants consistent with the statute and the allotment formula developed pursuant to the statute.

#### 6. Secondary Nonferrous Metal Production

*Comment:* One commenter asked that EPA clarify that the rule does not apply to EAFs that are used to produce nonferrous metals, where nonferrous metal means "any pure metal other than iron or any metal alloy for which a metal other than iron is its major constituent by percent in weight."

*Response:* We agree. The types of facilities identified by the commenter are covered under other source categories depending on the type of metal produced (e.g., secondary nonferrous metals, secondary aluminum, secondary copper, etc.)

#### V. Impacts of the Final Rule

We estimate that the final standards will reduce mercury emissions from EAF by an estimated 5 tons per year (tpy) and will reduce emissions of other metallic HAP (primarily manganese with some lead, nickel and chromium) by about 52 tpy. Emissions of PM will be reduced by 865 tpy.

The capital cost of the final standards is estimated as \$69 million. The total annualized cost of the final rule is estimated at \$13 million/yr, including the annualized cost of capital and the annual operating costs for emissions control systems. The additional cost of monitoring, reporting, and recordkeeping attributable to the final rule, including the preparation of scrap management plans and scrap specifications, is estimated as \$122,000 per year. No adverse economic impacts are expected for large or small entities. Secondary impacts will include an increase in the generation of hazardous waste (865 tpy) and an increase in electricity usage (23,000 megawatt-hours per year) from additional fans and fan capacity associated with baghouse installations and upgrades to meet the opacity standard.

#### VI. 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 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 this rule have been submitted for approval to the Office of Management and Budget (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 information requirements are based on notification, recordkeeping, and reporting requirements in the NESHAP General Provisions (40 CFR part 63, subpart A), which are mandatory for all operators subject to national emission standards, and the recordkeeping and reporting requirements in the part 64 CAM rule, which are based on the requirements in the operating permits rule (40 CFR parts 70 and 71). These recordkeeping and

reporting requirements are specifically authorized by section 114 of the CAA (42 U.S.C. 7414). All information submitted to EPA pursuant to the recordkeeping and reporting requirements for which a claim of confidentiality is made is safeguarded according to Agency policies set forth in 40 CFR part 2, subpart B.

The final rule requires all facilities to submit a one-time notification of applicability and notification of compliance status required by the NESHAP general provisions (40 CFR part 63, subpart A). The notification of compliance status must include compliance certifications for various rule requirements. The general provisions also require preparation of a test plan for performance tests and advance notification of the date the performance test is to be conducted.

The provisions for the control of contaminants from scrap require the owner or operator to prepare a pollution prevention plan to minimize the amount of chlorinated plastics, lead, and free organic liquids that are charged to the furnace and to submit the plan to the Administrator for approval. Facilities must keep the plan onsite and train certain employees in the plan's requirements. Alternatively, the facility must restrict the type of scrap charged to the furnace. For mercury, facilities must prepare a site-specific plan for removal of mercury switches, submit the plan to the Administrator for approval, and submit semiannual progress reports containing information on the mercury switches that have been removed would also be required. Alternatively, facilities must purchase motor vehicle scrap only from suppliers that participate in an approved program for the removal of mercury switches or recover only material for its specialty alloy content that does not contain mercury switches. Facilities are required to maintain records to demonstrate compliance with the selected option. Records of specific information are required for plants electing to comply with the site-specific plan for mercury; semiannual progress reports are also required.

All area source facilities are required to conduct performance tests to demonstrate initial compliance with the applicable PM and opacity limits. Existing facilities are allowed to certify initial compliance based on the results of a previous performance test that meets the rule requirements. All facilities must monitor capture systems and PM control devices for EAF and AOD vessels, maintain records, and submit reports according to the part 64 CAM requirements. These reports

include deviation reports, semiannual monitoring reports, and annual compliance certifications.

Consistent with § 63.6(e) of the general provisions, all plants are required to prepare and operate by a startup, shutdown, and malfunction plan, and make an immediate report if a startup, shutdown, or malfunction was not consistent with their plan. Plants also must keep records and make semiannual reports according to the requirements in § 63.10.

The annual average monitoring, reporting, and recordkeeping burden for this collection (averaged over the first 3 years of this ICR) is estimated to total 2,393 labor hours per year at a cost of \$121,573. This includes 2.7 responses per year from each of 91 respondents for an average of about 9.7 hours per response. There are no additional capital/startup costs or operation and maintenance costs associated with the final rule.

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 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 this final rule.

### 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 this final rule on small entities, small entity is defined as: (1) A small business that meets the Small Business Administration size standards for small businesses at 13 CFR 121.201 (whose parent company has fewer than 1,000 employees for NAICS code 331111); (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 this final rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. The small entities directly regulated by this final rule are approximately nine EAF steelmaking facilities owned by small businesses. We have determined that the requirements for these small business owned facilities consist of preparing a scrap selection plan or mercury switch removal plan and maintaining records to document compliance with these requirements. The requirements of the part 63 General Provisions include notifications, records, semiannual reports, and a startup, shutdown and malfunction plan. The information required in these information collection requirements is very similar to the information collection requirements in 40 CFR parts 64, 70, and 71. We have determined that the nine or fewer EAF steelmaking facilities (less than 10 percent of the total number of facilities) will experience an impact of about \$3,500 per year per facility, which is less than one percent of total revenues.

Electric arc furnaces and AOD vessels at all EAF steelmaking facilities that are area sources are already equipped with capture systems and control devices. We have identified ten plants that may have to upgrade emission capture and control systems at a total capital cost of \$69 million and a total annualized cost of \$13 million per year. However, none of these plants are owned by small businesses.

Although this final rule will not have a significant economic impact on a substantial number of small entities, EPA has nonetheless tried to reduce the impact of this rule on small entities. We held meetings with industry trade

associations and company representatives to discuss the proposed rule and have included provisions such as the lb/ton limit for small facilities that address their concerns. We have also included a subcategory based partially on facility size that allows more individualized consideration of EAFs in the subcategory, which include small businesses.

### D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures by State, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any 1 year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

EPA has determined that this final rule does not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, and tribal governments, in the aggregate, or to the private sector in any 1 year. Thus, this final rule is not subject to the requirements of sections 202 and 205 of

the UMRA. EPA has determined that this final rule contains no regulatory requirements that might significantly or uniquely affect small governments. In addition, the final rule is not subject to section 203 of the UMRA.

#### *E. Executive Order 13132: Federalism*

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

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

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

Executive Order 13175 entitled "Consultation and Coordination with Indian Tribal Governments" (65 FR 67249, November 6, 2000), requires EPA to develop an accountable process to ensure "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications." This final rule does not have tribal implications, as specified in Executive Order 13175. It 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. The final rule imposes no requirements on tribal governments. Thus, Executive Order 13175 does not apply to this rule.

#### *G. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks*

Executive Order 13045 (62 FR 19885, April 23, 1997) applies to any rule that: (1) Is determined to be "economically

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

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

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

This 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. Further, we have concluded that this final rule is not likely to have any adverse energy effects because energy requirements will not be significantly impacted by the additional pollution controls or other equipment that are required by this rule.

#### *I. National Technology Transfer Advancement Act*

As noted in the proposed rule, section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) of 1995 (Pub. L. 104-113, 15 U.S.C. 272 note) directs EPA to use voluntary consensus standards (VCS) in its regulatory activities, unless to do so would be inconsistent with applicable law or otherwise impractical. The VCS are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by VCS bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency does not use available and applicable VCS.

This final rule involves technical standards. EPA cites the following standards: EPA Methods 1, 1A, 2, 2A, 2C, 2D, 2F, 2G, 3, 3A, 3B, 4, 5, 5D, and 9 in 40 CFR part 60, appendix A; EPA Method 9095B, "Paint Filter Liquids Test," (revision 2, November 2004)

(incorporated by reference—see § 63.14); and ASTM D2216-05, "Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass" (incorporated by reference—see § 63.14).

Consistent with the NTTAA, EPA conducted searches to identify VCS in addition to these EPA methods. No applicable VCS were identified for EPA Methods 1A, 2A, 2D, 2F, 2G, 5D, 9, 9095B, or ASTM D2216-05. The search and review results are in the docket for this final rule.

One VCS was identified as applicable to this final rule. The standard ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses," is cited in this final 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 VCS. The EPA determined that these 12 standards identified for measuring emissions of the HAP or surrogates subject to emissions standards in this final rule were impractical alternatives to EPA test methods. Therefore, EPA does not intend to adopt these standards for this purpose. The reasons for the determinations for the 12 methods are discussed in a memorandum included in the docket for this final rule.

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

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

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

EPA has determined that this final rule will not have disproportionately high and adverse human health or

environmental effects on minority or low-income populations because it increases the level of environmental protection for all affected populations without having any disproportionately high and adverse human health or environmental effects on any population, including any minority or low-income population. This final rule establishes national standards for the 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. The EPA will submit a report containing this final rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the final rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a "major rule" as defined by 5 U.S.C. 804(2). This final rule will be effective on December 28, 2007.

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

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

Dated: December 14, 2007.

**Stephen L. Johnson,**  
Administrator.

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

- a. By adding paragraph (b)(63);
- b. By revising paragraph (i)(1); and
- c. By adding paragraph (k)(1)(iv).

#### § 63.14 Incorporations by reference.

\* \* \* \* \*

(b) \* \* \*

(63) ASTM D2216–05, "Standard Test Methods for Laboratory Determination

of Water (Moisture) Content of Soil and Rock by Mass," IBR approved for the definition of "Free organic liquids" in § 63.10692.

\* \* \* \* \*

(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), 63.10686(d)(1)(iii), 63.10702, 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), and Table 5 to subpart DDDDD of this part.

\* \* \* \* \*

(k) \* \* \*

(1) \* \* \*

(iv) Method 9095B, "Paint Filter Liquids Test," revision 2, November 2004, IBR approved for the definition of "Free organic liquids" in § 63.10692.

\* \* \* \* \*

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

#### Subpart YYYYY—National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities

Sec.

##### Applicability and Compliance Dates

63.10680 Am I subject to this subpart?  
63.10681 What are my compliance dates?

##### Standards and Compliance Requirements

63.10685 What are the requirements for the control of contaminants from scrap?  
63.10686 What are the requirements for electric arc furnaces and argon-oxygen decarburization vessels?

##### Other Information and Requirements

63.10690 What parts of the General Provisions apply to me?  
63.10691 Who implements and enforces this subpart?  
63.10692 What definitions apply to this subpart?

##### Tables to Subpart YYYYY of Part 63

Table 1 to Subpart YYYYY of Part 63—  
Applicability of General Provisions to Subpart YYYYY

#### Subpart YYYYY—National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities

##### Applicability and Compliance Dates

##### § 63.10680 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate an electric arc furnace (EAF) steelmaking facility that is an area source of hazardous air pollutant (HAP) emissions.

(b) This subpart applies to each new or existing affected source. The affected source is each EAF steelmaking facility.

(1) An affected source is existing if you commenced construction or reconstruction of the affected source on or before September 20, 2007.

(2) An affected source is new if you commenced construction or reconstruction of the affected source after September 20, 2007.

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

(d) If you own or operate an area source subject to this subpart, you must have or obtain a permit under 40 CFR part 70 or 40 CFR part 71.

##### § 63.10681 What are my compliance dates?

(a) Except as provided in paragraph (b) of this section, if you own or operate an existing affected source, you must achieve compliance with the applicable provisions of this subpart by no later than June 30, 2008.

(b) If you own or operate an existing affected source, you must achieve compliance with opacity limit in § 63.10686(b)(2) or (c)(2) by no later than December 28, 2010 if you demonstrate to the satisfaction of the permitting authority that additional time is needed to install or modify emission control equipment.

(c) If you start up a new affected source on or before December 28, 2007, you must achieve compliance with the applicable provisions of this subpart by no later than December 28, 2007.

(d) If you start up a new affected source after December 28, 2007, you must achieve compliance with the applicable provisions of this subpart upon startup of your affected source.

##### Standards and Compliance Requirements

##### § 63.10685 What are the requirements for the control of contaminants from scrap?

(a) *Chlorinated plastics, lead, and free organic liquids.* For metallic scrap utilized in the EAF at your facility, you must comply with the requirements in



either paragraph (a)(1) or (2) of this section. You may have certain scrap at your facility subject to paragraph (a)(1) of this section and other scrap subject to paragraph (a)(2) of this section provided the scrap remains segregated until charge make-up.

(1) *Pollution prevention plan.* For the production of steel other than leaded steel, you must prepare and implement a pollution prevention plan for metallic scrap selection and inspection to minimize the amount of chlorinated plastics, lead, and free organic liquids that is charged to the furnace. For the production of leaded steel, you must prepare and implement a pollution prevention plan for scrap selection and inspection to minimize the amount of chlorinated plastics and free organic liquids in the scrap that is charged to the furnace. You must submit the scrap pollution prevention plan to the permitting authority for approval. You must operate according to the plan as submitted during the review and approval process, operate according to the approved plan at all times after approval, and address any deficiency identified by the permitting authority within 60 days following disapproval of a plan. You may request approval to revise the plan and may operate according to the revised plan unless and until the revision is disapproved by the permitting authority. You must keep a copy of the plan onsite, and you must provide training on the plan's requirements to all plant personnel with materials acquisition or inspection duties. Each plan must include the information in paragraphs (a)(1)(i) through (iii) of this section:

(i) Specifications that scrap materials must be depleted (to the extent practicable) of undrained used oil filters, chlorinated plastics, and free organic liquids at the time of charging to the furnace.

(ii) A requirement in your scrap specifications for removal (to the extent practicable) of lead-containing components (such as batteries, battery cables, and wheel weights) from the scrap, except for scrap used to produce leaded steel.

(iii) Procedures for determining if the requirements and specifications in paragraph (a)(1) of this section are met (such as visual inspection or periodic audits of scrap providers) and procedures for taking corrective actions with vendors whose shipments are not within specifications.

(iv) The requirements of paragraph (a)(1) of this section do not apply to the routine recycling of baghouse bags or other internal process or maintenance materials in the furnace. These

exempted materials must be identified in the pollution prevention plan.

(2) *Restricted metallic scrap.* For the production of steel other than leaded steel, you must not charge to a furnace metallic scrap that contains scrap from motor vehicle bodies, engine blocks, oil filters, oily turnings, machine shop borings, transformers or capacitors containing polychlorinated biphenyls, lead-containing components, chlorinated plastics, or free organic liquids. For the production of leaded steel, you must not charge to the furnace metallic scrap that contains scrap from motor vehicle bodies, engine blocks, oil filters, oily turnings, machine shop borings, transformers or capacitors containing polychlorinated biphenyls, chlorinated plastics, or free organic liquids. This restriction does not apply to any post-consumer engine blocks, post-consumer oil filters, or oily turnings that are processed or cleaned to the extent practicable such that the materials do not include lead components, chlorinated plastics, or free organic liquids. This restriction does not apply to motor vehicle scrap that is charged to recover the chromium or nickel content if you meet the requirements in paragraph (b)(3) of this section.

(b) *Mercury requirements.* For scrap containing motor vehicle scrap, you must procure the scrap pursuant to one of the compliance options in paragraphs (b)(1), (2), or (3) of this section for each scrap provider, contract, or shipment. For scrap that does not contain motor vehicle scrap, you must procure the scrap pursuant to the requirements in paragraph (b)(4) of this section for each scrap provider, contract, or shipment. You may have one scrap provider, contract, or shipment subject to one compliance provision and others subject to another compliance provision.

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

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

(ii) You must prepare and operate according to a plan demonstrating how your facility will implement the scrap specification in paragraph (b)(1)(i) of this section for removal of mercury switches. You must submit the plan to the permitting authority for approval. You must operate according to this plan as submitted during the review and approval process, operate according to the approved plan at all times after approval, and address any deficiency identified by the permitting authority

within 60 days following disapproval of a plan. You may request approval to revise the plan and may operate according to the revised plan unless and until the revision is disapproved by the permitting authority. The permitting authority may change the approval status of the plan upon 90-days written notice based upon the semiannual compliance report or other information. The plan must include:

(A) A means of communicating to scrap purchasers and scrap providers the need to obtain or provide motor vehicle scrap from which mercury switches have been removed and the need to ensure the proper management of the mercury switches removed from that scrap as required under the rules implementing subtitle C of the Resource Conservation and Recovery Act (RCRA) (40 CFR parts 261 through 265 and 268). The plan must include documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need to promote the removal of mercury switches from end-of-life vehicles. Upon the request of the permitting authority, you must provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols;

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

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

(D) Provisions for taking corrective actions (i.e., actions resulting in scrap providers removing a higher percentage of mercury switches or other mercury-containing components) if needed, based on the results of procedures implemented in paragraph (b)(1)(ii)(C) of this section).

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

(iv) You must establish a goal for each scrap provider to remove at least 80 percent of the mercury switches.

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

(v) For each scrap provider, you must submit semiannual progress reports to the permitting authority that provide the number of mercury switches removed or the weight of mercury recovered from the switches, the estimated number of vehicles processed, an estimate of the percent of mercury switches removed, and certification that the removed mercury switches were recycled at RCRA-permitted facilities or otherwise properly managed pursuant to RCRA subtitle C regulations referenced in paragraph (b)(1)(ii)(A) of this section. This information can be submitted in aggregated form and does not have to be submitted for each scrap provider, contract, or shipment. The permitting authority may change the approval status of a site-specific plan following 90-days notice based on the progress reports or other information.

(2) *Option for approved mercury programs.* You must certify in your notification of compliance status that you participate in and purchase motor vehicle scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the Administrator based on the criteria in paragraphs (b)(2)(i) through (iii) of this section. If you purchase motor vehicle scrap from a broker, you must certify that all scrap received from that broker was obtained from other scrap providers who participate in a program for the removal of mercury switches that has been approved by the Administrator based on the criteria in paragraphs (b)(2)(i) through (iii) of this section. The National Vehicle Mercury Switch Recovery Program and the Vehicle Switch Recovery Program mandated by Maine State law are EPA-approved programs under paragraph (b)(2) of this section unless and until the Administrator disapproves the program (in part or in whole) under paragraph (b)(2)(iii) of this section.

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

(ii) The program has a goal to remove at least 80 percent of mercury switches

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

(iii) The program sponsor agrees to submit progress reports to the Administrator no less frequently than once every year that provide the number of mercury switches removed or the weight of mercury recovered from the switches, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and certification that the recovered mercury switches were recycled at facilities with permits as required under the rules implementing subtitle C of RCRA (40 CFR parts 261 through 265 and 268). The progress reports must be based on a database that includes data for each program participant; however, data may be aggregated at the State level for progress reports that will be publicly available. The Administrator may change the approval status of a program or portion of a program (e.g., at the State level) following 90-days notice based on the progress reports or on other information.

(iv) You must develop and maintain onsite a plan demonstrating the manner through which your facility is participating in the EPA-approved program.

(A) The plan must include facility-specific implementation elements, corporate-wide policies, and/or efforts coordinated by a trade association as appropriate for each facility.

(B) You must provide in the plan documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need to promote the removal of mercury switches from end-of-life vehicles. Upon the request of the permitting authority, you must provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols.

(C) You must conduct periodic inspections or provide other means of corroboration to ensure that scrap providers are aware of the need for and are implementing appropriate steps to minimize the presence of mercury in scrap from end-of-life vehicles.

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

(4) *Scrap that does not contain motor vehicle scrap.* For scrap not subject to the requirements in paragraphs (b)(1) through (3) of this section, you must certify in your notification of compliance status and maintain records of documentation that this scrap does not contain motor vehicle scrap.

(c) *Recordkeeping and reporting requirements.* In addition to the records required by § 63.10, you must keep records to demonstrate compliance with the requirements for your pollution prevention plan in paragraph (a)(1) of this section and/or for the use of only restricted scrap in paragraph (a)(2) of this section and for mercury in paragraphs (b)(1) through (3) of this section as applicable. You must keep records documenting compliance with paragraph (b)(4) of this section for scrap that does not contain motor vehicle scrap.

(1) If you are subject to the requirements for a site-specific plan for mercury under paragraph (b)(1) of this section, you must:

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

(ii) Submit semiannual reports of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and a certification that the recovered mercury switches were recycled at RCRA-permitted facilities. The semiannual reports must include a certification that you have conducted inspections or taken other means of corroboration as required under paragraph (b)(1)(ii)(C) of this section. You may include this information in the semiannual compliance reports required under paragraph (c)(3) of this section.

(2) If you are subject to the option for approved mercury programs under paragraph (b)(2) of this section, you must maintain records identifying each

scrap provider and documenting the scrap provider's participation in an approved mercury switch removal program. If you purchase motor vehicle scrap from a broker, you must maintain records identifying each broker and documentation that all scrap provided by the broker was obtained from other scrap providers who participate in an approved mercury switch removal program.

(3) You must submit semiannual compliance reports to the Administrator for the control of contaminants from scrap according to the requirements in § 63.10(e). The report must clearly identify any deviation from the requirements in paragraphs (a) and (b) of this section and the corrective action taken. You must identify which compliance option in paragraph (b) of this section applies to each scrap provider, contract, or shipment.

**§ 63.10686 What are the requirements for electric arc furnaces and argon-oxygen decarburization vessels?**

(a) You must install, operate, and maintain a capture system that collects the emissions from each EAF (including charging, melting, and tapping operations) and argon-oxygen decarburization (AOD) vessel and conveys the collected emissions to a control device for the removal of particulate matter (PM).

(b) Except as provided in paragraph (c) of this section, you must not discharge or cause the discharge into the atmosphere from an EAF or AOD vessel any gases which:

(1) Exit from a control device and contain in excess of 0.0052 grains of PM per dry standard cubic foot (gr/dscf); and

(2) Exit from a melt shop and, due solely to the operations of any affected EAF(s) or AOD vessel(s), exhibit 6 percent opacity or greater.

(c) If you own or operate a new or existing affected source that has a production capacity of less than 150,000 tons per year (tpy) of stainless or specialty steel (as determined by the maximum production if specified in the source's operating permit or EAF capacity and maximum number of operating hours per year), you must not discharge or cause the discharge into the atmosphere from an EAF or AOD vessel any gases which:

(1) Exit from a control device and contain particulate matter (PM) in excess of 0.8 pounds per ton (lb/ton) of steel. Alternatively, the owner or operator may elect to comply with a PM limit of 0.0052 grains per dry standard cubic foot (gr/dscf); and

(2) Exit from a melt shop and, due solely to the operations of any affected EAF(s) or AOD vessel(s), exhibit 6 percent opacity or greater.

(d) Except as provided in paragraph (d)(6) of this section, you must conduct performance tests to demonstrate initial compliance with the applicable emissions limit for each emissions source subject to an emissions limit in paragraph (b) or (c) of this section.

(1) You must conduct each PM performance test for an EAF or AOD vessel according to the procedures in § 63.7 and 40 CFR 60.275a using the following test methods in 40 CFR part 60, appendices A-1, A-2, A-3, and A-4:

(i) Method 1 or 1A of appendix A-1 of 40 CFR part 60 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 (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.

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

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

(v) Method 5 or 5D of appendix A-3 of 40 CFR part 60 to determine the PM concentration. Three valid test runs are needed to comprise a PM performance test. For EAF, sample only when metal is being melted and refined. For AOD vessels, sample only when the operation(s) are being conducted.

(2) You must conduct each opacity test for a melt shop according to the procedures in § 63.6(h) and Method 9 of appendix A-4 of 40 CFR part 60. When emissions from any EAF or AOD vessel are combined with emissions from emission sources not subject to this subpart, you must demonstrate compliance with the melt shop opacity limit based on emissions from only the emission sources subject to this subpart.

(3) During any performance test, you must monitor and record the information specified in 40 CFR 60.274a(h) for all heats covered by the test.

(4) You must notify and receive approval from the Administrator for procedures that will be used to determine compliance for an EAF or

AOD vessel when emissions are combined with those from facilities not subject to this subpart.

(5) To determine compliance with the PM emissions limit in paragraph (c) of this section for an EAF or AOD vessel in a lb/ton of steel format, compute the process-weighted mass emissions ( $E_p$ ) for each test run using Equation 1 of this section:

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

Where:

$E_p$  = Process-weighted mass emissions of PM, lb/ton;

C = Concentration of PM or total metal HAP, gr/dscf;

Q = Volumetric flow rate of stack gas, dscf/hr;

T = Total time during a test run that a sample is withdrawn from the stack during steel production cycle, hr;

P = Total amount of metal produced during the test run, tons; and

K = Conversion factor, 7,000 grains per pound.

(6) If you own or operate an existing affected source that is subject to the emissions limits in paragraph (b) or (c) of this section, you may certify initial compliance with the applicable emission limit for one or more emissions sources based on the results of a previous performance test for that emissions source in lieu of the requirement for an initial performance test provided that the test(s) were conducted within 5 years of the compliance date using the methods and procedures specified in paragraph (d)(1) or (2) of this section; the test(s) were for the affected facility; and the test(s) were representative of current or anticipated operating processes and conditions. Should the permitting authority deem the prior test data unacceptable to demonstrate compliance with an applicable emissions limit, the owner or operator must conduct an initial performance test within 180 days of the compliance date or within 90 days of receipt of the notification of disapproval of the prior test, whichever is later.

(e) You must monitor the capture system and PM control device required by this subpart, maintain records, and submit reports according to the compliance assurance monitoring requirements in 40 CFR part 64. The exemption in 40 CFR 64.2(b)(1)(i) for emissions limitations or standards proposed after November 15, 1990 under section 111 or 112 of the CAA does not apply. In lieu of the deadlines for submittal in 40 CFR 64.5, you must submit the monitoring information required by 40 CFR 64.4 to the applicable permitting authority for

approval by no later than the compliance date for your affected source for this subpart and operate according to the approved plan by no later than 180 days after the date of approval by the permitting authority.

#### Other Information and Requirements

##### § 63.10690 What parts of the General Provisions apply to this subpart?

(a) You must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) as provided in Table 1 of this subpart.

(b) The notification of compliance status required by § 63.9(h) must include each applicable certification of compliance, signed by a responsible official, in paragraphs (b)(1) through (6) of this section.

(1) For the pollution prevention plan requirements in § 63.10685(a)(1): “This facility has submitted a pollution prevention plan for metallic scrap selection and inspection in accordance with § 63.10685(a)(1)”;

(2) For the restrictions on metallic scrap in § 63.10685(a)(2): “This facility complies with the requirements for restricted metallic scrap in accordance with § 63.10685(a)(2)”;

(3) For the mercury requirements in § 63.10685(b):

(i) “This facility has prepared a site-specific plan for mercury switches in accordance with § 63.10685(b)(1)”;

(ii) “This facility participates in and purchases motor vehicle scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the EPA Administrator in accordance with § 63.10685(b)(2)” and has prepared a plan demonstrating how the facility participates in the EPA-approved program in accordance with § 63.10685(b)(2)(iv);

(iii) “The only materials from motor vehicles in the scrap charged to an electric arc furnace at this facility are materials recovered for their specialty alloy content in accordance with § 63.10685(b)(3) which are not reasonably expected to contain mercury switches”; or

(iv) “This facility complies with the requirements for scrap that does not contain motor vehicle scrap in accordance with § 63.10685(b)(4).”

(4) This certification of compliance for the capture system requirements in § 63.10686(a), signed by a responsible official: “This facility operates a capture system for each electric arc furnace and argon-oxygen decarburization vessel that conveys the collected emissions to a PM control device in accordance with § 63.10686(a)”.

(5) If applicable, this certification of compliance for the performance test requirements in § 63.10686(d)(6): “This facility certifies initial compliance with the applicable emissions limit in § 63.10686(a) or (b) based on the results of a previous performance test in accordance with § 63.10686(d)(6)”.

(6) This certification of compliance for the monitoring requirements in § 63.10686(e), signed by a responsible official: “This facility has developed and submitted proposed monitoring information in accordance with 40 CFR part 64”.

##### § 63.10691 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by the EPA or a delegated authority such as a State, local, or tribal agency. If the EPA Administrator has delegated authority to a State, local, or tribal agency, then that Agency has the authority to implement and enforce this subpart. You should contact your 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 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 (6) of this section.

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

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

(3) Approval of a major change to test methods under § 63.7(e)(2)(ii) and (f). A “major change to test method” is defined in 40 CFR 63.90.

(4) Approval of major change to monitoring under 40 CFR 63.8(f). A “major change to monitoring” is defined in 40 CFR 63.90.

(5) Approval of a major change to recordkeeping/reporting under 40 CFR 63.10(f). A “major change to recordkeeping/reporting” is defined in 40 CFR 63.90.

(6) Approval of a program for the removal of mercury switches under § 63.10685(b)(2).

##### § 63.10692 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:

*Argon-oxygen decarburization (AOD) vessel* means any closed-bottom,

refractory-lined converter vessel with submerged tuyeres through which gaseous mixtures containing argon and oxygen or nitrogen may be blown into molten steel for further refining.

*Capture system* means the equipment (including ducts, hoods, fans, dampers, etc.) used to capture or transport emissions generated by an electric arc furnace or argon-oxygen decarburization vessel to the air pollution control device.

*Chlorinated plastics* means solid polymeric materials that contain chlorine in the polymer chain, such as polyvinyl chloride (PVC) and PVC copolymers.

*Control device* means the air pollution control equipment used to remove particulate matter from the effluent gas stream generated by an electric arc furnace or argon-oxygen decarburization vessel.

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

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

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

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

*Electric arc furnace (EAF)* means a furnace that produces molten steel and heats the charge materials with electric arcs from carbon electrodes. An electric arc furnace consists of the furnace shell, roof, and the transformer.

*Electric arc furnace (EAF) steelmaking facility* means a steel plant that produces carbon, alloy, or specialty steels using an EAF. This definition excludes EAF steelmaking facilities at steel foundries and EAF facilities used to produce nonferrous metals.

*Free organic liquids* means material that fails the paint filter test by EPA Method 9095B, (revision 2, dated November 1994) (incorporated by reference—see § 63.14) after accounting for water using a moisture determination test by ASTM Method D2216–05 (incorporated by reference—see § 63.14). If, after conducting a moisture determination test, if any portion of the material passes through and drops from the filter within the 5-

minute test period, the material contains *free organic liquids*.

*Leaded steel* means steel that must meet a minimum specification for lead content (typically 0.25 percent or more) and for which lead is a necessary alloy for that grade of steel.

*Mercury switch* means each mercury-containing capsule or switch assembly that is part of a convenience light switch mechanism installed in a vehicle.

*Motor vehicle* means an automotive vehicle not operated on rails and usually operated with rubber tires for use on highways.

*Motor vehicle scrap* means vehicle or automobile bodies, including

automobile body hulks, that have been processed through a shredder. *Motor vehicle scrap* does not include automobile manufacturing bundles, or miscellaneous vehicle parts, such as wheels, bumpers or other components that do not contain mercury switches.

*Nonferrous metals* means any pure metal other than iron or any metal alloy for which an element other than iron is its major constituent by percent in weight.

*Scrap provider* means the person (including a broker) who contracts directly with a steel mill to provide scrap that contains motor vehicle scrap. Scrap processors such as shredder

operators or vehicle dismantlers that do not sell scrap directly to a steel mill are not *scrap providers*.

*Specialty steel* means low carbon and high alloy steel other than stainless steel that is processed in an argon-oxygen decarburization vessel.

*Stainless steel* means low carbon steel that contains at least 10.5 percent chromium.

**Tables to Subpart YYYYY of Part 63**

As required in § 63.10691(a), you must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) shown in the following table.

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

Citation	Subject	Applies to subpart YYYYY?	Explanation
§ 63.1(a)(1), (a)(2), (a)(3), (a)(4), (a)(6), (a)(10)–(a)(12), (b)(1), (b)(3), (c)(1), (c)(2), (c)(5), (e).	Applicability .....	Yes.	
§ 63.1(a)(5), (a)(7)–(a)(9), (b)(2), (c)(3), (c)(4), (d).	Reserved .....	No.	
§ 63.2 .....	Definitions .....	Yes.	
§ 63.3 .....	Units and Abbreviations .....	Yes.	
§ 63.4 .....	Prohibited Activities and Circumvention	Yes.	
§ 63.5 .....	Preconstruction Review and Notification Requirements.	Yes.	
§ 63.6(a), (b)(1)–(b)(5), (b)(7), (c)(1), (c)(2), (c)(5), (e)(1), (e)(3)(i), (e)(3)(iii)–(e)(3)(ix), (f), (g), (h)(1), (h)(2), (h)(5)–(h)(9), (i), (j).	Compliance with Standards and Maintenance Requirements.	Yes.	
§ 63.6(b)(6), (c)(3), (c)(4), (d), (e)(2), (e)(3)(ii), (h)(3), (h)(5)(iv).	Reserved .....	No.	
§ 63.7 .....	Applicability and Performance Test Dates.	Yes.	
§ 63.8(a)(1), (a)(2), (b), (c), (d), (e), (f)(1)–(5), (g).	Monitoring Requirements .....	Yes .....	Requirements apply if a COMS or CEMS is used.
§ 63.8(a)(3) .....	[Reserved] .....	No.	
§ 63.8(a)(4) .....	Additional Monitoring Requirements for Control Devices in § 63.11.	No.	
§ 63.8(c)(4) .....	Continuous Monitoring System Requirements.	Yes .....	Requirements apply if a COMS or CEMS is used.
§ 63.8(f)(6) .....	RATA Alternative .....	Yes .....	Requirements apply if a CEMS is used.
§ 63.9(a), (b)(1), (b)(2), (b)(5), (c), (d), (f), (g), (h)(1)–(h)(3), (h)(5), (h)(6), (i), (j).	Notification Requirements .....	Yes.	
§ 63.9(b)(3), (h)(4) .....	Reserved .....	No.	
§ 63.9(b)(4) .....	Reserved .....	No.	
§ 63.10(a), (b)(1), (b)(2)(i)–(v), (b)(2)(xiv), (b)(3), (c)(1), (c)(5)–(c)(8), (c)(10)–(c)(15), (d), (e)(1)–(e)(4), (f).	Recordkeeping and Reporting Requirements.	Yes .....	Additional records for CMS in § 63.10(c)(1)–(6), (9)–(15), and reports in § 63.10(d)(1)–(2) apply if a COMS or CEMS is used.
§ 63.10(b)(2)(xiii) .....	CMS Records for RATA Alternative .....	Yes .....	Requirements apply if a CEMS is used.
§ 63.10(c)(2)–(c)(4), (c)(9) .....	Reserved .....	No.	
§ 63.11 .....	Control Device Requirements .....	No.	
§ 63.12 .....	State Authority and Delegations .....	Yes.	
§§ 63.13–63.16 .....	Addresses, Incorporations by Reference, Availability of Information, Performance Track Provisions.	Yes.	