

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA-HQ-OAR-2004-0083; FRL-8470-2]

RIN 2060-AM71

Revision of Source Category Lists for Standards Under Sections 112(c) and 112(k) of the Clean Air Act; and National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule; notice of revisions to source category lists.

SUMMARY: EPA is adding electric arc furnace steelmaking facilities to the list of source categories subject to regulation under Clean Air Act (CAA) section 112(c)(6) and revising the area source category list for the Integrated Urban Air Toxics Strategy. At the same time, EPA is proposing national emission standards for electric arc furnace steelmaking facilities that are area sources of hazardous air pollutants (HAP). The proposed standards establish requirements for the control of mercury emissions that are based on the maximum achievable control technology (MACT) and requirements for the control of other hazardous air pollutants that are based on generally available control technology or management practices.

DATES: Comments must be received on or before [INSERT DATE 30

DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER], unless a public hearing is requested by [INSERT DATE 10 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER]. If a hearing is requested on the proposed rule, written comments must be received by [INSERT DATE 45 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER]. Under the Paperwork Reduction Act, comments on the information collection provisions must be received by OMB on or before [INSERT DATE 30 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-HQ-OAR-2004-0083, by one of the following methods:

- www.regulations.gov: Follow the on-line instructions for submitting comments.
- E-mail: a-and-r-Docket@epa.gov.
- Fax: (202) 566-9744.
- Mail: National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities Docket, Environmental Protection Agency, Air and Radiation Docket and Information Center, Mailcode: 2822T, 1200 Pennsylvania Ave., NW, Washington, DC 20460. Please include a total of two copies. In addition, please mail a copy of your comments on the information collection provisions to the Office of Information and Regulatory Affairs, Office of Management and Budget (OMB), Attn:

Desk Officer for EPA, 725 17th St., NW, Washington, DC 20503.

- Hand Delivery: EPA Docket Center, Public Reading Room, EPA West, Room 3334, 1301 Constitution Ave., NW, Washington, DC 20460. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to Docket ID No. EPA-HQ-OAR-2004-0083. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at www.regulations.gov including any personal information provided, unless the comment includes information claimed to be confidential business information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through www.regulations.gov or e-mail. The www.regulations.gov website is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through www.regulations.gov, your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the

Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

Docket: All documents in the docket are listed in the www.regulations.gov index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy form. Publicly available docket materials are available either electronically in 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.

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this action apply to me?

The regulated category and entities affected by this proposed action include:

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

¹ North American Industry Classification System.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this action. To determine whether your facility would be regulated by this action, you should examine the applicability criteria in 40 CFR 63.10680 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. What should I consider as I prepare my comments for EPA?

Do not submit information containing CBI to EPA through www.regulations.gov or e-mail. Send or deliver information identified as CBI only to the following address: Roberto Morales, OAQPS Document Control Officer (C404-02), Office of Air Quality Planning and Standards, Environmental Protection Agency, Research Triangle Park, North Carolina 27711, Attention Docket ID EPA-HQ-OAR-2004-0083. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD ROM that you mail to EPA, mark the outside of the disk or CD ROM as CBI and then identify electronically within the disk or CD ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

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

In addition to being available in the docket, an electronic copy of this notice and proposed action will also be available on the Worldwide Web (WWW) through the Technology Transfer

Network (TTN). Following signature, a copy of this proposed action will be posted on the TTN's policy and guidance page for newly proposed or promulgated rules at the following address: <http://www.epa.gov/ttn/oarpg/>. The TTN provides information and technology exchange in various areas of air pollution control.

D. When would a public hearing occur?

If anyone contacts EPA requesting to speak at a public hearing concerning the proposed rule by [INSERT DATE 10 DAYS AFTER PUBLICATION OF THIS PROPOSED RULE IN THE FEDERAL REGISTER], we will hold a public hearing on [INSERT DATE 15 DAYS AFTER PUBLICATION OF THIS PROPOSED RULE IN THE FEDERAL REGISTER]. If you are interested in attending the public hearing, contact Ms. Pamela Garrett at (919) 541-7966 to verify that a hearing will be held. If a public hearing is held, it will be held at 10 a.m. at the EPA's Environmental Research Center Auditorium, Research Triangle Park, NC, or an alternate site nearby.

E. How is this document organized?

The information in this preamble is organized as follows:

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II. Background Information

- A. What is the statutory authority for the proposed NESHAP?

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,¹ 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

¹ 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.

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.² 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. Johnston, 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).

We added electric arc furnace (EAF) steelmaking facilities to the Integrated Urban Air Toxics Strategy Area Source Category List on June 26, 2002 (67 FR 43112). The inclusion of this source category on the section 112(c)(3) area source category list is based on 1990 emissions data, as EPA used 1990 as the baseline year for that listing. This source category was listed as contributing a percentage of the total area source emissions for the following "Urban HAP": arsenic, cadmium, chromium,

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

lead, manganese, mercury, nickel, and trichloroethylene. We subsequently discovered that the 1990 emissions data for trichloroethylene was for a few specialty EAF facilities that used trichloroethylene in vapor degreasing. These emission units at both major and area sources are already subject to standards for halogenated solvent cleaning under 40 CFR part 63, subpart T. Consequently, we are not proposing any additional standards for trichloroethylene from 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. Congress targeted these HAP for regulation because of their persistence and tendency to bioaccumulate in the environment. These HAP are also associated with adverse health effects such as nervous system damage and reproductive effects. We published an initial list of source categories under CAA section 112(c)(6) on April 10, 1998 (63 FR 17838). As discussed below in section III of this preamble, we are adding 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.

During the development of these proposed emissions standards, we discovered two EAF facilities that are co-located at integrated iron and steel plants that are major sources, of which we were previously not aware. We plan to list EAF steelmaking facilities as major sources under CAA section 112(c) and to develop national emission standards for hazardous air pollutants (NESHAP) for them based on the performance of maximum achievable control technology (MACT). However, these two major sources are not needed to fulfill the CAA section 112(c)(6) requirement to develop standards for sources accounting for not less than 90 percent of the emissions of mercury so we are not pursuing such action in this rulemaking given the severe time constraints to which this rulemaking is subject.

B. What criteria did EPA use in developing this proposed NESHAP?

We are proposing standards for mercury in response to a court-ordered deadline that requires promulgation of standards for listed CAA section 112(c)(6) source categories by December 15, 2007 (Sierra Club v. Johnson, no. 01-1537, D.D.C). The proposed standards for mercury emissions from all EAF steelmaking facilities that are area sources of HAP are consistent with CAA section 112(c)(6).

The court order in Sierra Club v. Johnson also requires EPA to issue standards for 10 source categories that EPA listed

pursuant to CAA section 112(c)(3) and (k)(3)(B) by December 15, 2007. In response to this requirement, we are proposing standards based on generally available control technology (GACT) for the control of the Urban HAP arsenic, cadmium, chromium, lead, manganese, and nickel from area source electric arc furnace steelmaking facilities. The bases for these standards are described below.

Under CAA section 112(d)(5), we may elect to promulgate standards or requirements for area sources "which provide for the use of generally available control technologies or management practices by such sources to reduce emissions of hazardous air pollutants." The alternative is to base standards on performance of MACT under section 112(d)(2) and (3) as described below. Additional information on the definition of "generally available control technology or management practices" is found in the Senate report on the 1990 amendments to the CAA (S. Rep. No. 101-228, 101st Cong. 1st sess. 171-172). That report states that GACT is to encompass:

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

Consistent with this legislative history, we can and do consider costs and economic impacts in determining GACT.

As provided in CAA section 112(d)(5), EPA is electing to

propose standards under CAA section 112(c)(3) based on GACT for EAF steelmaking facilities that are area sources. As stated further below (see section IV.D.3 of this preamble), we do not believe that a choice to base standards for these area sources on GACT, rather than MACT, requires justification. However, should justification be required, we are proposing standards based on GACT rather than on MACT because these facilities are already well controlled for the metal HAP these sources emit, and a regulation based on GACT will appropriately allow us to consider the costs and economic impacts of more stringent regulations. See the discussion of particulate matter (PM) controls in section IV.D.4 of this preamble. We believe the consideration of costs and economic impacts is especially important for EAF area sources because, given their current well-controlled levels, a MACT floor determination could result in only marginal reductions in HAP emissions at very high costs for modest incremental improvement in control. The consideration of cost is especially important for the small businesses that operate small specialty and stainless steel EAF facilities.

We are proposing standards pursuant to CAA section 112(d)(2) for mercury emissions from all EAF steelmaking facilities that are area sources of HAP. Standards established under CAA section 112(d)(2) must reflect performance of MACT.

The MACT-based regulation can be based on the emissions reductions achievable through application of measures, processes, methods, systems, or techniques including, but not limited to: (1) reducing the volume of, or eliminating emissions of, such pollutants through process changes, substitutions of materials, or other modifications; (2) enclosing systems or processes to eliminate emissions; (3) collecting, capturing, or treating such pollutants when released from a process, stack, storage or fugitive emission point; (4) design, equipment, work practices, or operational standards as provided in section 112(h) of the CAA; or (5) a combination of the above.³

The MACT floor is the minimum control level allowed for NESHAP and is defined under CAA section 112(d)(3). For new sources, MACT standards cannot be less stringent than the emission control achieved in practice by the best-controlled similar source, as determined by the Administrator. The MACT standards for existing sources can be less stringent than standards for new sources, but they cannot be less stringent than the average emission limitation achieved by the best performing 12 percent of existing sources in the category or subcategory (for which the Administrator has emission

³ Section 112(d)(4) (not relevant here) allows alternative risk-based standards for HAP which are threshold pollutants.

information) or the best performing 5 sources for categories or subcategories with fewer than 30 sources.

Although emission standards are often structured in terms of numerical emissions limits, alternative approaches are sometimes necessary and are authorized pursuant to CAA section 112(d)(2). For example, in some cases, physically measuring emissions from a source may be not practicable due to technological and economic limitations. Sections 112(d)(2)(D) and 112(h) of the CAA authorize EPA to promulgate a design, equipment, work practice, or operational standard, or combination thereof, consistent with the provisions of CAA sections 112(d) or (f), in those cases where it is not feasible to prescribe or enforce an emission standard. Under CAA section 112(h)(2), the phrase "not feasible to prescribe or enforce an emission standard" includes situations in which the EPA determines that the HAP emissions cannot be emitted through a conveyance designed and constructed to emit or capture the emissions or the application of measurement methodology to a particular class of sources is not practicable due to technological and economic limitations.

We are proposing an emissions standard for mercury pursuant to CAA section 112(d)(2)(A) that is based on pollution prevention measures which "reduce the volume of, or eliminate emissions of, such pollutants through process changes,

substitution of materials, or other modifications.” We describe below why this standard establishes the MACT floor for mercury under section 112(d)(3), and further why we are not proposing beyond-the-floor standards for mercury. We note first, however, that we do not view standards requiring (or directly based upon) pollution prevention to be work practices under section 112(h). This is because the statute specifically differentiates between emission standards requiring pollution prevention measures (“measures which reduce the volume of, or eliminate emissions of, such [HAP] through... substitution of materials”) and those requiring work practices, with only the latter requiring separate justification under section 112(h). Compare section 112(d)(2)(A) and (D).⁴ This is a reasonable construction, since there is reason to favor standards requiring use of pollution prevention measures, which eliminate HAP emissions altogether, over standards reflecting merely the capture of some portion of an emitted HAP. There is thus no reason to disfavor pollution prevention-based standards by allowing their use only if the section 112(h) criteria are also satisfied.

However, even assuming, for the sake of argument, that the proposed pollution prevention standards for mercury are considered to be work practices, it is not feasible to prescribe

⁴ Such a standard is an “emission standard” since it “limits the quantity . . . of emissions of air pollutants on a continuous basis”. See section 302(k) (definition of “emission standard”).

or enforce an emissions limit for mercury, within the meaning of section 112(h). We believe that continuous emission monitoring systems (CEMS) for mercury concentration and volumetric flow rate would be needed for EAF, because EAF steelmaking is a batch process, and mercury emissions vary enormously from batch to batch as different scrap sources are processed. Indeed, emissions have been shown to vary by two orders of magnitude at a single plant.⁵ Cf. Mossville Environmental Action Now v. EPA, 370 F. 3d 1232, 1240 (D.C. Cir. 2004) (noting that EPA reasonably declined to establish MACT floor levels based on single emission level measurements from batch process operations because of constant change in those levels).

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

⁵ See "Analysis of Mercury Emissions Test Data" in Docket ID No. EPA-HQ-OAR-2004-0083.

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.^{6,7}

Some EAF do have stacks, and the limited amount of mercury emissions data from EAF which EPA has comes from such sources. These limited test data were collected using manual test methods and are therefore not reliable for determining an EAF's actual performance because these short-term test results are not representative of the long-term operation of a cyclic batch process. The results of the different manual tests (typically 1-hour runs) show a variability of over two orders of magnitude

⁶ For example, EPA estimated that 70 of 130 electric arc furnaces (EAF) subject to the new source performance standard (NSPS) were not required to install continuous opacity monitors because of the configuration of their baghouse. (See the EPA fact sheet for the NSPS amendments available at http://www.epa.gov/ttn/oarpg/t1/fact_sheets/eaf_npsfs.pdf).

⁷ Retrofitting such sources with stacks would be extremely costly for most electric arc furnaces (EAFs) to the point that it would not be economically practicable to do so. See "Estimated Impacts of Proposed Area Source Standard for EAF" in EPA Docket ID No. EPA-HQ-OAR-2004-0083. EPA believes that one takes a source as one finds it for purposes of applying section 112(h), and therefore that it is simply not technologically practicable to apply continuous mercury monitoring technology to a stackless EAF.

within a single source (as well as across sources) and reinforce the conclusion that continuous monitoring would be needed to prescribe and enforce a numerical emissions limit for mercury.⁸ As noted, CEMS are not demonstrated for these sources. For these reasons, we do not believe it technologically practicable to apply continuous measurement methodology to even EAFs with stacks.

We also examined the possibility of setting a direct limit on the amount of mercury entering the EAF and thus limiting emissions.⁹ However, the scrap charged to EAF includes many shapes and sizes, bundles, discrete pieces, and various sizes of shredded metal. Accordingly, there is no way to obtain representative samples for analysis of mercury content to develop or enforce a mercury limit for the scrap. The number of mercury switches in the scrap (the predominant source of mercury in the scrap, and hence to an EAF) also cannot be determined for the same reasons. In addition, the switches would not be recognizable after scrap dealers have crushed and shredded incoming scrap. Consequently, we propose that it is not feasible or practicable to establish a limit for mercury in the scrap.

⁸ See "Analysis of Mercury Emissions Test Data" in EPA Docket ID No. EPA-HQ-OAR-2004-0083.

⁹ However, as explained in section IV.D.1 of this preamble, the standard we are proposing effectively establishes such a limit.

The pollution prevention approach which is the basis for the proposed MACT standard for mercury is discussed below in section IV.D.1 of this preamble.

III. Addition and Revision to Source Category Lists

Section 112(c)(6) of the CAA requires us to list categories and subcategories of sources accounting for not less than 90 percent of the aggregate emissions of each of seven specific HAP. Since the publication of the original 1998 CAA section 112(c)(6) source category list, we have collected additional data on mercury emissions in 1990 and performed another review of information on the 1990 baseline emissions inventory that served as the basis for the listing. In re-evaluating the baseline inventory, we have determined that EAF steelmaking facilities emit mercury and contributed to the 90 percent of the aggregate emissions of mercury in 1990, and we have updated our estimates of the 1990 baseline year to reflect this contribution of mercury from EAF.¹⁰ Consequently, we are adding EAF steelmaking facilities to the list of source categories under CAA section 112(c)(6) on the basis of mercury emissions.

This notice also announces 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

¹⁰ Additional information on the "1990 Emissions Inventory of Section 112(c)(6) Pollutants" is available at <http://www.epa.gov/ttn/atw/112c6/112c6pg.html>.

changes the name of the listed area source category, "Stainless and Nonstainless Steel Manufacturing Electric Arc Furnaces (EAF)" to "Electric Arc Furnace Steelmaking Facilities." We are making this revision to clarify that the source category includes all types of steel made in EAF, such as stainless steel, carbon steel, specialty steel, and other grades and alloys of steel. This is simply a change in the name of the source category and does not change the universe of sources that were the basis of the original listing notice.

IV. Proposed NESHAP for EAF Steelmaking Facilities

A. What area source category is affected by the proposed NESHAP?

The EAF steelmaking area source category consists of facilities engaged in the production of steel using EAF to melt primarily ferrous scrap to produce molten steel. The molten steel is refined by ladle metallurgy processing and subsequently cast into basic steel shapes that are further processed in rolling mills.

The U.S. steel industry produced about 106 million tons of raw steel in 2006, and approximately 93 "minimills" that melt ferrous scrap in EAF accounted for 57 percent of the total U.S. production. Critically, for purposes of the mercury standard proposed in this rule, the EAF at minimills produce steel by melting recycled ferrous scrap. The reason this is critical is

that the mercury emitted by EAF comes almost exclusively from automotive scrap, and approximately 50 to 80 percent of this mercury can be eliminated from the scrap feed by pollution prevention measures carried out upstream of the EAF.

The production of steel in minimills has increased dramatically over the past 30 years. Minimills accounted for 10 percent of the national steel production in 1970, 30 to 40 percent in the 1980s, 40 to 50 percent in the 1990s, and (as noted) 57 percent in 2006. The growth has been attributed in part to an expansion in the types and quality of steel products that minimills can produce, including heavy structurals, rail, plate, specialty bar, hot rolled, cold rolled, galvanized, and stainless flat rolled products.

Most of the steel produced in EAF is carbon steel used in the manufacture of construction materials, automobiles, appliances, and other applications. Approximately 4 percent (about 2 million tons) is specialty and stainless steel, which are high value steel products. The types of steel are defined by their composition of alloying elements. Stainless and alloy steels contain less carbon and zinc and more chromium, manganese, and nickel than carbon steels. Some stainless steel grades contain 12 to 28 percent chromium and 4 to 25 percent nickel.

U.S. minimills are the largest recyclers of metal scrap in

the world. Recycled iron and steel scrap nationwide in 2004 included 25 percent "home scrap" (from current operations at the plant), 26 percent "prompt scrap" (from plants manufacturing steel products), and 49 percent post-consumer scrap. The primary source of post-consumer scrap is the automobile, and in 2004, the steel industry recycled 14.2 million tons of iron and steel scrap from 14 million vehicles.

B. What are the production processes and emissions sources?

Most EAF are equipped with three carbon electrodes that are raised or lowered through the furnace roof. When the electrodes are retracted, the furnace roof can be rotated to allow the charge of scrap steel by an overhead crane. Electric current that is passed between the electrodes and through the scrap generates heat to melt the scrap. The stages of each production cycle include charging (loading scrap and other raw materials into the furnace), melting, removing slag (a layer of impurities that forms on top of the molten steel), and tapping (pouring molten steel into a ladle). Operating cycles in this batch process range from 35 to more than 200 minutes; the longer cycle times are generally used when producing stainless and specialty steels. After tapping, the steel is transferred to the ladle metallurgy facility where it undergoes additional refining in a ladle to produce the desired final properties. After the composition and temperature are adjusted in the ladle metallurgy

facility, the molten steel is transferred to the continuous caster, which forms the steel into semi-finished shapes. The steel shapes are then processed in rolling mills to produce the final steel product.

Emissions from the EAF occur during charging, melting, and tapping. Emissions may also occur when the molten steel is processed at the ladle metallurgy facility. The type and volume of emissions of HAP metals are affected by the quantity and type of HAP metals in the ferrous scrap being melted and the addition of certain alloys (e.g., chromium, manganese, and nickel). Some HAP metals, such as manganese, are an inherent and necessary component of ferrous scrap and the final steel product. Other HAP metals, such as mercury, arsenic, and cadmium, are undesirable elements introduced with the ferrous scrap. Other HAP metals, such as chromium and nickel, are introduced as alloying elements and are necessary to produce stainless and specialty steels.

Capture systems for emissions from EAF typically include direct-shell evacuation control (DEC) systems; canopy hoods, side draft hoods, and tapping hoods; partial or total enclosures; scavenger duct systems; and building evacuation systems. The most common types of capture systems for ladle metallurgy are canopy hoods, side draft hoods, and close fitting hoods. Nearly all plants duct process and fugitive emissions to

a baghouse. These capture systems and PM control devices are highly efficient for the capture and control of PM and HAP metals that are in particulate form, including the Urban HAP arsenic, cadmium, chromium, lead, manganese, and nickel. However, mercury emitted from the EAF is in vapor form and is not controlled by the PM control devices.

A detailed survey of 27 plants showed that EAF steelmaking facilities use scrap specifications, scrap management plans, and inspections to ensure that charge materials do not adversely affect the quality of steel or create dangerous operating conditions. Common requirements include testing for radiation; rejecting scrap containing sealed containers, hazardous materials, or explosives; and prohibiting materials such as lead, copper, oil, grease, batteries, and refrigerants. Most plants also require some type of visual inspection of incoming scrap. These scrap management procedures also serve to reduce HAP emissions by preventing HAP materials and precursors from entering the EAF and subsequently being emitted.

C. Summary of the proposed requirements

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

1. Applicability and Compliance Dates

The proposed NESHAP applies to each new or existing EAF steelmaking facility that is an area source of HAP. We are proposing that 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 comply with all applicable rule requirements no later than six months after the date of publication of the final rule in the **Federal Register**. We are proposing that 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 two years after the date of publication of the final rule in the **Federal Register** based on a demonstration to the satisfaction of the permitting authority that the additional time is needed. The owner or operator of a new affected source would be required to comply with all applicable rule requirements by the date of publication of the final rule in the **Federal Register** (if the startup date is on or before promulgation) or upon startup (if the startup date is after promulgation).

2. Proposed MACT Standards for the Control of Mercury

The proposed 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 proposed compliance option is for the EAF facility to prepare and operate pursuant to an EPA-approved site-specific plan that includes specifications to the scrap provider that mercury switches must be removed from motor vehicle bodies at an efficiency comparable to that of the EPA-approved mercury switch removal program (see below). An equivalent compliance option is provided for facilities that do not utilize motor vehicle scrap that contains mercury switches.

We expect most facilities that use motor vehicle scrap will choose to comply by purchasing motor vehicle scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the Administrator. The National Vehicle Mercury Switch Recovery Program (NVMSRP)¹¹ would be an approved program under this proposed standard. Facilities choosing to use the NVMSRP as a compliance option

¹¹ 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.

would have to assume all of the responsibilities for steelmakers as described in the Memorandum of Understanding. The NVMSRP is described in detail in section IV.D.1 of this preamble.

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

EAF facilities that purchase motor vehicle scrap from scrap providers that do not participate in an EPA-approved mercury switch removal program would have to prepare and operate pursuant to and in conformance with a site-specific plan for the removal of mercury switches. The facility's scrap specifications would have to 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 would be submitted to the Administrator for approval and would demonstrate how the facility will comply with specific requirements that include:

(1) a means of communicating to scrap purchasers and scrap providers the need to obtain or provide motor vehicle scrap from which mercury switches have been removed and the need to ensure the proper disposal of the mercury switches, (2) provisions for obtaining assurance from scrap providers that motor vehicle scrap provided to the facility meets the scrap specifications, (3) provisions for periodic inspection, site visits, or other means of corroboration to ensure that scrap providers and dismantlers are implementing appropriate steps to minimize the presence of mercury switches in motor vehicle scrap, (4) provisions for taking corrective actions if needed, and (5) requiring each motor vehicle scrap provider to provide an estimate of the number of mercury switches removed from motor vehicle scrap sent to the facility during the previous year and the basis for the estimate. The Administrator would be able to request documentation or additional information from the owner or operator at any time. The site-specific plan must establish a goal for the removal of at least 80 percent of the mercury switches. All documented and verifiable mercury-containing

components removed from motor vehicle scrap would count towards the 80 percent goal.

An equivalent compliance option would be provided for EAF steelmakers who do not utilize motor vehicle scrap that contains mercury. The option would require the facility to certify that the only materials they are charging from motor vehicle scrap are materials recovered for their specialty alloy, such as chromium in certain exhaust systems. Such materials are known not to contain mercury, and because the specialty steels must meet stringent product quality and performance specifications, automobile scrap with contaminants such as mercury, lead, zinc, and copper is not accepted.¹²

3. Proposed GACT Standards for EAF and Ladle Metallurgy Operations

We propose that the owner or operator would be required to install, operate, and maintain capture systems for EAF and ladle metallurgy operations that convey the collected gases and fumes to a venturi scrubber or baghouse for the removal of PM. We are proposing 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

¹² Letter from Joseph Green, Counsel to the Specialty Steel Industry of North America, to Steve Fruh, Environmental Protection Agency. Information Regarding Specialty Steel Industry Segment. July 30, 2004.

steelmaking facilities. The small facilities would be 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 ladle metallurgy operation and an opacity limit of 6 percent for melt shop emissions. All other EAF steelmaking facilities (both existing and new) would be 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 ladle metallurgy operation. The opacity of emissions from melt shops from these sources would be limited to 6 percent.

Performance tests would be required for each emissions source to demonstrate initial compliance with the PM and opacity limits. Provisions are included in the proposed rule for conducting the tests. The owner or operator of an existing EAF steelmaking facility would be 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 would be required to obtain a title V permit. The proposed rule would require each EAF steelmaking facility to monitor the capture system, PM control

device, and melt shop; maintain records; and submit reports according to the compliance assurance monitoring (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).

4. Proposed GACT Standards for Scrap Management

In addition to meeting PM and opacity limits reflecting GACT, we are also proposing that EAF facilities be required 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 proposed 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 would simply prohibit the processing of scrap containing these contaminants (restricted scrap). Compliance would be demonstrated by a certification that the owner or operator will not process scrap with 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 would 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 would not apply to the production of leaded steel (where lead is obviously needed for production).

The other proposed scrap management provision would require 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 would be submitted to the Administrator for approval. The owner or operator would be 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 would 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 would 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.

5. Proposed Requirements for Recordkeeping and Reporting

Area sources subject to the proposed requirements for EAF and ladle metallurgy operations would be 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 reporting requirements under part 64 requires 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 proposed NESHAP would also be 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 proposed 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 would be 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 would be required to keep records and submit semiannual reports on the number of mercury switches removed by the scrap provider 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. In contrast, 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. As discussed in more detail in section IV.D.1 of this

preamble, we are proposing to require 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 would be required to submit semiannual reports according to the requirements in §63.10(e) of the general provisions. The report would identify any deviation from the rule requirements and the corrective action taken.

D. What is our rationale for the proposed MACT and GACT standards?

1. Proposed MACT Standard for Mercury

Background. Mercury enters the EAF steelmaking process almost exclusively with the ferrous scrap that is charged to the furnace. A few other materials are charged to the EAF in small quantities (e.g., coke, coal, lime); however, they contribute little mercury because they are used in very small quantities relative to the scrap charge and contain virtually no mercury in any case. The major source of mercury in ferrous scrap is convenience light switches in end-of-life vehicles that contain 0.8 grams (g) to 1.2 g of mercury per switch. These switches (called mercury switches or tilt switches) control lights under the hoods and in the trunks of older model vehicles. The

Ecology Center estimated that the vehicles retired in 2003 contained 8.5 million switches and 9.3 tons of mercury. Pilot studies in New Jersey and Michigan reported 0.54 to 0.8 mercury switches per vehicle processed. For 14 million vehicles recycled in 2004, the number of switches thus would be in the range of 7.6 to 11 million. Although mercury switches were phased out of automobiles in 2002, there is a 10 to 15 year supply of existing vehicles destined for recycling that still contain the switches. There are other components in automobile scrap which contain small amounts of mercury, such as anti-lock braking sensors, security systems, and active ride control systems. However, most of the mercury is contributed by convenience light switches, which are estimated to be the source of 87 percent of the mercury in motor vehicle scrap by the Ecology Center.¹³

We have very limited data on the mercury species emitted from EAFs; however, the limited data indicate that over 99 percent of the mercury emissions are in the gaseous form, and about 93 percent of the gaseous mercury is elemental mercury. Although baghouses are highly efficient at removing HAP metals that are in the particulate phase, the baghouses do not control gaseous or vapor phase mercury and thus (for practical purposes)

¹³ The Ecology Center report and other information cited for mercury switches is available in EPA Docket ID No. EPA-HQ-OAR-2004-0083.

do not control mercury emissions from EAFs. No EAFs use add-on controls for gaseous mercury emissions.

The limited test data show extreme variability (orders of magnitude) in mercury emissions from plant to plant and from the same plant over time as different batches of scrap are melted. The limited sampling results of input materials likewise indicate that the mercury content of scrap typically varies widely.¹⁴

We also examined scrap specifications that may be in use to reduce mercury emissions. Three companies reported in their survey responses that their scrap specifications prohibited mercury-containing components. However, there was no measure of effectiveness of the written specification.

Over the past few years, there has been an increasing awareness that a highly effective way of reducing mercury releases to the environment from scrap using entities like EAFs is to remove mercury switches from end-of-life vehicles prior to crushing, shredding, and melting. Numerous interested parties have been involved at the local, State, and national level in the development and implementation of switch removal programs, including local and State environmental agencies, national and local environmental groups, steel recyclers, steel producers,

¹⁴ See "Analysis of Mercury Emissions Test Data" in Docket ID No. EPA-HQ-OAR-2004-0083.

automobile makers, various EPA offices, and others. Many successful State and local switch removal programs are already in place, and more are expected in the future.

Several State programs for mercury switch removal have been implemented, and there are many different variations. Some programs are mandated by law, and others are voluntary. Some offer financial incentives provided by different stakeholders, some specify financial incentives to be provided by automobile makers, and some have no financial incentives. Some have a strict accounting of switches removed and requirements for proper collection, management, and disposal of the switches.

There have been direct measurements of the mercury emission reductions that can be achieved at minimills by switch removal programs. For example, a pilot program administered by the New Jersey Department of Environmental Protection reported a reduction of 50 percent in mercury emissions when the EAF melted scrap that had been processed in a switch removal program.¹⁵ We also identified one minimill in Minnesota that had implemented a mercury switch removal program that included removal prior to processing in their on-site shredder and a system for paying other scrap suppliers to remove switches. This program has resulted in a quantifiable reduction in environmental releases

¹⁵ "Mercury Switch Data Collection Pilot Project." Prepared by K.L. Woodruff. New Jersey Department of Environmental Protection. March 24, 2004.

of mercury. These two studies confirm that a national mercury switch removal program for end-of-life vehicles will reduce mercury emissions.

Switch removal programs reduce mercury releases to all media. Switch removal reduces mercury releases to air, water, and land when automobiles are crushed and shredded prior to delivery to the minimills. Mercury contamination of auto shred residue (plastics, fabrics, and other unwanted materials in the automobile) is reduced making safer the further management of the material. The switches themselves are isolated and managed in RCRA subtitle C hazardous waste management facilities where they are subject to stringent regulatory control. As a result of the mercury switch removal programs, mercury emissions are reduced at all facilities which use the scrap as raw material, including not only EAFs but integrated iron and steel plants and iron and steel foundries. Finally, mercury emissions are reduced from scrap that is exported and melted in furnaces in other countries.

The National Vehicle Mercury Switch Recovery Program

(NVMSRP).¹⁶ A significant step forward in reducing mercury

¹⁶ This section describes the national switch recovery program in detail. As discussed in the following sections of this preamble, the proposed rule does not codify these details as part of the proposed standard for mercury emissions. The proposed rule requires the owner or operator to: (1) certify they are participants in the national program and that scrap is

emissions was made on August 11, 2006 when a Memorandum of Understanding (MOU) was signed by representatives of the steel industry, automobile makers, scrap recyclers, environmental groups, State and local agencies, and EPA.¹⁷ The MOU established the NVMSRP, and this program has been implemented and is already removing and recovering mercury switches from end-of-life vehicles before the metallic scrap is recycled at EAFs (and other steel-producing entities).

The NVMSRP is the result of a two-year collaborative effort involving EPA, the End of Life Vehicle Solutions Corporation (ELVS)¹⁸, the American Iron and Steel Institute, the Steel Manufacturers Association, the Institute of Scrap Recycling Industries, the Automotive Recyclers Association, Environmental Defense, the Ecology Center (Ann Arbor), and representatives of the Environmental Council of the States. The goal of the NVMSRP is to significantly reduce air emissions of mercury from

purchased only from scrap providers participating in such a national program, (2) maintain records documenting such participation, and (3) submit semiannual reports if there any deviations from the requirements. However, the proposed rule also allows an owner or operator to comply with the proposed rule if they can demonstrate that they are participating in a program that is equivalent to the national program and is of demonstrably equal effectiveness.

¹⁷ Additional details and the signed Memorandum of Understanding can be found at <http://www.epa.gov/mercury/switch.htm>.

¹⁸ ELVS is a non-profit corporation established by several motor vehicle manufacturers who are listed at <http://www.elvsolutions.org/about.htm>.

steelmaking facilities that utilize auto shred by substantially reducing the number of mercury-containing switches in scrap automobiles before they are crushed and shredded for recycling. This is being accomplished through education and outreach for those removing switches; removal, collection and management of switches; transport of the switches to a qualified retorter that has the permits that allow for managing the switches under RCRA subtitle C; recordkeeping and accountability of mercury recovery; scrap selection and corroboration; and review and improvement of the NVMSRP. The vehicle manufacturers and steelmakers have created a three-year, \$4 million dollar implementation fund in support of the program. The fund will support the implementation of the NMSRP through incentive payments to those entities recovering (i.e. pulling) the switches. Performance will be assessed on a regular basis by all of the participating parties.

Finally, the MOU contains a provision providing that the agreement may terminate with the consent of the parties based on the phase out of automobiles containing mercury switches. A potential termination date mentioned in the MOU is December 31, 2017, a date when it is projected that 90 percent of vehicles containing mercury switches will be retired.¹⁹ EPA believes

¹⁹ The MOU states "The NVMSRP will be implemented until December 31, 2017 based on estimates that 90% of the vehicles containing

that any issues raised by this potential "sunset" provision are best addressed when EPA reexamines the MACT standard pursuant to section 112(d)(6) (which must occur no later than 2015). At that time, there will be robust information available as to switch removal rates and rate of fleet retirement.

The NVMSRP was designed to harmonize with existing State programs and to be implemented State-by-State by the participants, in consultation with appropriate State agencies, in the remaining States to form a coordinated national program. The NVMSRP has shown success in just a few months following the MOU. As of July 9, 2007, programs were operational in 45 States, and 5,633 participants have collected more than 575,841 mercury switches with 1,267 pounds of mercury. Programs are expected to be implemented in all of the remaining States in 2007.

Proposed MACT floor determination. More than 12 percent of the EAF steelmaking facilities are participants in this national

mercury switches would be retired by that time. If, before that date, based on Program data and other information, the Parties or their designees determine that the number of remaining Mercury Switches no longer constitutes a significant source of mercury, they may determine that the program should end. In such a case, the Parties may terminate this MOU through written notice to all signatories and Participants. If the Parties or their designees determine that the number of mercury switches is still significant after that date, they may extend the Program. If the Program is extended, the Parties and US EPA may continue this MOU through written mutual consent of all parties and US EPA."

program and have been participants in previous State and local programs. We believe that these operations pursuant to the national program represent the best performers and best performance for mercury - the chief source of mercury in emissions is being removed from feedstock - so that the MACT floor for new and existing EAF steelmaking facilities is for the owner or operator to operate pursuant to such a program; i.e., to obtain scrap only from scrap providers that are first removing mercury switches pursuant to the national program or an equivalent program of demonstrably equal effectiveness.²⁰ We are also proposing that a switch removal program is the MACT floor for new sources because the best-controlled similar source is among those that prevent mercury switches from entering with the scrap.

We examined the features of the NVMSRP and other switch

²⁰ We estimate that the mercury switch removal program will reduce mercury emissions to below 90 mg Hg/ton of steel produced (based on two State pilot program studies showing approximately 50 percent reduction from switch removal and average baseline mercury emissions of 180 mg Hg/ton), which results in an estimated reduction of 5 tpy of mercury. For perspective, 90 mg/ton of steel corresponds to a trace mercury level of 0.1 ppm in the steel scrap or the equivalent of about one mercury switch (one gram or 1,000 mg of mercury) per 10 tons of steel scrap (about one switch per ten end-of-life vehicles at one ton of steel per vehicle). In contrast, we estimate that the MACT floor based on our limited mercury emissions test data, which comes from a time when switch removal agreements were not in place, would be 650 mg Hg/ton of steel. Additional details are provided in "Analysis of Mercury Emissions Test Data" in Docket ID No. EPA-HQ-OAR-2004-0083.

removal programs to identify those features that would be the necessary components of a national emission standard to ensure that the program would be effective at reducing mercury emissions. These features include assurance that each facility is participating in a switch removal program that has been approved by the Administrator, a program goal for the percent of switches removed (80 percent), a system that accounts for the number of switches (or quantity of mercury) removed and the number of vehicle bodies processed, a mechanism to ensure the switches are properly disposed of or recycled, and an outreach program that informs dismantlers of the need for removal of mercury switches and provides training and guidance for removal. The national program has these features, and we are proposing that these features represent the MACT floor for mercury for new and existing sources because this is the mercury control approach that is being used by the best-performing sources.

The national program also has a mechanism to measure performance because the number of switches and amount of mercury recovered is reported by State, and from an estimate of the number of vehicles processed, the progress toward the goal of 80 percent removal can be determined. The MOU also includes ongoing measures to track and measure progress. For example, the parties will assess development and implementation of State plans and identification and participation of program

participants at three month intervals for the first year following the effective date of the MOU. At six month intervals thereafter, the parties will collectively review by State the status of implementation and participation in the program and make adjustments as necessary. The indicators to be reviewed will include the status of plans for 50-State implementation, number of States where the program has been initiated, the status of web-based information on the NVMSRP, the status of identification of dismantlers and dismantler participation in all States (starting with those States targeted for initial implementation), and the status of the mercury recovery database and rate of information collection.

The parties to the MOU expect that in the first three years of the program, capture rates will be ramping up due to the realities of program implementation and will not fully achieve the 80 to 90 percent switch recovery rate goal. It is expected that a minimum of four million mercury switches will be recovered during the first three years of the program in addition to the mercury being recovered by existing State programs. The parties agreed to make every effort to exceed this amount through aggressive implementation of the responsibilities detailed in this agreement.

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 agreed to 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 discussion of the number of switches that have been collected and what factors have contributed to program effectiveness.

A key element of measuring the success of the program is maintaining a database of participants that has 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 State and national recovery totals. 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, number of mercury switches, and an estimated national capture rate, with information organized by State, compared with the expected range of mercury switch retirement rates for each State; and the total number and identity of dismantlers or others dropped due to inactivity or withdrawal from the program.

Facilities choosing to use the NVMSRP to comply with this proposed standard would have to assume all of the responsibilities for steelmakers as described in the MOU and take steps consistent with the NVMSRP to minimize the presence of mercury in scrap from end-of-life vehicles. Participating steelmakers were to initiate the following steps when the NVMSRP went into effect:

- Issue a statement that the individual steel company is participating in the NVMSRP.
- Acting independently, develop a plan demonstrating the manner through which it is participating in the NVMSRP. The plan should include facility-specific implementation elements,

corporate-wide policies, and/or efforts coordinated by a trade association as appropriate for each facility.

- Provide in the plan documentation of direction to appropriate staff to communicate to suppliers the need to promote the NVMSRP with suppliers throughout the scrap supply chain. The steel mill should be able to provide examples of materials that it uses for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols.
- Strongly encourage their suppliers and others in the scrap supply chain to support and participate in the NVMSRP.
- Take steps to minimize the presence of mercury in scrap, which includes notifying suppliers that the steelmaker, acting independently pursuant to the NVMSRP, intends to use in their operations, to the maximum extent possible, scrap from vehicles which do not contain mercury switches or from which mercury switches have been removed and to adapt their respective purchasing practices to that end.
- Use the ELVS database or other appropriate means to demonstrate that suppliers (spot suppliers and those under continuous contracts) are participating as anticipated in the NVMSRP and periodically re-affirm their commitment to provide only reduced-mercury automobile scrap. Steelmakers will conduct occasional spot checks, site visits or other means of

corroboration to ensure that suppliers are aware of the need and are implementing appropriate steps to minimize the presence of mercury in automobile scrap.

- Cooperate with ELVS in the development of education, training materials, and outreach where appropriate.
- Work with the Institute of Scrap Recycling Industries to assure that any scrap work practice standards or other programs that may be implemented in accordance with the NVMSRP take into account market and technological factors and do not create unreasonable or unworkable certification requirements for scrap processors.

We propose that the Administrator can evaluate the success of the 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 this proposed 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 will assess the information with respect to the program's goal for percent switch recovery and trends in recovery rates.

Although the national program would be an EPA-approved program for the purpose of complying with the proposed MACT standard, other State, local, or facility-specific programs could qualify as a compliance option on a case-by-case basis if they met the same criteria. Consequently, we also are proposing as the MACT floor participation in these other programs after satisfying criteria based on the national program, i.e., showing that these other programs would assure the same level of mercury control that the national program utilized by the best existing performers achieves, that would be used by the Administrator to determine if other switch removal programs could be used to demonstrate compliance.

For example, we are proposing that a facility could prepare and operate pursuant to a site-specific plan for the removal of mercury switches and establish scrap specifications for the removal of mercury switches to achieve the MACT level of control (i.e., control as effective as the national plan). The plan would be submitted to the Administrator for approval and would demonstrate how the EAF steelmaking facility will comply with the following specific requirements: (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 management of the removed mercury switches, (2) provisions for

obtaining assurance from scrap providers that motor vehicle scrap provided to the EAF meets the scrap specifications, (3) provisions for periodic inspection, site visits, or other means of corroboration for the EAF to ensure that scrap providers and dismantlers are implementing appropriate steps to minimize the presence of mercury switches in motor vehicle scrap, (4) a goal for the removal of at least 80 percent of the mercury switches, (5) provisions for taking corrective actions if needed, and (6) requiring each motor vehicle scrap provider to provide an estimate of the number of mercury switches removed from motor vehicle scrap sent to the facility during the previous year and the basis for the estimate. The Administrator would be able to request documentation or additional information and change the approval status of the plan at any time based on a review of progress toward meeting the switch removal goal and other factors.

We developed an equivalent compliance option (also based on pollution prevention) for steelmakers who do not purchase motor vehicle scrap that contains mercury switches. The compliance option would require the facility to certify that the only materials from motor vehicle scrap are materials recovered for their specialty alloy, such as chromium in certain exhaust systems, and that the type of scrap is not reasonably expected to contain mercury switches.

Proposed beyond-the-floor determination. As a beyond-the-floor option, we considered the upstream removal of mercury-containing components other than mercury switches. There is no practical or reasonable way for to remove trace amounts of mercury entering with raw materials (such as fluxing agents and alloys) other than scrap. Although there are other components in automobile scrap containing small amounts of mercury (see the earlier discussion above), pilot studies by various States have found that most of the mercury is contributed by the mercury switches, which take only a few minutes to locate and remove. (See the reports of switch removal studies in Maine, New Jersey, and Michigan in the rulemaking docket.) Other mercury-containing components contribute less mercury, and they are more difficult to locate, identify, and remove. For example, the mercury switch study performed by the New Jersey Department of Environmental Protection found that convenience light switches could be located and removed in less than one minute. However, the time to remove and locate switches in anti-lock braking systems (ABS) required 7 to 8 minutes to locate, remove the rear seat, unbolt the unit, and remove it. In some cases, no ABS mercury switches were found. Some vehicles had to be raised on lifts, which required 10 to 15 minutes to locate and remove the ABS switch. In other cases, the ABS mercury bullet could not be removed separately because it was encased in a plastic resin

material. Since the removal of these other mercury-containing components is costly and not practical in many cases, we have initially determined that the removal of these other mercury-containing components is not justified as a beyond-the-floor standard. However, we propose to encourage their removal by crediting all documented and verifiable mercury-containing components removed from motor vehicle scrap (such as sensors in ABS systems, security systems, active ride control, and other applications) when evaluating progress towards the 80 percent goal.

We also examined the feasibility and cost of an add-on control device for mercury and continuous emissions monitoring as a beyond-the-floor option for mercury for existing and new sources. Activated carbon injection has been used on other somewhat similar processes (i.e., similar with respect to temperature and volumetric flow rate); however, it has never been used at EAF facilities, and thus is not a demonstrated mercury control technology for EAF facilities. The nationwide cost of activated carbon injection and monitoring on EAFs is estimated as \$100 million/yr. The mercury reductions are estimated as about 5 tpy after implementation of the national mercury switch recovery program. Assuming that activated carbon injection could be applied to EAFs and would reduce the remaining mercury emissions by 90 percent (4.5 tpy), the cost

effectiveness would be \$22 million per ton of mercury. This cost does not include the further high cost of waste treatment and disposal noted in the next paragraph.

We also considered other factors: (1) the EAF batch process has highly variable concentrations of mercury in the exhaust gases (which results in a great deal of uncertainty with respect to cost, design, and efficiency of an add-on control system), (2) carbon injection could result in landfilling large quantities of hazardous EAF dust (since the carbon injection residue is commingled with other baghouse dust) that is currently recycled to recover its zinc value (see American Petroleum Inst. v. EPA, 906 F. 2d 729, 734, 740-41 (D.C. Cir. 1990) and 53 FR 11752-11753, August 17, 1988) because the mercury would either be re-emitted at the zinc smelter (in which case there would effectively be no further reduction of mercury emissions) or the baghouse dust which is otherwise recyclable would have to be treated and disposed in a RCRA subtitle C landfill (a non-air adverse environmental impact we are required to consider under section 112(d)(2)) at a significant cost, and (3) the operation of a carbon injection (or any type of mercury emissions control device) would result in increased energy consumption (another adverse impact we are required to consider under section 112(d)(2)).

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.

2. Proposed GACT Standards for Metal HAP Other Than Mercury

Background. EAF steelmaking facilities were listed under CAA section 112(c)(3) for emissions of the Urban HAP arsenic, cadmium, chromium, lead, manganese, mercury, and nickel (67 FR 43112). As just explained in section IV.D.2 of this preamble, we are proposing a MACT standard for mercury based on its listing under CAA section 112(c)(6). For metal HAP other than mercury, we decided that it is not practical to establish individual standards for each specific type of metallic HAP that could be present in the emissions (e.g., separate standards for manganese emissions, lead emissions, and so forth for each of the metals listed as HAP that may be present) because the types and quantities of metal HAP can vary widely in the scrap. When released, each of the metallic HAP compounds other than mercury behaves as PM. The control technologies used for the control of

PM emissions achieve comparable levels of performance for these metallic HAP emissions, i.e., when PM is captured, HAP metals are captured non-preferentially as part of the PM. Therefore, emission standards requiring control of PM will also achieve comparable control of metallic HAP emissions. Establishing separate standards for each individual type of metallic HAP would impose costly and significantly more complex compliance and monitoring requirements and achieve no HAP emissions reductions beyond what would be achieved using the surrogate pollutant approach based on capture and control of PM.

As provided in CAA section 112(d)(5), we are proposing standards representing GACT for the Urban HAP metals other than mercury. EPA believes that the statute allows the agency to elect to establish standards for area sources listed pursuant to section 112(c) based on GACT without further explanation. The statute simply does not set any condition precedent for issuing standards under section 112(d)(5) other than that the area source category or subcategory at issue must be one that EPA listed pursuant to section 112(c), which is the case here. See 72 FR 38880 (July 16, 2007).

We reviewed the control technologies and management practices used by the existing EAF steelmaking facilities, and we found that all of the plants are well controlled for PM emissions and are subject to emissions limits for PM. All

plants have capture systems that collect emissions from charging, melting, tapping and ladle metallurgy and route the collected gases to a PM control device. All plants have title V permits because they are major sources for criteria pollutants (hence the standards proposed today would be implemented via title V permits). In addition, all plants are subject to the CAM requirements in 40 CFR part 64.

There are a wide variety of capture systems and types of control devices that EAFs employ to achieve control of PM, and all of these systems are effective and generally available. For example, capture systems include direct-shell evacuation, canopy hoods, close-fitting hoods, side draft hoods, tapping hoods, partial enclosures, total enclosures, scavenger duct systems, building evacuation, or a combination. Control devices include many different types of baghouses (positive pressure, negative pressure, reverse air, shaker, and pulse jet) and venturi scrubbers. We concluded from our technology review that the generally available control technologies and management practices for PM emissions, and thus for emissions of HAP metals other than mercury, consist of the installation, operation, and maintenance of capture and control systems for PM emissions from charging, melting, tapping, and ladle metallurgy. Compliance assurance monitoring under 40 CFR part 64 is required for EAF facilities to ensure that the capture and control systems are

properly installed, operated, and maintained on a continuing basis.

Subcategories. As part of the GACT analysis, we considered whether there were differences in processes, sizes, or other factors affecting emissions and control technologies that would warrant subcategorization. Under section 112(d)(1) of the CAA, EPA "may distinguish among classes, types, and sizes within a source category or subcategory in establishing such standards...". We found that there is a segment of the EAF steelmaking industry that is comprised of small facilities producing specialty and stainless steel. These facilities produce less than 150,000 tpy of steel per plant, and they represent 0.5 percent of the national steelmaking capacity and contribute only 0.5 percent of the HAP emissions.²¹ The EAF process at these small producers is characterized by small furnaces with low volume of emissions, longer cycle times, and intermittent rather than continuous operation. In addition, they use high quality scrap that must meet specifications much more stringent than those applied to scrap for carbon steel producers. The HAP metals emitted from these facilities are primarily chromium and nickel, whereas carbon steel producers emit primarily manganese and lead. Consequently, we are

²¹ Additional details on the characteristics of the small specialty steel plants can be found in the rulemaking docket.

proposing to develop GACT standards for two subcategories of EAF steelmaking: one for all carbon steel and large stainless and specialty steel producers and one for small stainless and specialty steel producers (i.e., less than 150,000 tpy).

Proposed GACT determination for carbon steel and large specialty steel producers. We examined emission limits in title V permits to determine if GACT for the carbon steel and large specialty steel producers could be expressed in terms of PM emission limits for control devices and opacity limits for fugitive emissions from the melt shop. The emission and opacity limits vary quite widely depending on whether the facility is in a non-attainment area for PM; whether the EAF had recently been constructed, modified, or reconstructed; EAF age; design of the capture and control system; and other factors. (Details on the permit information are provided in the rulemaking docket in the questionnaire responses for each company that was surveyed.) The most commonly-applied emissions and opacity limits are those in the new source performance standard (NSPS) in 40 CFR part 60, subpart AAa, which applies to EAFs constructed after August 7, 1983. Approximately 80 of the 91 EAF steelmaking area source facilities that we have identified are subject to the NSPS. These limits are 0.0052 gr/dscf for the control device and a melt shop opacity limit of 6 percent (6-minute average) for fugitive emissions.

We gathered additional information on the 10 older EAFs in the carbon steel and large specialty steel subcategory that are not subject to the NSPS and found that four facilities are currently meeting the NSPS limits and six facilities are not meeting the NSPS opacity limit for fugitive emissions. We found that the facilities not meeting the NSPS opacity limit would require either new or extensively upgraded capture and control equipment to achieve the level of control required for the newer facilities subject to the NSPS. We confirmed that these facilities would need higher evacuation rates for their capture systems and new or expanded baghouse capacity. We obtained cost estimates from the plants, and we performed our own independent estimates of the cost to upgrade capture and control systems. The total nationwide capital cost to upgrade to meet the NSPS limit for opacity was estimated as \$26 to \$34 million.²² The total annualized cost was estimated as \$4.9 to \$6.2 million per year nationwide. PM emissions would be reduced by 540 tpy, and HAP metals other than mercury would be reduced by 34 tpy. The average cost effectiveness per plant ranged from \$2,000 to \$14,000 per ton of PM with an overall cost effectiveness of \$10,000 per ton of PM. For metal HAP other than mercury, the

²² The capital cost per plant ranged from \$1.5 million to \$12 million, and the total annualized cost per plant ranged from \$140,000 to \$2.8 million per year. All estimates of impacts (e.g., costs and emission reductions) are documented in the rulemaking docket.

average cost effectiveness per plant ranged from \$40,000 to \$250,000 per ton with an overall cost effectiveness of \$160,000 per ton of HAP. The cost effectiveness for PM is well within the range that EPA has considered acceptable for other sources, such as PM standards for mobile sources. For example, the cost effectiveness of mobile source programs adopting (quite aggressive) PM controls has ranged from \$2,390 per ton of PM to \$31,530 per ton of PM with estimates for three mobile source programs in the range of \$10,000 to \$20,000 per ton of PM (69 FR 39133, June 29, 2004).²³

Our economic analysis indicated the facilities are owned and operated by large corporations, and all but one of these corporations operate multiple plants with EAFs. We believe that the costs of upgrades to meet the NSPS level of control for opacity are economical and would not pose adverse economic impacts on the companies. After considering the economic

²³ We note that, although section 112(d) only authorizes control of hazardous air pollutants (HAP), and particulate matter (PM) is not itself a HAP but a surrogate for HAP metals, Congress expected the maximum achievable control technology (MACT) program to result in significant emissions reductions of criteria air pollutants (of which PM is one), and viewed this as an important benefit of the MACT (and residual risk) provisions. See 5 Legislative History at 8512 (Senate Committee Report) ("[w]hen establishing technology-based standards under this subsection, the Administrator may consider the benefits which result from control of air pollutants that are not listed but the emissions of which are, nevertheless, reduced by control technologies or practices necessary to meet the prescribed limitation").

impacts, the reasonable costs and cost effectiveness for control of PM and HAP, and the emissions reductions that would be obtained, we have determined initially that an opacity limit of 6 percent represented the GACT level of control for this subcategory of carbon steel and large stainless and specialty steel producers.

We acknowledge that there is uncertainty in our estimates of costs, emission reductions, and cost effectiveness. The estimates of costs and cost effectiveness for the older non-NSPS plants could be higher than we have initially estimated, and if that is the case and these costs are disproportionately different from those of other sources, it might be appropriate to consider a separate subcategory based on the technical and economic feasibility (i.e., facilities constructed prior to 1983 may need to add or alter existing infrastructure, upgrade their hooding, close vents, install partitions, or re-route crane ways) of retrofitting facilities based on their age.²⁴ If

²⁴ See Texas Oil and Gas Ass'n v. EPA, 161 F.3d 923, 934 (5th Cir. 1998) (age as subcategorization factor under Clean Water Act); American Iron and Steel Inst. v. EPA, 568 F. 2d 244, 299 (3rd Cir. 1977) (same). Here, the year 1983 is critical since EPA promulgated new source performance standards (NSPS) for the electric arc furnace (EAF) source category in that year. Most of the industry is subject to these standards, but 10 EAFs are not, raising the question of whether these sources should be considered as a separate subcategory for purposes of determining generally available control technology (GACT). See Cf. American Iron and Steel Inst. v. EPA, 526 F. 2d 1046, 1048 (3rd Cir. 1975) (age of source may bear on technical and economic

subcategorization on this basis is appropriate, we believe that GACT for these older facilities would achieve an opacity limit of 6 percent except for 20 percent opacity during charging and tapping. This alternative standard would yield an improvement in existing performance at reasonable cost. We request comment, along with supporting documentation, on our estimates of cost and cost effectiveness and the possibility of creating a separate subcategory for older facilities and whether these costs are disproportionately different from those of other industry sources. Supporting documentation must be provided in sufficient detail to allow characterization of the quality and representativeness of the data.

We also evaluated the generally available controls and emission limits applied to emissions from control devices on EAFs and ladle metallurgy operations. A total of 80 plants are subject to and achieve the NSPS PM limit of 0.0052 gr/dscf, and the other 10 plants not subject to the NSPS have installed baghouses that can achieve the limit. Consequently, we are also proposing that the PM limit of 0.0052 gr/dscf is GACT for control devices applied to EAFs and ladle metallurgy operations.

We also considered whether additional control and emission reductions might be generally available beyond those achieved by the NSPS. The NSPS opacity limit of 6 percent is one of the

feasibility of retrofitting).

most stringent Federal limits in effect for fugitive emissions and is well below the most commonly applied limit of 20 percent for fugitive emissions in State regulations. The NSPS opacity limit was based on the best-performing plants in terms of their ability to capture and control fugitive emissions. A limit more stringent than 6 percent opacity for fugitive emissions has not been applied to EAFs or other similar processes, and any limit more stringent would approach an infeasible standard of no visible emissions. Consequently, we concluded that an opacity limit of 6 percent is GACT for fugitive emissions from EAF operations.

We also considered whether a PM limit more stringent than the NSPS limit of 0.0052 gr/dscf might be achieved by all facilities using the technology described above. Although the NSPS is 20 years old, it was based on the best technology and best-performing sources at that time. The NSPS level of control is achieved by a well-designed and properly-operated baghouse with a low air-to-cloth ratio that is characteristic of baghouses in use today, and generally reflected testing of the baghouses when performing at their optimum. For example, essentially the same level of PM control (a limit of 0.005 gr/dscf) was promulgated as the MACT standard for EAFs and induction furnaces at iron and steel foundries, which melt similar scrap and have similar operating characteristics (69 FR

21924, April 22, 2004). An upgrade of existing baghouses (e.g., increasing bag filtering area to lower the air-to-cloth ratio) would result in expensive retrofit costs for a very marginal improvement in PM control. Consequently, we are proposing that the NSPS PM limit of 0.0052 gr/dscf is GACT for control devices applied to EAFs and ladle metallurgy.

Proposed GACT determination for small stainless and specialty steel producers. We also examined the control technologies used by the small stainless and specialty steel producers with a production of less than 150,000 tpy. We identified five plants in this subcategory, and all of these plants apply capture systems for emissions from charging, melting, tapping, and ladle metallurgy (i.e. the direct, non-fugitive PM emissions) and vent the captured emissions to a PM control device. Most plants use baghouses as the PM control device and meet the NSPS limit; however, one plant uses a venturi scrubber as the control device and meets a PM emission level of 0.8 lb/ton of steel produced. We performed an analysis of costs and cost effectiveness to determine if the GACT level of emission control for this subcategory should be represented by the performance of a baghouse at the NSPS level of control, the level achieved by the venturi scrubber, or some other level. The estimated capital cost to replace the venturi scrubber with a baghouse ranged from \$4 to \$14 million (depending on retrofit

assumptions and their costs) with a total annualized cost of \$0.7 to \$2 million per year. PM emissions would be reduced by 27 tpy, and emissions of HAP metals other than mercury would be reduced by 4.6 tpy. The estimated cost effectiveness was \$52,000 per ton of PM and \$300,000 per ton of HAP. We believe that the costs and cost effectiveness are unacceptably high and that the emission reductions achieved would be low (resulting in poor cost effectiveness (which is certainly higher than those considered acceptable in the context just discussed of fugitive emission control for EAFs)). We concluded that the NSPS level of PM control (0.0052 gr/dscf) does not represent GACT for this subcategory.

Consequently, we reviewed the emission control performance of the plant with the venturi scrubber. The results of four tests for PM emissions ranged from 0.4 to 0.7 lb/ton of steel with an average of 0.5 lb/ton and a standard deviation of 0.11 lb/ton. The 99th percentile of performance (the average plus 2.33 standard deviations) is 0.8 lb/ton. (The 99th percentile is the level of emission control that the plant can achieve at least 99 percent of the time, i.e., 99 percent of the test results would be below this level.) See National Wildlife Federation v. EPA, 286 F.3d 554, 572 (D.C. Cir. 2002) (reasonableness of adopting 99th percentile confidence level); Chemical Mfr's. Ass'n v. EPA, 870 F.2d, 229 (5th Cir.) (same).

We are proposing a PM emission limit of 0.8 lb/ton of steel produced for this source category of small stainless and specialty steel producers based on the 99th percentile of emission control performance demonstrated by the venturi scrubber.

We also examined the control of fugitive emissions at the small stainless and specialty steel producers. All of the plants have effective capture and control systems for fugitive emissions. Although two plants are not subject to the NSPS opacity limit of 6 percent for fugitive emissions, these plants and all other plants in the subcategory can meet the NSPS limit. Consequently, we have initially determined that the NSPS limit of 6 percent for fugitive emissions from the melt shop represented GACT. As we discussed above, the NSPS opacity limit of 6 percent is one of the most stringent limits in effect for fugitive emissions and is well below the most commonly applied limit of 20 percent for fugitive emissions in State regulations. The NSPS opacity limit was based on the best performing plants in terms of their ability to capture and control fugitive emissions. Consequently, we initially concluded that an opacity limit more stringent than 6 percent for this subcategory is not warranted and would not represent GACT.

Proposed compliance monitoring. We are proposing compliance assurance monitoring as required by 40 CFR part 64

for all EAF steelmaking facilities. This proposal is based on a review of the compliance monitoring procedures that are currently in place at EAF facilities and are generally available. All EAF facilities have title V permits and are subject to the CAM requirements. The CAM rule requires the owner or operator to maintain records of monitoring data, monitor performance data, corrective actions taken, any written 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 requires the owner or operator to submit monitoring reports to the permitting authority in accordance with the requirements for facilities with title V operating permits, which include a 6-month monitoring report, deviation reports, and annual compliance certifications. The reporting requirements under part 64 require 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. We are proposing to adopt the extensive compliance assurance monitoring requirements in part 64 in this proposed NESHAP for EAF steelmaking facilities.

3. Proposed GACT Standards for Scrap to Control HAP Other than Mercury

In addition to the standards for PM, EPA is proposing further measures to minimize the amount of contamination in scrap to EAFs. Our studies of industry practices indicate that many facilities have scrap specifications and procedures to minimize contaminants in the scrap. For example, emissions of the Urban HAP lead are reduced by ensuring that lead components, such as wheel weights, batteries, and cables, are removed before the scrap is processed and melted (loosely analogous to the mercury switch program discussed for mercury in that the HAP is removed from the scrap before it reaches the EAF). Although EAFs were not listed for emissions of organic Urban HAP, it is also common industry practice to limit the amount of plastics and organic liquids in the scrap, which reduces the emissions of organic HAP. Unlike mercury, bulky items such as batteries and

cables, as well as dripping liquids, can often be visually detected in a scrap load. Consequently, we are proposing pollution prevention measures as GACT for lead and organic HAP. These pollution prevention measures reduce emissions beyond those achieved by the emission controls that are already in place. For example, all EAFs have PM control devices, which also control lead emissions; however, preventing lead from entering the EAF provides additional reductions even with PM controls. Similarly, some organic HAP are destroyed at the high temperatures used to melt scrap, but preventing plastics and organic liquids from entering with the scrap provides reductions beyond that achieved by this thermal destruction.

Our survey of EAF plants indicated that all of the plants have specifications for their scrap, including measures that reduce HAP emissions by preventing certain materials from entering the EAF with the scrap. For example, some specify no non-ferrous metals, no non-metallic materials, no free-flowing oil, etc. Excluding organic materials (such as plastics and oil) and metals such as lead will reduce HAP emissions, and in the case of organics, also reduce the formation of combustion-product organic HAP at the high operating temperatures of the EAF.

It is difficult to quantify specific emissions reductions achieved by these scrap management programs. First, nearly all

plants implement some sort of formal or informal scrap management program (to maintain product quality), so it is difficult to assess what the baseline emissions might be without one. Second, these scrap management programs are used in conjunction with other air emissions control technologies to reduce emissions from the EAF. The emissions reductions specifically attributable to the scrap management program are impossible to separate out. Nonetheless, it is clear that any reduction in HAP content or HAP precursors entering the EAF will reduce the emissions of HAP metals and organics from the EAF.

While a scrap management program is expected to reduce HAP emissions, it cannot be expected to eliminate all HAP elements or precursors in the scrap. First, scrap loads are generally large and difficult to inspect. A load of scrap may contain thousands of different pieces, and some scrap may be shredded and bundled. Visual inspections are only able to identify obvious off-specification materials that are on the top of a load. Second, some of the HAP elements are desirable components in the scrap iron and steel that contribute to the overall chemistry of the product and provide valuable properties in the cast metal (e.g., manganese and chromium.) Third, even undesirable HAP metals cannot be eliminated from the cast iron and steel as they are trace components in the scrap iron and steel that cannot be separated. For example, all cast iron

contains trace amounts of lead (typically 0.5 to 4 percent). As such, a load of scrap meeting a "no lead" scrap specification does not mean that the scrap is lead-free -- only that the scrap is free of lead components (e.g., batteries or wheel weights).

We have determined that the management practice of limiting the amount of organic impurities and lead in the scrap represents GACT (along with the emission controls described in the previous section of this preamble) because they are in widespread use, there is little additional cost for all plants to implement them (most already have), and there is no doubt that preventing these materials from entering the EAF will reduce emissions of the HAP which would otherwise be charged to the furnace. (A summary of the proposed scrap management practices is provided in section IV.C.4 of this preamble.)

V. Impacts of the Proposed Standards

As proposed, the standards would reduce mercury emissions from EAF by an estimated 5 tons per year (tpy) and would reduce mercury releases to the environment by 8 tpy. The proposed standards would also reduce emissions of other metallic HAP (primarily manganese with some lead, nickel and chromium) by about 34 tpy. Emissions of PM would be reduced by 540 tpy.

The capital cost of the proposed standards is estimated as \$26 to \$34 million. The total annualized cost of the proposed rule is estimated at \$4.9 to \$6.2 million/yr, including the

annualized cost of capital and the annual operating costs for emission control systems. The additional cost of monitoring, reporting, and recordkeeping attributable to the proposed 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 would include an increase in the generation of hazardous waste (540 tpy) and an increase in electricity usage (10,400 megawatt-hours per year) from additional fans and fan capacity associated with baghouse installations and upgrades to meet the proposed opacity standard. (All estimates of primary and secondary impacts are documented in the rulemaking docket.)

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 the proposed rule have been submitted for approval to OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. The Information

Collection Request (ICR) document prepared by EPA has been assigned EPA ICR No. 2277.02.

The proposed 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 proposed 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 would 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 proposed requirements for the control of contaminants

from scrap require a pollution prevention plan to minimize the amount of chlorinated plastics, lead, and free organic liquids that are charged to the furnace and 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 would be required to maintain records to demonstrate compliance with the selected option. Records of specific information would be required for plants electing to comply with the site-specific plan for mercury; semiannual progress reports would also be required.

All area source facilities would be required to conduct performance tests to demonstrate initial compliance with the applicable PM and opacity limits. Existing facilities would be allowed to certify initial compliance based on the results of a

previous performance test that meets the rule requirements. All facilities would be required to monitor capture systems and PM control devices for EAF and ladle metallurgy operations, 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 would be 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 would 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 proposed 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 part 63 are listed in 40 CFR part 9.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for the proposed rule, which includes this ICR, under Docket ID number EPA-HQ-OAR-2004-0083. Submit any comments related to the ICR for the proposed rule to EPA and OMB. See the ADDRESSES section at the beginning of this notice for where to submit comments to EPA. Send comments to OMB at the Office of Information and Regulatory Affairs, Office of Management and

Budget, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Office for EPA. Because OMB is required to make a decision concerning the ICR between 30 and 60 days after [INSERT DATE OF PUBLICATION OF THIS PROPOSED RULE IN THE FEDERAL REGISTER], a comment to OMB is best assured of having its full effect if OMB receives it by [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION OF THIS PROPOSED RULE IN THE FEDERAL REGISTER]. The final rule will respond to any OMB or public comments on the information collection requirements contained in the proposal.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule would not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions.

For the purposes of assessing the impacts of this proposed rule on small entities, small entity is defined as: (1) a small business that meets the Small Business Administration size standards for small businesses 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. We estimate that fewer than 9 EAF steelmaking facilities are owned by small businesses (less than 10 percent of the total facilities).

After considering the economic impacts of this proposed rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. Electric arc furnaces and ladle metallurgy operations at all EAF steelmaking facilities that are area sources are already equipped with capture systems and control devices. We have identified six plants that may have to upgrade the capture and control systems for fugitive emissions at a total capital cost of \$26 to \$34 million and a total annualized cost of \$4.9 to \$6.2 million per year. However, none of these plants are owned by small businesses. The only other additional requirements of the proposed NESHAP consist of preparing a scrap selection plan or mercury switch removal plan (if these options are selected) and maintaining records to document compliance with these requirements. The requirements of the part 63 General Provisions would include notifications, records, semiannual reports, and a startup, shutdown, and malfunction

plan. The information required in these information collection requirements are very similar to the information collection requirements in 40 CFR parts 64, 70, and 71. The cost of these requirements (about \$3,500 per year per facility) would not result in an adverse economic impact on any facility, large or small (i.e., the cost is less than one percent of total revenues, even for small businesses).

Although the proposed rule will not have a significant economic impact on a substantial number of small entities, we nonetheless tried to reduce the impact of the proposed 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 proposed to include a subcategory based partially on facility size that allows more individualized consideration of EAFs in the proposed subcategory, which include small businesses. We continue to be interested in the potential impacts of the proposed action on small entities and welcome comments on issues related to such impacts.

D. Unfunded Mandates Reform Act

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.

The EPA has determined that the proposed rule does not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, and tribal governments, in the aggregate, or to the private sector in any one year. Thus, the proposed rule is not subject to the requirements of sections 202 and 205 of the UMRA. In addition, the proposed rule does not significantly or uniquely affect small governments. The proposed rule contains no requirements that apply to such governments and impose no obligations upon them, and the proposed rule is not subject to section 203 of the UMRA.

E. Executive Order 13132: Federalism

Executive Order 13132 (64 FR 43255, August 10, 1999) requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" 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."

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

In the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between EPA and State and local officials, EPA specifically solicits comments on this proposed rule from State and local officials.

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

Executive Order 13175 (65 FR 67249, November 6, 2000), requires EPA to develop an accountable process to ensure "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications." The proposed rule does not have tribal implications, as specified in Executive Order 13175. It would not have substantial direct effects on tribal governments, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes, as specified

in Executive Order 13175. The proposed rule imposes no requirements on tribal governments. Thus, Executive Order 13175 does not apply to the proposed rule.

EPA specifically solicits additional comment on this proposed rule from tribal officials.

G. Executive Order 13045: Protection of Children from Environmental Health and Safety Risks

Executive Order 13045 (62 FR 19885, April 23, 1997) applies to any rule that: (1) is determined to be "economically significant," as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, EPA must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

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

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

This proposed rule is not a "significant energy action" as defined in Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001) because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. Further, we have concluded that the proposed rule is not likely to have any adverse energy effects because only a slight increase in energy requirements would occur.

I. National Technology Transfer Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) of 1995 (Public Law No. 104-113, 15 U.S.C. 272 note) directs EPA to use voluntary consensus standards (VCS) in its regulatory activities, unless to do so would be inconsistent with applicable law or otherwise impractical. The VCS are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by VCS bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency does not use available and applicable VCS.

This proposed rule involves technical standards. EPA is proposing to use 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," in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, revision 2 and subsequent revisions, dated November 2004 and in Update IIIB (incorporated by reference in 63.10692-see 40 CFR 63.14); and ASTM D2216-05 and subsequent revisions, "Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass", incorporated by reference approved for §63.10692.

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 these proposed rules.

One voluntary consensus standard was identified as applicable to this proposed rule. The standard ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses," is cited in this proposed 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 proposed 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 proposed rule.

For the methods required or referenced by this proposed rule, a source may apply to EPA for permission to use alternative test methods or alternative monitoring requirements in place of any required testing methods, performance specifications, or procedures under §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 proposed rule will not have

disproportionately high and adverse human health or environmental effects on minority or low-income populations because it increases the level of environmental protection for all affected populations without having any disproportionately

**National Emission Standards for Hazardous Air Pollutants for
Area Sources: Electric Arc Furnace Steelmaking Facilities
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high and adverse human health or environmental effects on any population, including any minority or low-income population. This proposed rule establishes national standards for the area source category.

List of Subjects in 40 CFR Part 63

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

Dated: September 12, 2007.

Stephen L. Johnson,
Administrator.

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

PART 63--[AMENDED]

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

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

Subpart A--[AMENDED]

2. Section 63.14 is amended 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 and subsequent revisions, "Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass", IBR approved for §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), 63.10702, 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 and subsequent revisions), dated November 2004 and in Update
IIIB, IBR approved for §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 ladle metallurgy operations?

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 [INSERT DATE OF PUBLICATION OF THIS PROPOSED RULE IN THE FEDERAL REGISTER].

(2) An affected source is new if you commenced construction or reconstruction of the affected source after

[INSERT DATE OF PUBLICATION OF THIS PROPOSED RULE IN THE FEDERAL REGISTER].

(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 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 6 months after the date of publication of the final rule in the **Federal Register**.

(b) If you own or operate an existing affected source, you must achieve compliance with the opacity limit in §63.10686(b)(2) or (c)(2) by no later than 2 years after the date of publication of the final rule in the **Federal Register** 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 the date of date of publication of the final rule in the **Federal Register**, you must achieve compliance with the applicable

provisions of this subpart by no later than the date of publication of the final rule in the **Federal Register**.

(d) If you start up a new affected source after the date of publication of the final rule in the **Federal Register**, you must achieve compliance with the 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. The requirements for a pollution prevention plan do not apply to the routine recycling of baghouse bags or other internal process or maintenance materials in the furnace. You must submit the scrap pollution prevention plan to the Administrator for approval. 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 according to standard industry practice, 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.

(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 each scrap provider, contract, or shipment, you must procure all motor vehicle scrap

pursuant to one of the compliance options in paragraphs (b) (1), (2), or (3) of this section. You may have one scrap provider, contract, or shipment subject to one compliance option and others subject to another option.

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

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

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

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

(C) Provisions for periodic inspection, site visits, or other means of corroboration to ensure that scrap providers and dismantlers are implementing appropriate steps to minimize the presence of mercury switches in motor vehicle scrap and that 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 Administrator 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 Administrator will credit all documented and verifiable mercury-containing components removed from motor vehicle scrap (such as sensors in anti-locking brake systems, security systems, active ride control, and other applications) when evaluating progress towards the 80 percent goal.

(v) For each scrap provider, you must submit semiannual progress reports to the Administrator that provide the number of mercury switches removed or the weight of mercury recovered from the switches, the 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) (A) of this section. The Administrator may change the approval status of a site-specific plan following 90-days notice based on the progress reports or other information.

(2) 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. The National Vehicle Mercury Switch Recovery Program

is an EPA-approved program 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 for each scrap provider which is a party to the agreement 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.

(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.

(c) Recordkeeping and reporting requirements. (1) 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 paragraph (b)(1) of this

section, including any compliance options in paragraphs (b) (2) and (3) of this section.

(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 certification that the recovered mercury switches were recycled at RCRA-permitted facilities. The semiannual reports must include a certification that you have conducted inspections, site visits, 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.

(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 ladle metallurgy operations?

(a) You must install, operate, and maintain a capture system that collects the gases and fumes from each EAF (including charging, melting, and tapping operations) and ladle metallurgy operation and conveys the collected gas stream 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 ladle metallurgy operation 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 ladle metallurgy operation(s), exhibit 6 percent opacity or greater.

(c) If you own or operate a new or existing affected source that produces less than 150,000 tons per year (tpy) of stainless or specialty steel, you must not discharge or cause the discharge into the atmosphere from an EAF or ladle metallurgy operation any gases which:

(1) Exit from a control device and contain in excess of 0.8 pounds of PM per ton (lb/ton) of steel; and

(2) Exit from a melt shop and, due solely to the operations of any affected EAF(s) or ladle metallurgy operation(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 ladle metallurgy operation according to the procedures in §63.7 and 40 CFR 60.275a using the following test methods in 40 CFR part 60, appendix A:

(i) Method 1 or 1A 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 to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B 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 to determine the moisture content of the stack gas.

(v) Method 5 or 5D 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 ladle metallurgy operations, 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 (40 CFR part 60, appendix A). When emissions from any EAF or ladle metallurgy operation 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 ladle metallurgy operation 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 ladle metallurgy operation 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 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, the owner or operator must conduct an initial performance test within 180 days of the rule compliance date.

(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 Requirements and Information

§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 the EPA Administrator in accordance with §63.10685(b)(2)"; or

(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".

(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 ladle metallurgy operation that conveys the collected gas stream 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 (3) of this section.

(1) 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.

(2) Approval of major change to monitoring under 40 CFR 63.8(f). A "major change to monitoring" is defined in 40 CFR 63.90.

(3) 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.

§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:

Capture system means the equipment (including ducts, hoods, fans, dampers, etc.) used to capture or transport particulate matter generated by an electric arc furnace or ladle metallurgy operation 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 ladle metallurgy operation(s).

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.

Free organic liquids means material that fails the paint filter test by EPA Method 9095B (incorporated by reference-see 40 CFR 63.14) after accounting for water using a moisture determination test by ASTM Method D2216-05 or subsequent versions (incorporated by reference-see 40 CFR 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.

Ladle metallurgy means a steelmaking process that is performed typically in a ladle after initial refining in an electric arc furnace, including argon-oxygen decarburization, alloy addition, temperature adjustment, and other processes that adjust or amend the chemical and/or mechanical properties of

steel. This definition does not include vacuum degassing.

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 is 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.

Scrap provider means the person (including a broker) who contracts directly with a steel mill to provide 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

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

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.

Citation	Subject	Applies to Subpart YYYYY?	Comment
§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 in §63.8(c) (4) (i)-(ii), (c) (5) and (c) (6), (d), (e), and (g) 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)		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), (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.