Federal Register

Thursday,
March 23, 2000

Part II

Environmental Protection Agency

40 CFR Part 63

National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production; Final Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[FRL–6513–8]

RIN 2060–AE77

National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action promulgates national emission standards for hazardous air pollutants (NESHAP) for new and existing sources at secondary aluminum production facilities. Hazardous air pollutants (HAPs) emitted by the facilities that would be regulated by this final rule include organic HAPs, inorganic gaseous HAPs (hydrogen chloride, hydrogen fluoride, and chlorine), and particulate HAP metals. Some of these pollutants, including 2,3,7,8-tetrachlorodibenzo-p-dioxin, are known or suspected carcinogens and all can cause toxic effects in humans following sufficient exposure. Emissions of other pollutants include particulate matter and volatile organic compounds.

These standards implement section 112(d) of the Clean Air Act (CAA) and are based on the Administrator's determination that secondary aluminum production facilities are major sources of HAP emissions and emit several of the HAPs listed in section 112(b) of the CAA from the various process operations found within the industry. The final rule will provide protection to the public health by requiring secondary aluminum production facilities to meet emission standards reflecting application of the maximum achievable control technology (MACT). Secondary aluminum production facilities that are area sources would be subject to limitations on emissions of dioxins and furans (D/F) only. Implementation of this rule will reduce emissions of all identified pollutants by about 14,200 megagrams per year (Mg/yr) (15,600 tons per year (tpy)) and HAP emissions would be reduced by about 11,300 Mg/yr (12,400 tpy).

EFFECTIVE DATE: This regulation is effective March 23, 2000. The incorporation by reference of certain publications listed in the rule is approved by the Director of the Federal Register as of March 23, 2000.

ADDRESSES: Docket. Docket No. A–92–61, containing information considered by the EPA in development of the promulgated standards, is available for public inspection between 8 a.m. to 5:30 p.m., Monday through Friday, except Federal holidays, at the following address: U.S. Environmental Protection Agency, Air and Radiation Docket and Information Center (6102), 401 M Street SW, Washington, DC 20460, telephone: (202) 260–7548. The docket is located at the above address in room M–1500, Waterside Mall (ground floor). A reasonable fee may be charged for copying docket materials.

FOR FURTHER INFORMATION CONTACT: For further information concerning applicability and rule determinations, contact the appropriate State or local agency representative. If no State or local representative is available, contact the EPA Regional Office staff listed in the Supplementary Information section of this preamble. For information concerning the analyses performed in developing this rule, contact Mr. Juan Santiago, Minerals and Inorganic Chemicals Group, Emission Standards Division (MD–13), Office of Air Quality Planning and Standards, U.S. EPA, Research Triangle Park, North Carolina 27711, telephone number (919) 541–1084, facsimile number (919) 541–5600, electronic mail address ''santiago.juan@epamail.epa.gov.''

SUPPLEMENTARY INFORMATION:

Regulated Entities

Entities potentially regulated by this action are secondary aluminum production facilities using clean charge, post-consumer scrap, aluminum scrap, ingots, foundry returns, dross, or molten metal as the raw material, and performing one or more of the following processes: aluminum scrap shredding, scrap drying/delacquering/decoating, thermal chip drying, furnace operations (*i.e.,* melting, holding, refining, fluxing, or alloying), in-line fluxing, or dross cooling. The EPA identified an estimated 3,000 facilities potentially affected by the rule (including sweat furnaces, die casting facilities, and foundries) which include one or more of the designated affected sources, 86 of which are estimated to be major sources. Most establishments are included in NAICS 331314 (Secondary Smelting and Alloying of Aluminum), although others may fall in NAICS 331315 (Aluminum Sheet, Plate, and Foil Manufacturing), NAICS 331316 (Aluminum Extruded Product Manufacturing), NAICS 331319 (Other Aluminum Rolling and Drawing), NAICS 331521 (Aluminum Die-Castings), and NAICS 331524 (Aluminum Foundries). Affected sources at facilities that are major sources of HAPs are regulated under the final rule. In addition, emissions of dioxins and furans (D/F) from affected sources at facilities that are area sources of HAPs are also regulated.

The final rule does not apply to manufacturers of aluminum die castings, aluminum foundries, or aluminum extruders that melt no materials other than clean charge and materials generated within the facility and that also do not operate a thermal chip dryer, sweat furnace or scrap dryer/delacquering kiln/decoating kiln. Secondary aluminum production facilities that are collocated with primary aluminum production are regulated under today's final rule.

Regulated categories and entities include:

Category	NAICS code	SIC code	Examples of regulated entities
Industry	331314	3341	Secondary smelting and alloying of aluminum facilities.
			Secondary aluminum production facility affected sources that are collocated at:
	331312	3334	Primary aluminum production facilities.
	331315	3353	Aluminum sheet, plate, and foil manufacturing facilities.
	331316	3354	Aluminum extruded product manufacturing facilities.
	331319	3355	Other aluminum rolling and drawing facilities.
	331521	3363	Aluminum die casting facilities.
	331524	3365	Aluminum foundry facilities.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. This table lists the types of entities that the Agency is now aware could potentially be

regulated by this action. Other types of entities not listed in the table could also be regulated. To determine whether your facility is regulated by this action, you should carefully examine the applicability criteria in § 63.1500 of the rule. If you have questions regarding the applicability of this action to a particular entity, consult the appropriate EPA Regional Office representative:

Region I—Janet Bowen, Office of Ecosystem Protection, U.S. EPA, Region I, CAP, JFK Federal Building, Boston, MA 02203, (617) 565–3595.

Region II—Kenneth Eng, Air Compliance Branch Chief, U.S. EPA, Region II, 290 Broadway, New York, NY 10007–1866, (212) 637–4000.

Region III—Bernard Turlinski, Air Enforcement Branch Chief, U.S. EPA, Region III (3AT10), 841 Chestnut Building, Philadelphia, PA 19107, (215) 566–2110.

Region IV—Lee Page, Air Enforcement Branch, U.S. EPA, Region IV, Atlanta Federal Center, 61 Forsyth Street, Atlanta, GA 30303–3104, (404) 562–9131.

Region V—George T. Czerniak, Jr., Air Enforcement Branch Chief, U.S. EPA, Region V (5AE–26), 77 West Jackson Street, Chicago, IL 60604, (312) 353–2088.

Region VI—John R. Hepola, Air Enforcement Branch Chief, U.S. EPA, Region VI, 1445 Ross Avenue, Suite 1200, Dallas, TX 75202–2733, (214) 665–7220.

Region VII—Donald Toensing, Chief, Air Permitting and Compliance Branch, U.S. EPA, Region VII, 726 Minnesota Avenue, Kansas City, KS 66101, (913) 551–7446.

Region VIII—Douglas M. Skie, Air and Technical Operations Branch Chief, U.S. EPA, Region VIII, 999 18th Street, Suite 500, Denver, CO 80202–2466, (303) 312–6432.

Region IX—Barbara Gross, Air Compliance Branch Chief, U.S. EPA, Region IX, 75 Hawthorne Street, San Francisco, CA 94105, (415) 744–1138.

Region X—Dan Meyer, Air and Radiation Branch Chief, U.S. EPA, Region X (OAQ–107), 1200 Sixth Avenue, Seattle, WA 98101–1128, (206) 553–4150.

Judicial Review

The NESHAP for secondary aluminum production was proposed on February 11, 1999 (63 FR 6946). Today's **Federal Register** action announces the EPA's final decision on the rule. Under section 307(b)(1) of the CAA, judicial review of the NESHAP is available by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit within 60 days of today's publication of this final rule. Only those objections to this rule which were raised with reasonable specificity during the period for public comment may be raised during judicial review. Under section 307(b)(2) of the CAA, the requirements that are the subject of today's final rule may not be challenged later in civil or criminal proceedings brought by the EPA to enforce these requirements.

Technology Transfer Network (TTN)

In addition to being available in the docket, following promulgation, a copy of the rule will be posted at the TTN's policy and guidance page for newly proposed or promulgated rules (http://www.epa.gov/ttn/oarpg/t3pfpr.html). The TTN provides information from EPA in various areas of air pollution technology or policy. If more information on the TTN is needed, call the TTN help line at (919)541–5384.

Outline

The following outline is provided to aid in reading this preamble to the final rule.

I. Background and Public Participation

The CAA (section 101(b)(1)) was created in part ''to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population.'' Section 112(b), as revised in 61 FR 30816 (June 18, 1996), lists 188 HAPs believed to cause adverse health or environmental effects. Section 112(d) requires that emission standards be promulgated for all categories and subcategories of ''major'' sources of these HAP and for ''area'' sources listed for regulation, pursuant to section 112(c). Major sources are defined as those that emit or have the potential to emit (from all emission points in all source categories within the facility) at least 10 tpy of any single HAP or 25 tpy of any combination of HAPs. Area sources are stationary sources of HAPs that are not major sources.

The CAA requires the EPA to promulgate national emission standards for sources of HAPs. Section 112(d) provides that these standards must reflect:

> * * * the maximum degree of reduction in emissions of the HAP * * * that the Administrator, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable for new or existing sources in the category or subcategory to which such emission standard applies (42 U.S.C. § 7412(d)(2)).

This level of control is referred to as MACT. For new sources, the standards for a source category or subcategory ''shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source, as determined by the Administrator'' (section 112(d)(3)). Existing source standards shall be no less stringent than the average emission limitation achieved by the best performing 12 percent of the existing sources for source categories and subcategories with 30 or more sources, or the average emission limitation achieved by the best performing 5 sources for sources or subcategories with fewer than 30 sources (section 112(d)(3)). These two minimum levels of control define the MACT floor for new and existing sources.

On July 16, 1992 (57 FR 31576), the EPA published a list of categories of sources slated for regulation under section 112(c). This list included the secondary aluminum production source category regulated by the standards being promulgated today. The statute requires emissions standards for the listed source categories to be promulgated between November 1992 and November 2000. On June 4, 1996, the EPA published a schedule for promulgating these standards (61 FR 28197). Standards for the secondary aluminum production source category covered by this rule were proposed on February 11, 1999 (63 FR 6946).

As in the proposal, the final standards give existing sources 3 years from the date of promulgation to comply. New sources that begin construction or reconstruction after February 11, 1999 must comply with the standards by the date of promulgation or upon startup,

whichever is later. The EPA believes these standards to be achievable by affected sources within the time provided.

Emission limits, operating limits, methods for determining initial compliance, as well as monitoring, recordkeeping, and reporting requirements are included in the final rule. All of these components are necessary to ensure that sources will comply with the standards both initially and over time. However, the EPA has made every effort to simplify the requirements in the rule.

The preamble for the proposed standards described the rationale for the proposed standards. Public comments were solicited at the time of proposal. To provide interested individuals the opportunity for oral presentation of data, views, or arguments concerning the proposed standards, a public hearing was offered at proposal. However, the public did not request a hearing; therefore, one was not held. The public comment period was from February 11, 1999 to April 12, 1999. A total of 36 comment letters were received. Commenters included industry representatives, State and local agencies, and environmental groups. Today's final rule reflects the EPA's full consideration of all of the comments. Major public comments on the proposed rule along with the EPA's responses to these comments are summarized in this preamble. A more detailed discussion of public comments and the EPA's responses can be found in the Response to Comment Document (Docket No. A–92–61).

II. Summary of Final Rule

A. Applicability and Definitions

The rule applies to the following affected sources at secondary aluminum production facilities: each new, existing or reconstructed aluminum scrap shredder, thermal chip dryer, scrap dryer/delacquering kiln/decoating kiln, group 2 (*i.e.,* processing clean charge only and no reactive fluxing) furnace, sweat furnace, dross-only furnace, and rotary dross cooler; each existing secondary aluminum processing unit (composed of all existing group 1 (*i.e.,* processing other than clean charge and/or performing reactive fluxing) furnace emission units and all existing in-line fluxer emission units); and each new or reconstructed secondary aluminum processing unit (composed of all new or reconstructed group 1 furnace emission units and all new or reconstructed in-line fluxer emission units which are simultaneously constructed or reconstructed after February 11, 1999) located at a secondary aluminum production facility that is a major source of HAP. The rule also limits emissions of D/F from each new, existing or reconstructed thermal chip dryer, scrap dryer/delacquering kiln/decoating kiln, and sweat furnace; and from each new, existing or reconstructed secondary aluminum processing unit that contains one or more group 1 furnace(s) not processing clean charge, and that is located at a secondary aluminum production facility that is an area source. The rule also applies to secondary aluminum production processes designated as affected sources if they are collocated at a primary aluminum production facility.

The rule does not apply to facilities that are aluminum extruding, aluminum die casting, and aluminum foundry facilities that (1) only process clean charge and material generated within the facility, and (2) do not operate a thermal chip dryer, sweat furnace, or scrap dryer/delacquering kiln/decoating kiln. Those aluminum extruding, die casting, and foundry facilities that purchase or otherwise obtain materials other than ''clean charge'' and operate a group 1 furnace or operate a thermal chip dryer, sweat furnace, or scrap dryer/delacquering kiln/decoating kiln are considered secondary aluminum production facilities under this rule and as such are subject to the requirements of this rule.

The EPA categorized process furnaces into two classes. A group 1 furnace includes any furnace that melts, holds, or processes aluminum containing paint, lubricants, coatings, or other foreign materials with or without reactive fluxing, or processes clean charge with reactive fluxing. Reactive fluxing means the use of any gas, liquid, or solid flux, other than cover flux, (including but not limited to chlorine gas and magnesium chloride) that results in a HAP emission.

A group 2 (clean charge) furnace processes only molten aluminum, T-bar, sow, ingot, billet, pig, alloying elements; thermally dried unpainted aluminum chips, aluminum scrap dried at 343 °C (650 °F) or higher or delacquered/decoated at 482 °C (900 °F); oil- and lubricant-free unpainted/uncoated gates and risers; and oil- and lubricant-free unpainted/uncoated scrap, shapes, or products (*e.g.,* pistons) that have not undergone any process (*e.g.,* machining, coating, painting, etc.) that would cause contamination of the aluminum (with coatings, oils, lubricants, or paints); and internal runaround. A group 2 furnace performs no fluxing or performs fluxing using only nonreactive, non-HAP-containing/non-HAP-generating gases (such as argon and nitrogen) or agents.

This rule allows permitting authorities the discretion to defer Clean Air Act (CAA) title V operating permitting requirements until December 9, 2004, for area sources of air pollution subject to this NESHAP. This deferral is an option at the permitting authority's discretion under EPA-approved part 70 permit programs and not an automatic deferral that the source can invoke. Thus, Part 70 permitting authorities are free to require area sources subject to this NESHAP to obtain title V permits. In areas where no approved part 70 program is in effect, and the part 71 permitting program is administered by EPA, we will defer the requirement for title V permitting for these area sources until December 9, 2004. In a separate action, the Agency proposed final amendments on August 18, 1999 to extend title V operating permit deferrals for area sources in five source categories (64 FR 45116).

B. Emission Limits and Requirements

The rule applies to major sources. In addition, the following emission sources located at secondary aluminum production facilities that are area sources of HAPs are regulated for emissions of D/F: new and existing thermal chip dryers, scrap dryers/delacquering kilns/decoating kilns, sweat furnaces, and secondary aluminum processing units containing group 1 furnaces that process other than clean charge. The emission limits for these units are summarized in Table 1 to subpart RRR in the final rule.

The particulate matter (PM) emission limits apply to new, reconstructed and existing aluminum scrap shredders, scrap dryers/delacquering kilns/decoating kilns, dross-only furnaces, rotary dross coolers, and secondary aluminum processing units at secondary aluminum production facilities that are major sources. Controlling PM emissions also controls emissions of HAP metals. A surrogate approach to emission limits is used to allow easier and less expensive measurement and monitoring requirements.

The rule limits total hydrocarbon (THC) emissions from new and existing thermal chip dryers and from new and existing scrap dryers/delacquering kilns/decoating kilns at secondary aluminum production facilities that are major sources. The THC represents emissions of HAP organics. Hydrogen chloride (HCl) emission limits apply to new, reconstructed and existing scrap dryers/delacquering kilns/decoating kilns, and secondary aluminum processing units at secondary aluminum

production facilities that are major sources. The HCl is itself a HAP, and it also serves as a surrogate measure of HAP inorganics including hydrogen fluoride (HF) and chlorine (Cl_2) emissions. The rule limits emissions of D/F from new, reconstructed and existing thermal chip dryers, scrap dryers/delacquering kilns/decoating kilns and sweat furnaces, and secondary aluminum processing units at secondary aluminum production facilities that are major or area sources. The D/F emission limit does not apply to facilities that are primarily die casting, extruding, or foundry facilities provided that they do not operate a thermal chip dryer, sweat furnace, or scrap dryer/delacquering kiln/decoating kiln, and do not process materials other than materials generated within the facility unless it is ''clean charge'' (defined in the rule). No surrogate is used for D/F emissions.

C. Operating and Monitoring Requirements

The rule includes operating and monitoring requirements for each affected source and emission unit within a secondary aluminum processing unit to ensure continuous compliance with the emissions standards. The rule incorporates all requirements of the NESHAP general provisions (40 CFR part 63, subpart A) except as provided in the appendix to the rule (Appendix A to subpart RRR). The operating and monitoring requirements are summarized in Table 2 to subpart RRR in the final rule.

D. Reconsideration of Standard for Die Casters and Foundries

EPA has based its MACT standard for aluminum die casting and aluminum foundries, as well as its assessment of the economic impacts on small businesses in these industries, on information on representative facility practices provided to EPA by these industries to date. However, affected facilities in these industries have expressed concern that the information and assumptions upon which EPA has relied may be incomplete or may not adequately represent the processes and emissions at such facilities. Accordingly, EPA has decided that it would be prudent to gather further information concerning facilities in the aluminum die casting and aluminum foundry industries and then to reevaluate MACT requirements and the economic impact on small businesses in these industries in light of this information.

Accordingly, EPA will issue within three months a proposed rule to remove the aluminum die casting and aluminum foundry industries from the present secondary aluminum standard, and a proposed rule to stay the applicability of the present standard to the aluminum die casting and aluminum foundry industries while EPA reevaluates the MACT requirements applicable to such facilities. EPA intends to take final action concerning the proposed stay as soon thereafter as practicable. EPA will also initiate a formal process to collect further information from the facilities in these industries on the activities in which they engage and the potential of these activities to contribute to HAP emissions. After evaluating this information, EPA will make a new determination concerning MACT requirements for both major facilities and area sources in these industries. EPA expects to adopt any alternative MACT standard applicable to these industries, and to take final action to remove the aluminum die casting and aluminum foundry industries from the current standard, within two years. Any alternative MACT standard adopted for these industries will provide three years from the date of promulgation for affected facilities to achieve compliance.

III. Summary of Responses to Major Comments

This section presents a summary of responses to selected comments. A more comprehensive comment summary and responses can be found in Docket No. A–92–61.

A. Applicability

Comment: Several commenters wanted to exempt unvented in-line flux boxes from testing and monitoring requirements and suggested regulating them via work practices based on the following statements:

- Emissions do not have the potential to exceed the emission limit because small amounts (< 0.2 lbs/ton) of chlorine gas flux are used;
- There is no acceptable method for sampling their fugitive emissions, so exclusion from testing and monitoring would improve the SAPU concept and substantially reduce costs; and
- Unvented in-line flux boxes are a pollution prevention design that operate within allowable OSHA limits and should be considered representative of the MACT floor when properly installed.

Response: Unvented in-line fluxers are capable of using and emitting chlorine and HCl in excess of the HCl emission standard for in-line fluxers, 0.04 lb/ton. One manufacturer of unvented in-line fluxers specifies a flux rate of 0.92 pounds chlorine per ton aluminum. The Agency has no reason to believe that fluxing at 0.2 to 0.9 lb/ton in an ''unvented'' in-line fluxer will meet the MACT floor level of emissions. Owner/operators can meet the emission limit by capturing and venting emissions to add-on controls or limiting the chlorine flux input to the fluxer. Limiting chlorine flux input to levels below the emission limit and monitoring flux addition is a work practice that would avoid the need for testing to demonstrate compliance. If testing is necessary, testing costs may be reduced through like-for-like testing allowed in the final rule, *i.e.,* with multiple uncontrolled flux boxes of same design and same operating practice, only one needs to be tested to demonstrate compliance.

The commenter's claim that such units cannot be tested is not valid. One unvented flux box at a facility that will be subject to this rule has been tested since proposal, and the results reported to the Agency. This particular unit was tested by measuring emissions at the point where fluxed metal exits the flux box. Another method of testing is to construct a temporary enclosure around the fluxer for the short duration of performance tests to capture fugitive emissions for measurement purposes (see Docket Item IV–A–1). Following the performance tests, flux usage must be monitored, and the flux box operating procedures must be maintained to ensure continuous compliance with the HCl standard.

With regard to ''unvented'' fluxers being a pollution prevention design that should be considered a MACT floor, commenters have referred to perceived lower emissions that presumably are achieved by lower and more efficient use of fluxing agents. The MACT floor technology for control of in-line flux boxes upon which the emission limit is based is a lime-injected fabric filter; this technology can achieve an emission limit of 0.04 lb/ton HCl. No data were provided by the commenters to demonstrate equal or lower emissions from ''unvented'' fluxers over the full range of input flux as compared to vented fluxers with the floor technology.

Comment: Several commenters opposed regulation of area manufacturing sources of D/F emissions, such as extrusion, die casting, and foundry facilities. Another commenter asserted that the EPA assumed area and major source D/F emitting processes emit at about equal rates per ton of feed, but data available to EPA for side-charge and roll top melters processing clean charge show those furnaces are not significant

sources of D/F as compared to furnaces charging dirty scrap. This commenter also contended the EPA assumption that 55 percent of all delacquering furnaces are located at area sources was the basis for regulating area sources. In comments on the Integrated Urban Air Toxics strategy, the commenter claimed there were inappropriate assumptions and errors in the inventories for sections 112(c)(6) and 112(k).

Response: The EPA acknowledges the error regarding delacquering furnaces in the inventory for the Integrated Urban Air Toxics strategy. The EPA recognizes that emissions of D/F from affected sources in secondary aluminum processing facilities are site-specific and depend on the type of materials (scrap) fed to the process, flux type, flux rate, and flux practices among other variables. For both major and area sources, the materials fed to the furnace and combustion processes contain varying amounts of oil (hydrocarbons) and coatings (hydrocarbons and chlorides). These compounds found in scrap containing oils and coatings, as well as some fluxes, are D/F precursors. Processes located at facilities that are area sources and using the same feed and flux materials as are used at major sources will emit D/F at levels equal to the same processes at major source facilities.

The EPA is not claiming that the total D/F emissions from affected sources located at facilities that are area sources are equal to the total D/F emissions from facilities that are major sources. However, there were also other commenters who mentioned large numbers of sweat furnaces in their States whose emissions were not counted, suggesting there are additional D/F emissions beyond those estimated in the national impacts at proposal. The EPA has developed an estimate of D/F emissions from sweat furnaces located at facilities that are area sources. That estimate is now included in the national impact calculations.

Comment: Numerous commenters representing aluminum extruders, aluminum die casters, and aluminum foundries stated that their facilities should not be regulated because they differ fundamentally from large secondary aluminum production facilities in emission potential, particularly D/F emissions. The commenters raised the following issues:

• Extruders encompass a broad spectrum of facilities and appear to fall within the broad definition of secondary aluminum production facilities, which range from relatively small facilities owned by large companies to facilities owned by independent business people, many of which the commenter claimed are small businesses.

• Some extruders, die casters, and foundries use no purchased scrap but do use internally generated scrap, while other facilities use small amounts of ''clean'' purchased scrap. Some are concerned that regulation may interfere with the effort to recycle at the plant, while others who purchase scrap see the regulation as creating a disincentive to recycle from outside the plant.

• Impurities in scrap are a principal source of D/F precursors. The commenters stated that extruders, die casters, and foundries cannot be large contributors to D/F emissions because they use or process only small amounts of higher quality scrap and do limited fluxing. One commenter argued that EPA should exclude extruders as small contributors to D/F emissions as in *Alabama Power* vs. *Costle,* 636 F.2d 323 (D.C. Cir. 1980) using the de minimis exception articulated in that case.

• Previous EPA publications support the distinction between die casters and secondary aluminum production facilities:

•• The Documentation for Developing the Initial Source Category List defines secondary aluminum production as facilities that smelt, and not including die casters;

•• An EPA new source review guidance memo (Treatment of Aluminum Die Casting Operations for the Purposes of New Source Review Applicability from, Thomas Curran, Director, Information Transfer and Program Integration Division, December 4, 1998) states ''die casting facilities typically need not be considered secondary metal production plants'' (the commenters argued that this memo acknowledges that die casters could engage in in-house recycling of castings and not be considered a secondary aluminum production facility); and

•• The Secondary Brass and Bronze New Source Performance Standard (NSPS) distinguishes between facilities that reclaim brass and bronze and those that create a finished product.

Applying the D/F standard to affected sources located at facilities that are area sources will subject facilities such as extruders, die casters, and foundries to the burden of title V permitting and MACT monitoring and reporting. One of these commenters stated that no environmental benefit will be gained from regulating area source aluminum production facilities since they already meet the emission limitation.

Response: The EPA has considered these issues and responds as follows to the points raised:

• With respect to the first issue, the EPA agrees that based on the definition of secondary aluminum production facility and current operations of some facilities that are extruders, those extruders would be subject to this rule. Numerous comments on the applicability section and definitions in the proposed rule were received and after consideration of those comments, the EPA has revised those sections of the final rule. As part of the revisions, the EPA has concluded that aluminum extruding, aluminum die casting, and aluminum foundry facilities that process no materials other than materials generated within the facility and ''clean charge'' (defined in the rule), and that do not operate a thermal chip dryer, sweat furnace, or scrap dryer/delacquering kiln/decoating kiln are not secondary aluminum production facilities and, therefore, are not subject to the requirements of the rule. Based on comments and information received in response to the proposal and subsequent meetings with the sources, the Agency believes that most small businesses will not fall under the definition of secondary aluminum production facility. Those aluminum extruding, die casting, and foundry facilities that do purchase or otherwise obtain materials other than ''clean charge'' and/or operate a thermal chip dryer, sweat furnace, or scrap dryer/delacquering kiln/decoating kiln are secondary aluminum production facilities and are subject to this rule.

The commenter's reference to some small facilities being owned by large companies is consistent with the EPA's knowledge that large companies in the secondary aluminum production industry engage in extruding operations. The commenter also claimed that some extruders are owned by independent businesses, many of which are small, however no specific quantitative data were provided to assist the Agency in assessing potential impacts.

• With regard to the second issue, the regulation discouraging recycling within the plant, the final rule does not prevent facilities that are area sources from using internally-generated scrap as charge to their group 1 furnaces. Regarding purchased scrap, although some extruders, die casters, and foundries use only small amounts of purchased scrap in their operations, other information provided to the EPA since proposal indicates that some of this type facility use more than half scrap (purchased and internally generated) as feed/charge in their operations (see Docket Item IV–E–2).

The issue with purchased scrap is the level of contamination with D/F

emission precursors. The EPA worked with industry representatives during the regulatory development phase to establish definitions and specifications for purchased scrap that would yield lower HAP emissions. Data collected indicated that the percentage of oil and coatings in scrap (hydrocarbon and chloride content) varies over a large range. No concurrence was achieved on the levels of scrap oil and coatings content that would reliably limit the processing of D/F precursors from affected sources, nor was concurrence achieved on a way to measure these levels of oil and coatings. Further, a similar discussion with industry representatives failed to reach a consensus on how to define limited reactive fluxing, the other important aspect of D/F emission potential. The EPA has concluded that facilities in which aluminum scrap is processed, whether purchased or otherwise acquired from outside the facility, fall within the secondary aluminum production source category.

• With regard to the third issue, these commenters assert that these facilities are not large contributors to D/F emissions because they purchase only small amounts of scrap or ''clean'' scrap, thus limiting the availability of D/F precursors in the affected sources. However, three factors (the total quantity of scrap fed to processes, the percentage of oil and coatings contamination of the scrap, and the flux rate) are significant variables that affect generation of D/F precursors. As mentioned above, some facilities use significant amounts of purchased scrap.

Regarding the comment citing *Alabama Power* vs. *Costle,* 636 F.2d 323 (D.C. Cir. 1980), and requesting de minimis exemption for extruders, EPA notes that CAA Section 112(c)(6) requires EPA to regulate sources accounting in the aggregate for more than 90 percent of certain dioxin and furan emissions, and that EPA cannot use a de minimis rationale to exclude area sources from regulation if this would be inconsistent with this statutory mandate.

• With regard to the fourth issue, documentation for the Source Category Listing states that the secondary aluminum production source category includes ''any facility engaged in the cleaning, melting, refining, alloying, and pouring of aluminum recovered from scrap, foundry returns, and dross, to form aluminum products such as alloy ingots, billets, notched bars, shot, hot metals, and hardeners.'' The documentation also states that the category includes pretreatment processes which include drying, burning, and sweating, among others. Although there can be differences in operations and products between secondary aluminum production facilities and those facilities that are primarily die casting, foundry, and extrusion facilities, for the purposes of this NESHAP, the Agency considers the die casting, foundry, and extrusion facilities that use aluminum scrap and other coated/painted aluminum bearing materials obtained from outside their facilities to be engaging in secondary aluminum production operations.

The EPA new source review guidance memo referenced by the commenter has, in addition to the commenter's quote, an extensive discussion of the fact that some facilities whose primary activity is die casting also perform secondary metals production from post-consumer scrap or unspecified aluminum scrap. This type of facility was identified in the memo as a ''nested'' secondary aluminum support facility. Such facilities also use processing equipment that is defined as an affected source under this rule. It is the acquisition of aluminum-bearing materials from outside the facility that are not ''clean charge,'' and the presence of affected sources that subject the facility to this rule. The difference in products is not the determining factor.

The final rule clarifies that aluminum die casting, aluminum foundry, and aluminum extrusion facilities that process only clean charge (as distinct from scrap) are not secondary aluminum production facilities (regardless of the remelting of internally generated scrap), provided they do not operate thermal chip dryers, scrap dryers/delacquering kilns/decoating kilns, or sweat furnaces. Aluminum die casting, extruding, and foundry facilities that process aluminum scrap, etc., in the furnaces (i.e., materials that are not clean charge) from outside the facility are secondary aluminum production facilities and subject to the final rule.

• Regarding the fifth issue, the burden of title V permitting, monitoring, and reporting for area sources, the final rule has been changed to allow permitting authorities the discretion to defer the title V permitting requirements for secondary aluminum production area source facilities that are not otherwise subject to title V permitting requirements under other regulatory actions. A further change that will reduce the burden for area sources is that they will only be required to conduct an initial performance test to demonstrate compliance. The requirement to repeat the performance test every 5 years has been eliminated for area sources.

Facilities that use add-on controls will be required to monitor parameters in accordance with their approved site-specific OM&M plan. Facilities that are area sources which use purchased scrap, but meet the D/F emission limit without add-on controls, i.e., use work practices, will also be required to monitor in accordance with their site-specific OM&M plan. Their monitoring provisions will include a calculation method for determination of scrap contamination levels, or a scrap inspection program to demonstrate they are not exceeding the scrap quantity and oil and coatings contamination levels, and flux rate established during the initial performance test.

The environmental benefit of controlling D/F from these affected sources is reduction of emissions of an environmentally persistent HAP. The benefits of monitoring for those sources who meet the limit without add-on controls is continuing evidence that the operating practices used during the compliance tests are maintained and emissions remain at a level below the limit.

Comment: Commenters desired to allow new or reconstructed units into the SAPU and encourage EPA to do it with a discount applied to the new unit's allowed emissions. The commenters stated that:

• It will allow sources to take advantage of the more efficient fluxing achievable in new flux boxes, in particular the ''unvented'' flux boxes.

• It promotes pollution prevention and is consistent with common sense initiatives and project XL innovations that allow plantwide applicability limits.

• It is not standard avoidance, but a more effective way of complying.

Response: To allow new or reconstructed units into a SAPU consisting of existing units would involve averaging the emission reductions achieved by new and existing affected sources. Since new and existing sources are subject to separate standards and must individually demonstrate compliance, creation of a source which has both new and existing emission units is not permitted by the CAA. Therefore, EPA will not allow new units to become part of a SAPU comprised of existing units. In order for new units to have the same benefits available to existing emission units, the Agency has revised the rule to allow for a new SAPU, that is composed entirely of simultaneously constructed new sources and/or simultaneously reconstructed sources, in addition to the SAPU for existing emission units.

Comment: In comments on combining and treating emissions from existing sources with those from new sources in a single control system:

• One commenter asked to group an existing or new furnace with a new in-line fluxer as a separate affected source (outside the SAPU). The combined unit would have the same limits as the furnace by itself for PM, HCl, and D/F (*i.e.,* no emission increment for the new fluxer). The industry claimed a significant improvement in fluxing efficiency with much lower emissions is associated with moving fluxing from the furnace to in-line fluxers.

• Another commenter requested that the rule be expanded to affirm that new emission units may be ducted to existing control systems if capacity is available or can be expanded to accommodate the new source.

Response: The problem with combining a new affected source with an existing affected source is that the new source is required to meet the specified emission limits, but once combined, the new source emissions are not measurable separately from the emissions from the existing source. As noted in the response to the previous comment, there is no legal construct under the CAA that permits combining control requirements for existing and new sources, therefore, the combination of an existing furnace and new in-line fluxer is not permitted.

The revisions to the final rule do provide for the establishment of a SAPU composed entirely of simultaneously constructed new emission units. This will allow the combination of a new furnace and new in-line fluxer as a SAPU, but not allow combining a new furnace or in-line fluxer with an existing SAPU.

Comment: Several commenters were concerned about the applicability of the rule to sweat furnaces:

• One commenter, a manufacturer of sweat furnaces, expressed concern about economic impacts on small aluminum reclamation operators. This commenter estimated that there are at least several hundred sweat furnaces manufactured by them currently being used nationally with capacities considerably less than the model sweat furnace used in EPA's analysis of impacts (5,000 tons/year). All of their furnaces are equipped with integral afterburners. This commenter also submitted an afterburner performance test report showing 97.8 percent removal of PM by the afterburner and claimed, but did not have measurements, that D/F removal should be similar. The commenter stated that the preamble did not show D/F results upstream of the afterburners or what destruction efficiency was achieved.

• Another commenter attached a brochure from a manufacturer claiming to have distributed over 2,000 small sweat furnaces. This commenter states that the proposal underestimated the number of these sources. The commenter believes that testing and control costs will eliminate small businesses from the market and suggested that regulations for area sources be withdrawn until small business, health, and environmental impacts have been reassessed. Another manufacturer of sweat furnaces suggested a technology-based standard for area source sweat furnaces with no testing required.

Response: The EPA has no test data to support a comparison between PM and D/F removal efficiencies. The D/F emission limit in the proposed and final rules has been proven to be achievable with MACT floor technology.

Based on the information contained in these comments, the EPA requested additional information and data from sweat furnace manufacturers to further assess impacts of regulating D/F emissions from the furnaces. The large number of units reported to be manufactured suggested large numbers of these affected sources are currently in operation. The EPA's further investigation found that although one manufacturer who commented only sells sweat furnaces with integral afterburners for emission control; that is not the case for all domestic manufacturers.

Due to the large number of these sources and the types of scrap materials processed, their D/F emission potential is significant both individually and in the aggregate. Recognizing this, the EPA considered additional regulatory strategies for sweat furnaces and performed an economic analysis to examine the impacts of those strategies. The conclusion from this analysis is that the cost of measuring D/F emissions from sweat furnaces through a performance test is significant in comparison to the cost of the furnace and afterburner. Based on this analysis the EPA has revised the rule to add an alternative means of compliance. Owner/operators electing to install and operate an afterburner meeting the design criteria of operating temperature of at least 1600 °F and a 2 second residence time will not have to conduct performance tests. The final rule retains the numerical standard so that owner/operators with control equipment that does not meet the design criteria have the option to test to show that the D/F emissions are below the limit. These revisions to the proposed rule, combined with many anticipated State permitting authority decisions to exercise their discretion to defer the requirement for title V permits, will significantly reduce the burden for both large and small businesses operating sweat furnaces. The economic impact analysis conducted for this regulation reports minimal economic impacts to owners and operators of sweat furnaces.

B. Definitions

Comment: Numerous comments were received on the definition of ''clean charge.''

• One commenter stated that the definition should include as clean charge, outside runaround that is contractually ensured to be clean.

• Other commenters stated that they support inclusion of ''non-coated runaround'' scrap in the definition, which may have small amounts of lubricant, and that some runaround is returned from customers. These commenters stated that the rule should allow external, preconsumer, and non-coated runaround scrap in group 2 furnaces.

• Several commenters requested that EPA define non-coated runaround scrap or redefine clean charge to allow scrap covered with lubricants or substances low in materials that could generate D/F. Many die casters use scrap generated on-site (miscast material, defective parts, and cutoffs of excess aluminum) that may have inorganic agents (clay or talc) or die release agents (heavy waxes or high molecular weight oils) that do not generate D/F when burned.

• Commenters representing extruders also wanted to revise the definition to include purchased scrap low in materials that contribute to D/F generation.

• Other commenters noted the proposed definition of clean charge allows only pure aluminum (pure aluminum is an incorrect term) that cannot be cast in a die casting machine. They stated that the definition of clean charge also restricts the use of chips that have not been processed in a chip dryer and this is a disincentive for exploration of new technology (presses, centrifuges, and washers) alternatives to chip drying. Some facilities that do dry chips do not heat to 343 °C because it may oxidize the metal. The temperature to which chips must be heated to qualify as clean charge is arbitrary and was not considered with any input from foundries and die casters.

Response: In regard to the first four comments on ''clean charge,'' EPA has reviewed and reconsidered the definition of clean charge. The

definition of clean charge at proposal erroneously included non-coated runaround scrap which commenters wanted clarified to include runaround from outside the facility (*i.e.,* external, relatively ''clean,'' preconsumer, non-coated runaround). The commenters acknowledged that the runaround may have ''small'' amounts of lubricant and coatings. Lubricants, oils, and coatings are D/F precursors. As explained in a previous response, the EPA worked with industry representatives during the regulatory development phase to establish definitions and specifications for purchased scrap that would yield consistently lower HAP emissions when charged to furnaces. Data collected indicated that the percentage of oil and coatings in scrap (hydrocarbon and chloride content) varies over a large range. No concurrence was achieved on the levels of scrap oil and coatings content, or a universal method of measuring the scrap content of oils/coatings, that would reliably limit the processing of D/F precursors from affected sources. Group 2 and those group 1 furnaces that are ''clean charge'' furnaces have no D/F emission limit. It is not consistent with the concept of clean charge furnaces to allow oil- and lubricant-bearing scrap purchased or otherwise obtained from outside the facility to be charged as clean charge. For this reason, the Agency has clarified that the definition of clean charge includes internally generated runaround. Internal runaround is defined in the final rule as scrap material generated on-site by aluminum extruding, rolling, scalping, forging, forming/stamping, cutting, and trimming operations that do not contain paint or solid coatings. Aluminum chips generated by turning, boring, milling, and similar machining operations that have not been dried at 343 °C (650 °F) or higher, or by an equivalent non-thermal drying process, are not considered internal runaround. Clean charge also does not include ''runaround'' scrap that is purchased or otherwise obtained from outside the facility.

Secondary aluminum production facilities may use painted and/or purchased runaround in group 2 furnaces by drying or delacquering it to meet the definition of clean charge, so as to eliminate the possibility of D/F formation in the furnace. Owner/operators may also charge painted and/or purchased runaround scrap to uncontrolled group 1 furnaces in a SAPU, provided they achieve an initial compliance demonstration and operate according to an OM&M plan approved by the permitting authority. For group 1 furnaces operated without add-on controls, the plan would likely include a site-specific scrap inspection or certification program of some type to indicate the contamination level and to define the percentage of scrap in the total furnace charge.

As noted in a response to a previous comment, facilities that are primarily aluminum die casters, foundries, and extruders that process only on-site materials or clean charge, and that do not operate a thermal chip dryer, scrap dryer/delacquering kiln/decoating kiln, or sweat furnace are not secondary aluminum production facilities and are not subject to this rule.

• With regard to the fifth comment, relating to the use of the term ''pure aluminum'' in the definition of ''clean charge'' in the proposed rule, the definition has been revised for the final rule to eliminate the word ''pure'' as a modifier of aluminum and instead describe it as oil- and lubricant-free uncoated/unpainted aluminum.

With respect to the issue of chip drying and the potential for oxidation of the aluminum, the final rule does not contain a minimum temperature requirement for thermal chip drying to make the chips ''clean charge.'' With regard to other chip processing, the Agency is not precluding new technology such as presses, centrifuges, and washers that may be capable of producing chips with no oily residue, thus qualifying those processed chips as clean charge.

C. Emission Standards and Operating Requirements

Comment: One commenter urged EPA to review the application of fluoride and chlorine fluxes in the secondary aluminum industry and to verify the appropriateness of HCl as a surrogate.

Response: Emission limits for HCl were proposed because test data indicate that HCl is emitted when chlorine and reactive chloride fluxes are used, and the technology representing the MACT floor for HCl removal, which was determined to be lime injected fabric filters, also achieves MACT floor level removal of chlorine and HF. Although some fluoride fluxes are used by the industry, differences in flux properties, cost relative to chlorine/chloride fluxes, and occupational health considerations related to in-plant particulate levels limit the amounts used, thus limiting the potential for HF emissions.

Comment: One commenter stated that emission limits do not reflect limits achievable using currently available technology, and that neither the limits nor the selected MACT accurately reflect MACT. The commenter stated that the MACT floor emission levels violate section 112 of the CAA in that they are not based on the best-controlled sources for new sources and are not at least as stringent as the best performing 12 percent for existing sources. According to the commenter, EPA should consider, but did not, emission limits more stringent than the floor. In a related comment, another commenter disagrees with the dioxin emission standards and states that they are unsupported by emissions data. According to the commenter, the method of developing the limit is inconsistent with the CAA and fails to recognize the law of averages and, in the case of SAPUs, is illegal because it permits individual group 1 furnaces to emit dioxin at levels in excess of the MACT floor.

Response: The commenters argued that EPA did not properly consider the available emissions data in establishing the MACT floor emissions limits. In the case, *Sierra Club* v. *EPA* (March 2, 1999), the DC Circuit held that because MACT standards must be achievable in practice, EPA must assure that the standards are achievable ''under most adverse circumstances which can reasonably be expected to recur'' (assuming proper design and operation of control technology). The court further held that EPA can reasonably interpret the MACT floor methodology language so long as the Agency's methodology in a particular rule allows it to ''make a reasonable estimate of the performance of the top 12 percent of units,'' that evaluating how a given MACT technology performs is a permissible means of estimating this performance, and that new source standards need not be based on performance of a single source. The court's decisions give EPA latitude in determining the MACT floor and the MACT floor emission limits. The EPA determined the MACT floor based on information available for each affected source and emission unit. At proposal, the EPA selected emission limits at the floor level of control, and the commenters provided no additional emissions data for any pollutant for EPA to consider. The emission standards are based on the emissions levels achieved through the application of MACT floor technologies and account for variation in the process and in the air pollution control device effectiveness.

Comment: Several commenters did not want an exceedance of an operating parameter to be a violation of an operating requirement. According to the commenters:

• The rule is not clear as to what constitutes a violation of the operating requirements.

• Operating parameters are only indicators of process and control performance, not a direct measure of excess emissions.

• An exceedance should not to be a violation until six exceedances occur in a 6-month period.

• No more than one violation should be counted per 24 hour period for any one parameter.

• The rule is not clear on whether a failure to take corrective action in response to an exceedance is a violation of the standard.

• A failure to initiate corrective action within 1 hour should constitute a violation.

• The rule should specify that if corrective action is begun within 1 hour and completed in accordance with the startup, shutdown, malfunction (SSM) plan, no violation has occurred.

Response: The EPA has considered the issue of a deviation being a violation and addresses the commenters' points as follows:

• With regard to the commenters' first point, the language in the final rule has been written to make clear that a deviation of an operating parameter is a violation of the operating standard. Each major source facility owner/operator is required to define the compliance parameters to be monitored in their OM&M plan. Then, during the initial performance tests, they are required to monitor and establish the value or range of the parameters. These values must be reported in the results of the test and notification of compliance status to the permitting authority and must be approved by the permitting authority. During subsequent operations, if the monitored parameters exceed the values or fall outside the range determined during the initial performance test, it is a violation of the operating requirements of the standard, unless it is the result of a malfunction to which the facility responds to in accordance with the SSM plan.

• Regarding the second point, the owner/operator may use continuous emission monitors (CEMs) as a direct measure of the emissions rather than using operating parameters if such CEMs can be demonstrated to the satisfaction of the permitting agency to reliably measure emissions.

• Regarding the third point, the EPA has no basis for allowing six deviations before considering the facility to be in violation. The owner/operator has ample opportunity to establish a range for the operating parameters and must thereafter operate within that range.

• Regarding the fourth point, any deviation of an operating parameter limit is a violation of the operating standard, regardless of when it occurs, unless it is the result of a malfunction to which the owner or operator responds in accordance with the SSM plan.

• Regarding the fifth and sixth points, the rule requires corrective action as a result of an operating parameter deviation or bag leak detector alarm. Corrective action must be conducted in accordance with the operations, maintenance and monitoring plan. Failure to take corrective action and to complete corrective action as expeditiously as practicable is a violation of the operating standard.

• Regarding the seventh point, a deviation that is the result of a malfunction, to which the facility responds in accordance to its SSM plan, is excluded as a violation.

Comment: Several commenters disagreed with the requirement that capture and collection systems meet the criteria established by the American Conference of Governmental Industrial Hygienists (ACGIH) for hooding and ventilation systems. The commenters claimed EPA has not shown that MACT floor facilities' hooding and ventilation systems met ACGIH criteria so that the requirement is arbitrary; EPA should show that the facilities met the ACGIH criteria. Several commenters stated that because EPA has no data to support the requirement for ACGIH criteria for capture and collection equipment for existing sources, they recommended the requirement apply only to new sources. Other commenters stated that although currently protecting work space air quality, most existing systems would not meet ACGIH criteria, meaning significant expenditures to upgrade those systems. The EPA likely did not account for these costs in their economic analysis; they agree with the commenters who stated that the requirement should be limited to new or modified sources.

Response: For affected sources and emission units that require an air pollution control device, a capture and control system meeting ACGIH criteria is necessary for occupational safety and to meet the emission standards. The emission standards are based on systems that effectively capture and contain emissions at the source (minimizing fugitives) and convey them to the control device for removal. In addition, a capture and control system meeting ACGIH criteria with good hooding design will result in a lower volume of exhaust air to be treated, and in many cases, a smaller, lower-cost control device. The EPA considers an ACGIH capture and collection system to be part of MACT floor technology for affected sources with add-on controls.

Comment: One commenter supported not counting false alarms of the bag leak detection system in the alarm time. Another commenter stated that the monitoring and reporting requirements are reasonable in order to confirm compliance, with the exception of bag leak detectors. The commenter stated that a facility should not be penalized for rapid response to an alarm and recommends that the actual time be counted and delete the 1-hour minimum alarm time.

Response: The rule has been clarified so that false alarms are not counted and a 1-hour minimum has been retained in the final rule to encourage proactive fabric filter maintenance.

Comment: Several commenters did not want the labeling requirement. They argued that, (1) The inspectors can get this information from the OM&M plan in the office before entering the plant; (2) the labels will be hard to maintain in a plant environment; (3) it creates opportunity for violation with no commensurate benefit and increases/duplicates regulatory paperwork; and (4) the labeling requirement generates safety concerns.

Response: The EPA believes that labeling requirements are necessary for enforcement and operating purposes and should be retained due to the complexity of the industry and the numerous possible facility configurations (and emission units that could be combined within a SAPU). Labeling will help prevent operators from charging the wrong materials or improperly operating the units and will help inspectors in identifying units and determining if the units are being properly operated. However, EPA understands industry's concerns over the implementation of the labeling requirements and has revised the proposed rule to require labeling only at those affected sources and emission units that can be operated in more than one mode and/or which are physically very similar, including group 1 furnaces with and without add-on controls, group 2 furnaces, scrap dryers/delacquering kilns/decoating kilns, and in-line fluxers. In addition, the final rule requires that labels contain only the identification of the unit and the applicable operational standards. These revisions respond to industry's concerns regarding increased regulatory paperwork with no commensurate benefits while maintaining enforceability of the standards since both operators and inspectors will

clearly know the operating standards/requirements of each emission unit.

Comment: Several commenters disagreed with the requirement to maintain the same flux injection schedule as used in performance tests. One commenter stated that they should be given flexibility to develop schedule procedures during performance tests subject to approval by the permitting authority. According to one commenter, the requirement to maintain the same flux injection schedule as used in performance tests, which would be done under worst case conditions, would result in an increase in HCL emissions and cause other negative environmental impacts. Another commenter stated that this requirement will cause increased HCL emissions for uncontrolled group 1 furnaces and will restrict work practices to minimize chlorine use. The commenter suggested a separate provision to maintain the same flux injection schedule for baghouses with semi-continuous lime feed systems.

One commenter wanted flux monitoring on a monthly basis and the schedule requirement eliminated. The rule could be interpreted to preclude a system with computerized monitoring of furnace operations/controls with correlated emissions and online continuous emissions calculations.

Response: Owners or operators are required to conduct performance tests under the highest load or capacity reasonably expected to occur. This is represented by the maximum reactive flux rate. The final rule provides that sources may flux (on a lb per ton of feed/charge basis), up to the limit established during a successful performance test, and does not require maintaining the same schedule. The rule also does not require owners or operators to use more flux than necessary to produce a saleable product. These requirements will not lead to increased HC1 emissions.

The standards for emission units performing reactive fluxing, all of which are included in the SAPU affected source, were developed using emissions data gathered during a complete cycle. Because of the difference in cycle times and schedules, the EPA recognized the need to develop emission limits for SAPUs that would account for overlapping cycles of the emission units included in the emissions calculation and a 3-day, 24-hour rolling average was selected as the maximum averaging time required. Reactive flux monitoring on a monthly basis is not acceptable in that it is inconsistent with the emission standards based on 3-day, 24-hour rolling average and the established monitoring parameter values or ranges derived during the performance test. Monitoring over a period consistent with the basis of the emission standards provides the necessary evidence of continuous compliance.

The issue of flux injection rate and schedule is related to lime injection practice for the fabric filter control systems. The final rule provides operating requirements for the floor technology, which is continuous lime injection systems with lime-injected fabric filters. Owners/operators who want to use intermittent lime feed systems (as opposed to continuous injection) must show compliance with the emission limits and must apply to the permitting authority for approval of an alternative lime addition monitoring procedure. The owners/operators must provide information as necessary to show that the applicable emission limits will be achieved on a continuous basis.

The rule does not preclude the use of computerized systems that correlate controls and operating practices with emissions and calculate emissions on a continuous basis once this approach is approved by the permitting authority and incorporated into the site-specific OM&M plan.

Comment: Several commenters disagreed with the +25 °F associated with the inlet temperature limit for fabric filters established during the initial performance test. According to two commenters, the operating temperature of these fabric filters will vary more than 25 °F due to changes in ambient temperatures. This creates an unnecessary risk of violation and provides no environmental benefit. Another commenter stated that instead of the temperature requirement, electrochemical HCl sensors for automatic lime feed adjustment and other automatic systems should be considered to allow greater operating flexibility. One commenter stated that in-line fluxers are not regulated for dioxin emissions and therefore do not need a temperature limit.

Response: The proposed rule has been changed to eliminate this requirement for fabric filters only controlling in-line fluxers since these units operate at temperatures that are close to ambient temperature. For other affected sources and emission units, or fluxers ducted to a device co-controlling other sources, the +25 °F limit is retained. Operators would be expected to add dilution air or water sprays as required to maintain the fabric filter inlet temperature within the range. Also, performance tests could be conducted at worst case conditions. For example, performance tests could be conducted so that the inlet temperature is much higher than the normal operating inlet temperature (450 °F vs 380 °F, for example, thus providing a larger operating range). Dioxin formation is strongly influenced by the temperature at the fabric filter inlet, and temperature control is the means of preventing D/F formation (and enhancing HCl removal) in the fabric filter. Temperature is also a parameter which is monitored to ensure continuous compliance between periodic performance tests. This is because it is an indicator of control device performance for D/F and HCl emissions.

Comment: According to one commenter, owners and operators could demonstrate compliance with the HCl emission limit by monitoring total chlorine input and showing it to be less than the emission limit.

Response: The EPA agrees that, for in-line fluxers and group 1 furnaces processing only clean charge, operators may demonstrate compliance (in lieu of performance tests) by demonstrating that reactive flux injection is limited to a rate which would not exceed the standard if emitted in its entirety.

D. Monitoring Requirements

Comment: Several comments were received that requested more flexibility in the monitoring requirements aimed at reducing the burden to the industry:

- One commenter stated that the operating and monitoring requirements of §§ 63.1506 and 63.1510 are too prescriptive and not consistent with preamble statements regarding flexibility.
- Several commenters stated that EPA should allow alternative site-specific monitoring and operating plans to improve feasibility and cost effectiveness.
- Another commenter stated that separate provisions should be included in each of §§ 63.1506 and 63.1510 allowing facilities to develop alternative procedures approvable by the applicable permitting agency.
- Two commenters claimed the provisions will result in burdensome, labor-intensive requirements without commensurate benefit to the environment.
- Another commenter with a rolling mill facility claimed their plant is operating at demonstrated low emission levels and seeks monitoring plan flexibility to allow their facility to continue in its present mode. Referring to this plant, another commenter stated that the plant has developed a correlation between opacity and PM which has been used for over a year, in accordance with a regulatory order. This monitoring has been approved by EPA

and the local agency and is federally enforceable.

Response: The final rule has been written to incorporate more flexibility in the monitoring requirements:

• With regard to the commenters' first, second, and third points, the final rule includes explicit provisions for obtaining approval to use alternative monitoring procedures and lists the types of information needed in the application. It includes data or information to justify the request such as technical or economic infeasibility, a description of the proposed alternative monitoring requirements including operating parameters and how the limit for SAPUs (if SAPUs are included in the application) will be calculated, and information as to how the alternative monitoring requirements would provide equivalent or better assurance of compliance with the standards.

In addition, in response to the numerous comments received regarding the proposed monitoring and operating provisions, the final rule has been written to provide more flexibility to individual facilities in developing their OM&M plans and for approval of site-specific monitoring and operating alternatives, within EPA guidelines, by the permitting authority. Additional comment responses below discuss some specific changes made in the final rule.

• Regarding the fourth point, the monitoring requirements are necessary to demonstrate continuous compliance and, as such, are environmentally beneficial. Most, if not all, of the monitoring data collection or logging can be computerized and, therefore, will not be labor intensive.

• Regarding the fifth point, specifically, the final rule allows the owner/operator of a plant to apply to the Administrator for alternative monitoring, if necessary, or document their current procedures in the facility OM&M plan. The OM&M plan is submitted to the permitting authority for review and approval. The final rule gives more flexibility, for example, through guidance for scrap inspections (used in operating limits and monitoring) that is less prescriptive and more options for lime injection monitoring.

Comment: Several commenters stated that the monitoring frequencies and data quality objectives are too restrictive and specific for application across a diverse industry and bear no relevance to the emission standards or ensuring proper operation of emission controls. Another commenter agreed with the selection of the monitoring parameters in the proposed rule, but stated that the monitoring intervals are too frequent.

Response: Monitoring frequency requirements are related to the need for evidence of continuous compliance, and frequent readings are essential to provide the demonstration. However, the final rule changes the frequency of recording monitored parameter values from that proposed. For example, the frequency of recording fluxing rates has been reduced by requiring readings only during periods when flux additions are occurring. Additional options included for monitoring free-flowing lime change those monitoring and frequency requirements and increase the monitoring options. Furthermore, the provisions for site-specific OM&M plans approved by permitting authorities allow opportunity for adjustment of monitoring, within EPA guidelines, to fit site-specific conditions. Comments dealing with data-quality objectives for specific monitored parameters are addressed in more detail below.

Comment: Several commenters argued that the requirements for accuracy of 1 percent when applied to feed/charge weight and flux injection rates are overly stringent and burdensome and create an unnecessary increment for a violation.

Response: The EPA has retained the 1 percent accuracy requirement in the final rule. However, the EPA recognizes there may be situations in which 1 percent accuracy for feed/charge weight and chlorine flux injection rate is not workable. An example of this may be operating at a very low flux injection rate. The final rule has been written to allow the permitting authority to approve alternative accuracy requirements for monitoring equipment, on a site-specific basis, in situations where the 1 percent accuracy requirement is not workable and where the owner/operator provides data/information to substantiate that emission standards will be achieved on a continuous basis.

Comment: In comments on accuracy of performance test measurements and feed/charge weight measurements:

• One commenter stated that the EPA reference methods are not better than 10 percent repeatable, so the requirement for 1 percent accuracy in charge weight is arbitrary and unnecessarily burdensome.

• Another commenter requested less stringency in the accuracy requirement for the sources whose emissions are well under the emission limit, noting that the expected accuracy of Methods 26A and 5 is 10 percent. This commenter suggested that the charge weight monitoring be restricted to only those sources having to comply with a lb/ton emission limit.

• An additional commenter stated that an aggregate accuracy of 5 percent is more representative of reproducible floor practice.

• Another commenter wanted the weight monitoring not to be required for each emission unit, but allowed to be aggregated across emission units.

Response: The EPA considered the measurement accuracy issue raised by the commenters and addresses their points as follows:

• With regard to the commenters' first, second, and third points concerning the test method accuracy, the EPA notes that the variability in the test methods, process, and control equipment is incorporated into the testing results upon which the emission limits are based. The limits have been established to accommodate that variability. Given that the emission limits are on a lb-of-emission/ton-of-feed (or charge) basis, it is also in the owner/operators best interest to make an accurate weight determination because inaccurate measurements could cause them to be out of compliance. As noted in the previous response, the final rule provides additional flexibility with regard to feed/charge measurement in situations where the 1 percent accuracy is not workable.

• Regarding the fourth point, weight monitoring is required because the emission limits are based on lb/ton of feed/charge or product. Under the site-specific OM&M plans, individual emission units of the same type may have different allowable emission rates based on the presence of add-on control devices, fluxing practice, and feed/charge practices. The only way to determine compliance is to monitor weights for individual emission units.

Comment: Commenters wanted the compliance date to be 3 years after promulgation rather than ''on or after the date of the initial performance test.'' They argued that:

• Carrying out performance tests prior to the end of 3 years is essential to completing the monumental job; but they do not like having to comply ''on and after the date of the initial performance test'' which could be the emission test program for the SAPU.

• The submittal deadlines for the OM&M plan, the SAPU emission plan, and the site-specific test plan are inconsistent with each other; they wanted EPA to remove all the interim compliance requirements to give the necessary flexibility to evaluate and agree with the permitting agency on compliance requirements before the 3-year deadline.

Response: A facility must be in compliance on and after the date of the

initial performance test. The date of that initial performance test, for existing sources, may be up to 3 years after the promulgation date of the standard. For existing SAPUs, the initial performance test is considered to be the date of approval of the OM&M plan by the permitting authority.

In response to the comments regarding the inconsistent plan requirements and dates for submittal, the EPA has revised and clarified those requirements. The final rule requires the owner/operator of a SAPU to perform tests that will define the operating modes of the controlled and uncontrolled emission units within the SAPU, and to define which parameters to monitor to demonstrate continuous compliance. These same tests can be used to measure the emission rates from the affected sources and emission units for performance test purposes. A site-specific test plan for this program must be submitted to the permitting authority for review and approval before the tests are conducted. The plan must identify the parameters to be monitored during the tests, the test methods to be used, the units to be tested, and planned operating modes for each unit during the tests. After the test plan has been approved by the permitting authority, the owner/operator is required to notify the Administrator of the test dates.

The results from this test program, including the emission rates measured, values of parameters monitored, monitoring parameters selected by the owner/operator for compliance demonstration, and values of the parameters to be used as operating limits must be submitted to the permitting authority for review and approval. As a result of the review, the permitting authority may request changes to selected monitoring parameters or values of the parameters used for compliance demonstration if it is determined the parameters or values do not provide an adequate means of demonstrating continuous compliance. When all of these elements are approved by the permitting authority, the owner/operator prepares an OM&M plan using the approved monitoring scheme and submits the OM&M plan to the permitting authority for approval. The compliance date is the approval date of the OM&M plan. The approved OM&M plan will be included by reference in the operating permit.

The latest date for an existing facility to achieve compliance is 3 years from the date the standard is promulgated. The OM&M plan must be submitted to the permitting authority for approval no later than 6 months before the planned compliance date. Given these conditions and lead times for preparing plans and conducting tests, it is clear that owner/operators must act expeditiously to develop test plans and execute the test programs.

Facilities that choose to comply by demonstrating that each emission unit in the SAPU meets the emission limit for that unit, and by monitoring the parameters as designated in the rule for each emission unit and control device, are also required to develop a test plan and notify the permitting authority of the test date(s).

Comment: One commenter stated that inspection of lime feed systems once per 8-hour shift and more frequently when found to be plugged may be difficult, arguing that visual inspection at silo and bin tops is dangerous. The commenter suggested alternate language that reduces the required checks from every 4 hours for 3 days, if plugged, to checks for only 2 consecutive 4-hour periods following restoration to free flow. Another commenter also disagreed with the requirement to inspect every 4 hours for 3 days, even if the problem is corrected earlier.

Response: Based on the comments received the final rule has been written to provide other options to demonstrate free-flowing lime. In addition to the option to perform visual checks to verify free-flowing lime, the owner/operator may use devices such as load cells to demonstrate this via weight changes in lime feed bins, use pressure sensors in pneumatic conveying systems to distinguish low or ''no flow'' conditions, continuously monitor lime feed rate, use an HCl monitoring device at the fabric filter outlet, or another method subject to approval by the permitting authority.

Comment: One commenter requested that lime feeder inspection requirements and corrective action requirements demonstrate compliance and that discovery and correction of a blockage or feeder setting drift not be an automatic violation. The commenter suggested that the rule be rewritten to require corrective action when necessary and not to make blockage or feeder setting drift a violation.

Response: As noted in the response to the previous comment, the final rule provides additional options for monitoring the lime system to maintain free-flowing lime. One of those options, the HCl monitor, provides a direct indication of continued effective operation of the control system which is the desired goal of any monitoring option selected. Other options that detect lime feeder blockages are not direct and immediate performance indicators, so the time until remedied is a critical variable. For this reason, EPA requires maintenance of free flowing lime in the feed hopper or silo at all times. Blockages that occur as a result of equipment breakage or failure would potentially fall under the malfunction provision, and if determined to be a malfunction, would be covered by the SSM plan and would not be a violation, if corrected in accordance with the SSM plan. However, continued and frequent blockages indicate a system design and operating problem rather than a malfunction.

Comment: Several commenters objected to the proposed regulatory requirements for scrap inspection programs. They stated that the requirements are too onerous, expensive, complex and overly prescriptive, and further, some provisions are not technically feasible or cannot be reasonably met. Three of the commenters suggested that the broadly stated scrap inspection requirements provided in the preamble to the proposed rule could be acceptable, and that approval of site-specific plans by the permitting authority would be a more acceptable requirement. Two commenters also stated that the scrap should not have to be inspected if the necessary control systems are in place. According to these commenters, inspection is only needed for control by work practices or pollution prevention. They stated that the EPA needs to be clearer as to which sources are covered; the preamble says all furnaces and the rule says uncontrolled group 1 furnaces.

Response: The scrap inspection program requirements apply only to those facilities that elect to use such a program as a monitoring technique to ensure the oil and coatings content of scrap charged to a group 1 furnace stays below levels established during the performance tests. Such a program could apply to facilities that have only uncontrolled group 1 furnaces, or facilities that have both add-on controlled and uncontrolled group 1 furnaces.

As a result of the numerous comments received regarding the scrap inspection program elements, the EPA has modified the proposed rule. The detailed requirements contained in the proposed rule have been deleted and the general scrap inspection guidelines provided in the proposal preamble have been adopted. This change will provide more flexibility to owner/operators to tailor the program to specific conditions for their facility. The scrap inspection program, if selected by the facility, will become part of the site-specific OM&M plan. The specific inspection program elements, which must be consistent

with guidance in the rule, will be approvable by the permitting authority as part of the site-specific OM&M plan and will be enforceable under the facility's permit.

Comment: Several commenters wanted EPA to allow testing one representative unit from a group of similar sources, that is one unit to represent similar furnaces or in-line fluxers, instead of having to test every emission unit. One of the commenters stated that this practice should be allowed for either controlled or uncontrolled units. Several commenters claim this approach is widely used under existing State permits and has been used by EPA in other NESHAPs. Commenters claimed that it would significantly reduce costs, provide flexibility, and provide more cost-effective test programs.

Response: Based on the comments received, the EPA is modifying the testing requirements to allow representative or similar uncontrolled emission units that use like charge and flux materials to be tested, instead of requiring each unit to be tested. Testing of representative or similar units may be used provided approval is obtained from the applicable permitting authority. The representative unit selected for testing must be subject to the same work practices and be of the same design as those emission units it is representing for test purposes. The representative unit must be tested under worst case conditions. It is up to the owner/operator to define the worst case scenario(s) for review and approval by the permitting authority. At least one of each different style unit must be tested. Each add-on control device controlling emissions from an affected source or emission unit must be tested.

E. Impacts

Comment: Several commenters disagreed with the results of EPA's regulatory impact analysis and believed that EPA underestimated the cost of the rule. The commenters identified the following as deficiencies in the impact analysis:

- The EPA underestimated the number of area sources that would be impacted as a result of the area source D/F standard. In particular, owners or operators of sweat furnaces, die casting facilities, foundries, and extruders were identified as potentially affected area sources that were either excluded or not adequately accounted for in the analysis. Furthermore, the commenters claimed that the proposed monitoring, recordkeeping, and reporting, and title V permit requirements would impose a significant burden on area sources.
- The EPA understated the number of small businesses that would be affected by the rule and, as a result, EPA's analysis of impacts on small entities was not adequate. According to several of the commenters, the small business impacts analysis underestimated small business impacts because it did not accurately account for sweat furnaces, die casting facilities, foundries, and extrusion facilities, many of which are small businesses and would be subject to the rule. The commenters also claimed that the proposed monitoring, recordkeeping, reporting, and title V permit requirements would impose significant burdens on these small businesses. They argued that the rule would have a significant impact on a substantial number of small entities and that EPA must, therefore, perform a regulatory flexibility analysis as required by the Regulatory Flexibility Act.
- Commenters took issue with the methods and assumptions used by EPA to estimate the costs and economic impacts of the rule, including failure to adequately account for the large number of affected area sources, title V permitting costs for area sources, and underestimating performance test costs due to the assumption of shared stacks. As a result, the commenters state that EPA's costs and economic impact estimates are too low. They argue that the annualized cost of the rule exceeds $100 million and is, therefore, a significant regulatory action under Executive Order 12866.

Response: Based on the numerous comments received regarding the regulatory impact analysis, the EPA has reviewed, revised, updated, and refined the analysis to address commenters' points:

- With regard to commenters' first point, for the proposed rule, the EPA used the information available on area sources of D/F emissions and requested additional information on the number of area sources, levels of emissions from these sources, the level of control currently employed, and the number of area sources that are also small businesses. In response to the comments on the proposed rule and using the information provided by commenters on sweat furnaces, die casting facilities and foundries, EPA has reassessed the cost of the rule on area sources (see Docket No. A–92–61). In addition, EPA has clarified and, in some cases, revised the proposed rule to address commenter concerns that the proposed rule will be overly burdensome for area sources. These changes include clarifications or revisions in the applicability of the rule, the performance testing requirements, the scrap inspection program, and giving the State permitting authorities the discretion to defer the requirements for a title V permit for area sources. On the basis of the information submitted to EPA during the public comment period and changes made to the proposed rule that narrow the applicability to facilities that are area sources, primarily aluminum extruders, die casters, and foundries, the EPA believes the number of those facilities subject to the rule to be small.
- Regarding the commenters' second point, after reviewing the comments on the small business impacts of the proposed rule and using the information on sweat furnaces, die casting facilities, and foundries provided by commenters, EPA has refined its small business impacts analysis (see Docket No. A–92–61). The analysis shows that the final rule will not have a significant impact on a substantial number of small businesses; therefore, no regulatory flexibility analysis is required. The small business impact analysis shows that the impact to small businesses operating sweat furnaces, and to small firms in the aluminum die casting and aluminum foundry industries is minimal.
- Regarding the commenters' third point, EPA considered the comments objecting to the costing methods and assumptions it used to estimate the impacts of the proposed rule. The EPA has reexamined its cost estimating procedures and believes that overall it has overstated the cost of the proposed rule. However, in view of the changes in the proposed rule and to incorporate revisions in the estimated number of affected area sources, EPA has updated its estimate of the cost of the rule (see Docket No. A–92–61). The revised cost of the rule is below the $100 million per year threshold, therefore, the rule is not a significant regulatory action as defined under Executive Order 12866.

IV. Summary of Changes Since Proposal

In response to comments received on the proposed rule and after further analysis, the following changes have been made:

Applicability. The applicability section has been clarified to distinguish the affected sources at major sources from those at area sources. Chip dryers and scrap shredders have been changed to ''thermal chip dryers'' and ''aluminum scrap shredders'' to more precisely define the type of equipment covered by the rule. A new secondary aluminum processing unit (SAPU) has been added to the list of affected sources; new group 1 furnaces and new

in-line fluxers have been removed from the list of affected sources but are covered as emission units within new SAPUs. This change enables simultaneously constructed new emission units to meet emission standards on an analogous basis to existing SAPUs and does not affect the required level of control or continuous compliance. Subject to certain limitations, manufacturers of aluminum die castings, aluminum foundries, and aluminum extruders have been exempted from the rule. The final rule contains explicit language exempting research and development equipment.

The final rule also gives States the discretion to defer the requirement for secondary aluminum production area sources to obtain a title V permit. This discretion may reduce the burden of the rule on both area sources and States, without decreasing control requirements or increasing emissions.

The EPA's authority for establishing the deferrals is section 502(a) of the CAA, which allows EPA to exempt non-major sources from the permitting requirement if EPA finds that compliance with title V is impracticable, infeasible, or unnecessarily burdensome on the sources. The General Provisions implementing section 112 of the CAA provide that unless EPA explicitly exempts or defers area sources subject to a NESHAP from the title V permitting requirement, they are subject to permitting (40 CFR section 63.1(c)(2)(iii)). As a result, under 40 CFR sections 70.3(b)(2), 71.3(b)(2), and 63.1(c)(2), we are to determine whether area sources will be required to obtain title V permits when we adopt the underlying NESHAP. The EPA has previously allowed permitting authorities to defer permit applications for area sources in a series of rulemakings (60 FR 29484, June 5, 1995; 61 FR 27785, June 3, 1996; and 64 FR 37683, July 13, 1999).

When EPA initially established the ability of permitting authorities to defer area sources from title V, the Agency stated that it would decide whether to adopt permanent exemptions by the time deferrals expired, and that it would continue to evaluate permitting authorities' implementation and enforcement of the NESHAP requirements for area sources not covered by title V permits, the likely benefit of permitting such sources, and the costs and other burdens on such sources associated with obtaining title V permits. Many permitting authorities are struggling to issue in a timely fashion initial title V permits to major sources and other sources that have been subject to the permitting requirements since the beginning of the program, and we are concerned about the impact on permitting authorities of subjecting area sources to the permit application deadlines. Therefore, to be consistent with the previously allowed deferrals of permit applications for area sources by permitting authorities, the most reasonable approach is to defer the requirement for title V permitting for area sources in the secondary aluminum production source category until December 9, 2004.

As a result, today's action defers the requirement for title V permitting for area sources in the secondary aluminum production source category until December 9, 2004. The deferral is not an automatic benefit provided to the sources. Rather, permitting authorities may exercise their discretion to either defer the area sources, or to require them to apply for and obtain part 70 permits. Some permitting authorities may decide that area sources in the subject source category warrant permitting mechanisms (such as the use of general permits or ''permits by rule'') that minimize the burden on both the permitting authoring and the source.

For area sources that are not covered by an effective approved part 70 program and are subject to the EPA-administered part 71 permitting program, today's action also defers those area sources subject to the secondary aluminum production NESHAP from permitting under part 71 until December 9, 2004.

Definitions. The definitions of clean charge, fluxing, reactive fluxing, aluminum scrap shredder, secondary aluminum processing unit, secondary aluminum production facility and thermal chip dryer have been revised and clarified to reflect the meanings intended at proposal. Definitions of internal runaround and cover flux have been added to the final rule.

Emission standards. In response to comments from the regulated community, a standard for new SAPUs has been included in the final rule. Also, for sweat furnace operations, the final rule provides an alternative to the emission standard that does not require emission testing. The alternative is expressed in terms of design and operating parameters of afterburners that ensure the emission limit will be achieved.

Operating requirements. The compliance date for SAPUs has been clarified. Lime addition requirements have been specified only for continuous lime injection systems. Lime addition requirements for intermittent lime addition have been eliminated because the MACT floor control technology, upon which the emission standards are based, includes continuous lime injection. Provisions for obtaining approval for intermittent lime addition and establishing operating requirements have been added to the rule.

Labeling requirements have been redefined to include only the emission unit or affected source identification and the applicable operating requirements and pollution prevention parameters. In addition, the applicability of the labeling requirement has been narrowed to specific affected sources and emission units.

The final rule allows the option to demonstrate compliance for specific affected sources on the basis of aluminum production as opposed to feed/charge. Owners or operators of SAPUs that choose to demonstrate compliance on the basis of aluminum production as opposed to feed/charge must account for aluminum production on an emission unit by emission unit basis. This option will provide additional flexibility for existing measurement equipment and will not increase HAP emissions. The inlet temperature limit has been eliminated for fabric filters that control only in-line fluxers because these fabric filters typically operate at near-ambient temperatures.

Monitoring requirements. The final rule includes options for permitting authority approval of measuring devices of alternative accuracy in cases where the use of devices of specified accuracy is not workable, such as measurement of very low chlorine flow rates. Additional options for ascertaining the free flow of lime, including the use of load cells, flow sensors and HCl concentration sensors, have been added to the final rule. Specific temperature monitoring relative accuracy and calibration drift requirements have been eliminated because they are not necessary. The requirements for scrap inspection plans have been made less prescriptive to allow for a wider range of situations as experienced in the secondary aluminum production industry. Procedures for obtaining approval of alternative site-specific monitoring practices have been included to increase flexibility.

Performance testing. The final rule eliminates the requirement for repeat performance testing at area sources for cost and economic reasons, but maintains the operating, maintenance, and monitoring (OM&M) plan requirement to ensure continuous compliance through monitoring of appropriate parameters. Sweat furnaces equipped with afterburners meeting required design specifications are not

subject to performance testing requirements in the final rule. The rule has also been changed to reduce the cost of performance testing by allowing owners or operators to conduct worst case performance tests on a single affected source or emission unit that is not equipped with an add-on control device to represent the performance of other sources of the same design and operating characteristics.

V. Summary of Impacts

In response to comments that EPA's assessment of impacts was not adequate, and as a result of revisions made to the rule to provide more flexibility to affected sources and to minimize the burden on area sources, EPA reanalyzed the impacts of the rule.

A. Air Quality Impacts

At the current level of control, emissions of HAPs and other pollutants are estimated to be approximately 28,700 Mg/yr (31,600 tpy). Of these emissions, 16,400 Mg/yr (18,100 tpy) are HAPs. The EPA estimates that implementation of the NESHAP will reduce all pollutants by 14,200 Mg/yr (15,600 tpy) and HAP emissions would be reduced by about 11,300 Mg/yr (12,400 tpy). Baseline emissions and emission reductions are summarized by pollutant in Table 1 below.

TABLE 1.—NATIONWIDE ANNUAL BASELINE EMISSIONS AND EMISSIONS REDUCTIONS

Pollutant	Baseline emissions (Mg/yr)	Emissions reduction (Mg/yr)	Baseline emissions (tpy)	Emissions reduction (tpy)
THC [1]	3,782	0	4,169	0
D/F	0.54 kg/yr	0.43 kg/yr	1.19 lb/yr	0.94 lb/yr
HCl	15,365	11,224	16,902	12,372
Cl_2	996	NQ [2]	1,098	NQ
POM	37	9	41	10
HAP Metals	58	36	64	40
PM	8,508	2,889	9,379	3,185
Total:				
HAPs	16,425	11,269	18,106	12,422
PM	8,508	2,889	9,379	3,185
HAPS and other pollutants	28,657	14,158	31,589	15,607

[1] THC is a surrogate for organic HAPs.
[2] NQ Not quantified due to lack of emissions data.

There are no THC emission reductions expected because all sources with a THC emission limit are already equipped with the technology representative of the MACT-level of control.

The estimated emissions reductions represent the minimum that will be achieved by the final rule since they are based on a reduction in baseline emissions to a level equal to the promulgated emission limit. In reality, if emission control equipment is installed to achieve compliance with the rule, emissions will likely be reduced to a level below the emission limit and the actual emissions reductions will be larger than the estimates. In addition, emissions reductions are also expected for other pollutants for which there are no specific emission limits. Although these potential emissions reductions were not quantified, emission controls installed to reduce HCl emissions are likely to also reduce Cl_2 emissions, the lime added or injected to fabric filters would reduce fluoride as well as chloride emissions, and fabric filters installed to meet PM emission limits also would reduce HAP metal and polycyclic organic matter (POM) emissions. For example, emission test data indicate that a fabric filter will reduce HAP metal emissions by approximately the same percentage as PM emissions. If the same reduction (61.4 percent from the baseline, taking into account that some sources already have these controls) is applied to HAP metal emissions, emission reductions of about 39.5 tpy from the estimated baseline level of 64.4 tpy would be achieved.

B. Economic Impacts

EPA revised the economic impact analysis (EIA) to consider revised estimates of costs due to changes in the requirements of the rule between proposal and promulgation as well as additional information received concerning potential impacts of the regulation to owners of sweat furnaces, aluminum die casting facilities, and aluminum foundries. Due to the number of facilities and variety of processes used in the affected industries, model plants were developed to categorize facilities based on possible combinations of processes that are performed. These model plant categories were used to estimate applicable emission control costs, including the costs of monitoring, reporting, and record keeping (MRR). Sixteen model plants were created and annual compliance costs were calculated for each.

Estimates of total capital and total annualized costs for each model plant and nationwide are shown in Table 2. Total nationwide annualized costs for this regulation are estimated at $76.7 million. The model plant (1–8) control cost estimates include control device costs, auxiliary equipment, and direct and indirect installation costs, but do not include monitoring costs. The nationwide annual costs include costs for monitoring, reporting, and record keeping estimated at $9.2 million annually. (All values are shown in 1994 dollars.)

TABLE 2.—ESTIMATED CAPITAL AND ANNUALIZED COSTS BY MODEL PLANT

[Thousands of 1994 dollars]

Model plants	Per facility		Nationwide	
	Capital costs	Annual costs	Capital costs	Annual costs
Model Plant 1	$805	$380	$24,960	$11,766
Model Plant 2	950	362	9,500	3,621
Model Plant 3	1,833	702	12,832	4,911
Model Plant 4	2,944	1,203	26,492	10,829
Model Plant 5	1,441	851	14,409	8,510
Model Plant 6	976	671	6,833	4,696
Model Plant 7	198	134	1,188	807
Model Plant 8	0	0	0	0
MRR for Model Plants 1–8	.....	.....	.....	3,885
Sweat Furnace 1	0	0	0	133
Sweat Furnace 2	0	0	0	299
Sweat Furnace 3	9	24	9,167	23,489
Die Casting 1	0	4	0	46
Die Casting 2	0	4	0	364
Die Casting 3	0	4	0	241
Foundry 1	0	4	0	2,489
Foundry 2	0	4	0	622
Nationwide Total	.....	.....	105,381	76,708

Firms producing products in SIC codes 3341 Secondary Smelting and Refining of Nonferrous Metals, 3353 Aluminum Sheet, Plate, and Foil, 3334 Primary Aluminum Production, 3354 Aluminum Extruded Product Manufacturing, 3363 Aluminum Die-Casting, 3365 Aluminum Foundries, 4953 Refuse Systems, 5093 Scrap and Waste Materials, and 5015 Motor Vehicle Parts—Used may be affected by this regulation.

A market impact analysis was completed for secondary aluminum producing firms. Table 3 presents primary and secondary market impacts estimated for the secondary aluminum market. Primary market impacts include estimated changes in price, domestic production, industry revenues, and potential facility closures. Secondary market impacts relate to potential employment losses, decreases in exports, and increases in imports.

TABLE 3.—SECONDARY ALUMINUM PRODUCTION PRIMARY AND SECONDARY MARKET IMPACTS

	Estimated impacts
Primary Market Impacts:	
Price Increase (Percent)	0.64
Production Decrease (Percent)	[0.40]
Industry Revenues—Increase in Value of Domestic Shipments (Percent)	0.24
Potential Facility Closures	0–1*
Secondary Market Impacts:	
Labor Market	
Potential Employee Reductions:	
Number of workers	94
Percent decrease	[0.40]
International Trade:	
Import increase (Percent)	1.51
Export decrease (Percent)	[0.22]

Decreases are shown in brackets [ ].

*Firm or facility closures are unlikely. However, if one makes a number of worst case assumptions, one facility or firm closure is possible.

In general, the economic impacts of this regulation are expected to be minimal to the secondary aluminum industry with price increases and production decreases of less than one percent. A market price increase of 0.64 percent and domestic production decrease of 0.40 percent are predicted. Revenues or the value of domestic shipments for the industry are expected to increase by 0.24 percent. Individual facilities or firms within the industry may experience revenue increases or decreases, but on average the industry revenues are anticipated to increase slightly with this regulation. Facility or firm closures are unlikely to occur as a result of this regulation. However, if a number of worst case assumptions are made, one could conclude that a single facility may close as a result of the regulation.

Approximately 94 workers may face employment displacement as a result of the regulation. This job loss estimate results from the decrease in production expected to result from the regulation and does not consider any employment increases that may occur relative to emission control. Exports of secondary aluminum products to other countries are expected to decline by 0.22 percent while imports of secondary aluminum are expected to increase 1.51 percent.

Since the impact of the regulation is anticipated to be minimal to firms owning sweat furnaces, aluminum die casters, aluminum foundries, and secondary aluminum dross reclamation facilities (categorized as model plants 7 and 8), a streamlined economic impact analysis was completed for these markets. This analysis computes the estimated cost of the regulation as a percentage of annual revenues. The cost to sales ratio refers to the change in annualized control costs divided by the sales revenues of a particular good or goods being produced in the process for which additional pollution control is required. It can be estimated for either individual firms or as an average for some set of firms such as affected small firms. While it has different significance for different market situations, it is a good rough gauge of potential impact. If costs for the individual (or group) of firms are completely passed on to the purchasers of the good(s) being produced, it is an estimate of the price change (in percentage form after

multiplying the ratio by 100). If costs are completely absorbed by the producer, it is an estimate of changes in pretax profits (in percentage form after multiplying the ratio by 100). The distribution of costs to sales ratios across the whole market, the competitiveness of the market, and profit to sales ratios are among the obvious factors that may influence the significance of any particular cost to sales ratio for an individual facility. This analysis was completed on a model plant basis using estimated annual revenues and for a sample of firms using actual company revenue data. A cost to sales ratio of 3 percent or above is an indicator of the potential for significant economic impact for firms in the industries affected by this rule. The results of these analyses are shown in Table 4.

As shown in Table 4, the cost to sales ratios using both model plant data and actual facility data are substantially below one percent for aluminum die casters, aluminum foundries, and firms operating sweat furnaces. This indicates that firms in these industries are not likely to incur significant economic impacts as a result of this regulation.

TABLE 4.—COST TO SALES RATIOS FOR ALUMINUM DIE CASTING, ALUMINUM FOUNDRIES, FIRMS OWNING SWEAT FURNACES, AND FIRMS OWNING ALUMINUM DROSS RECLAMATION FACILITIES

Description	Cost to sales ratios (%)
Firms Operating Sweat Furnaces Model Plant Data:	
Sweat Furnace 1	0.16
Sweat Furnace 2	0.06
Sweat Furnace 3	0.08
Average Actual Firm Data	0.01
Aluminum Die Casting Model Plant Data:	
Model Plant 1	<0.01
Model Plant 2	0.01
Model Plant 3	0.04
Average Actual Firm Data	0.04
Aluminum Foundries Model Plant Data:	
Model Plant 1	0.16
Model Plant 2	0.04
Average Actual Firm Data	0.03
Secondary Aluminum Dross Reclamation Facilities for Model Plants 7 and 8 Model Plant Data:	
Model Plant 7	1.08
Model Plant 8	0.07
Average Actual Firm Data:	
Model Plant 7	0.73
Model Plant 8	0.18

Cost to sales ratios for secondary aluminum dross reclamation facilities (model plants 7 and 8) approximate or are less than one percent on a model plant and actual firm data basis. These firms are also not anticipated to incur significant economic impacts as a result of this regulation. For further information, please see Economic Impact For the Secondary Aluminum NESHAP, Final Report, October 1999.

C. Non-Air Health and Environmental Impacts

As discussed in the preamble to the proposed rule, the NESHAP is based on air pollution control systems which are of the dry type (*e.g.,* afterburners and fabric filters), and there are no water pollution impacts resulting from their use. Solid waste generated by fabric filters in the form of particulate matter (including HAP metals and lime from fabric filters) is typically disposed of by landfilling. With the addition of fabric filters and lime conditioned fabric filters, the amount of solid waste is expected to increase by about 97,904 Mg/yr (107,921 tpy) nationwide. The increase in solid waste is estimated as the sum of the annual reduction in PM emissions and the annual increase in the use of lime in lime-injected fabric filters.

Implementation of the NESHAP will aid in reducing aerial deposition of D/F and HAP metals (lead, cadmium, and mercury), will substantially reduce ambient concentrations of HCl and Cl_2, and will reduce emissions.

D. Energy Impacts

Operating fabric filters and afterburners require the use of electrical energy to operate fans that move the gas stream. The additional electrical energy requirements are estimated at 78 million kilowatt hours per year (kWh/yr), or 282 terajoules per year (TJ/yr), over current requirements. Afterburners may also use natural gas as fuel. Approximately 325,500 kilocubic feet per year (kft^3/yr) or 322 billion British thermal units (Btu)/yr (340 TJ/yr) of additional natural gas will be required.

The increased energy requirements for facilities will result in an increase in utility emissions as more energy is generated. Nationwide emissions of PM, sulfur dioxide (SO_2), and nitrogen oxides (NO_X) from electric power plants are estimated to increase by 8.1 Mg/yr (8.9 tpy), 323 Mg/yr (356 tpy), and 161 Mg/yr (178 tpy), respectively.

VI. Administrative Requirements

A. Congressional Review Act

The Congressional Review Act, 5 U.S.C. section 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. This rule is not a ''major rule'' as defined by 5 U.S.C. 804(2).

B. Executive Order 12866—Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the EPA must determine whether the regulatory action is ''significant'' and therefore subject to review by the Office of Management and Budget (OMB) and the requirements of the Executive Order. The Executive Order defines ''significant regulatory action'' as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, or the rights and obligation of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

In response to comments that the rule as proposed would result in adverse impacts to sources in the secondary aluminum production industry as well as result in costs in excess of $100 million, EPA reexamined the cost of the rule. In view of the changes in the rule that have been made since proposal to clarify applicability as well as the requirements of the rule and to provide greater flexibility in the rule, EPA finds that the cost of the final rule is below $100 million. Because the projected annual costs (including monitoring) for this NESHAP are less than $100 million, a regulatory impact analysis has not been prepared. However, because of concerns expressed by affected facilities regarding the potential for adverse economic impacts, EPA submitted this

final regulation to OMB for review. Any written comments are included in the docket listed under **ADDRESSES**.

C. Executive Order 13045—Protection of Children From Environmental Health Risks and Safety Risks

Executive Order 13045 applies to any rule that EPA determines (1) is ''economically significant'' as defined under Executive Order 12866, and (2) the environmental health or safety risk addressed by the rule has a disproportionate effect on children. If the regulatory action meets both criteria, the Agency 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.

This final rule is not subject to E.O. 13045 because it is not an economically significant regulatory action as defined by Executive Order 12866, and it does not address an environmental health or safety risk that would have a disproportionate effect on children.

D. Executive Order 13084—Consultation and Coordination With Indian Tribal Governments

Under Executive Order 13084, EPA may not issue a regulation that is not required by statute, that significantly or uniquely affects the communities of Indian tribal governments, and that imposes substantial direct compliance costs on those communities, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by the tribal governments, or EPA consults with those governments. If EPA complies by consulting, Executive Order 13084 requires EPA to provide to OMB, in a separately identified section of the preamble to the rule, a description of the extent of EPA's prior consultation with representatives of affected tribal governments, a summary of the nature of their concerns, and a statement supporting the need to issue the regulation. In addition, Executive Order 13084 requires EPA to develop an effective process permitting elected officials and other representatives of Indian tribal governments ''to provide meaningful and timely input in the development of regulatory policies on matters that significantly or uniquely affect their communities.''

Today's rule does not significantly or uniquely affect the communities of Indian tribal governments. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this rule.

E. Executive Order 13132—Federalism

Executive Order 13132, entitled ''Federalism'' (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure ''meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.'' ''Policies that have federalism implications'' is 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.'' Under Executive Order 13132, EPA may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local officials early in the process of developing the proposed regulation. EPA also may not issue a regulation that has federalism implications and that preempts State law unless the Agency consults with State and local officials early in the process of developing the proposed regulation.

If EPA complies by consulting, Executive Order 13132 requires EPA to provide to the Office of Management and Budget (OMB), in a separately identified section of the preamble to the rule, a federalism summary impact statement (FSIS). The FSIS must include a description of the extent of EPA's prior consultation with State and local officials, a summary of the nature of their concerns and the agency's position supporting the need to issue the regulation, and a statement of the extent to which the concerns of State and local officials have been met. Also, when EPA transmits a draft final rule with federalism implications to OMB for review pursuant to Executive Order 12866, EPA must include a certification from the agency's Federalism Official stating that EPA has met the requirements of Executive Order 13132 in a meaningful and timely manner.

This final rule will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. This determination has been made since none of the affected facilities under this final rule are owned or operated by State or local governments. Thus, the requirements of section 6 of the Executive Order do not apply to this rule. Although section 6 of Executive Order 13132 does not apply to this rule, EPA did consult with State and local officials in developing the proposed rule.

F. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Pub. L. 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, the 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 to 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 the 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 the 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 the 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 this rule does not contain a Federal mandate that may result in expenditures of $100 million or more for State, local, and tribal governments, in aggregate, or the private sector in any 1 year, nor does the rule significantly or uniquely impact small governments because it contains no requirements that apply to such

governments or impose obligations upon them. Thus, the requirements of the UMRA do not apply to this rule.

G. Regulatory Flexibility Act

The EPA analyzed the potential impact of the proposed rule on small entities. The results of the analysis for the proposed rule and the method used by EPA to perform the analysis of impacts on small entities are discussed in the preamble to the proposed rule (64 FR 6946, February 11, 1999).

In response to comments on the proposed rule that EPA understated the number of small businesses that would be affected by the rule, EPA refined its small business impacts analysis to include information concerning sweat furnaces, aluminum die casting facilities, and aluminum foundries. The EPA has determined that it is not necessary to prepare a regulatory flexibility analysis in connection with this final rule. Based on the revised small business impacts analysis prepared concerning this final rule, EPA has also determined that the requirements in this rule will not have a significant impact on a substantial number of small entities.

The regulation will potentially impact firms producing products in SIC codes 3341 (secondary smelting and refining of nonferrous metals), 3353 (aluminum sheet, plate, and foil), 3334 (primary aluminum production), 3354 (aluminum extruded products), 3363 (aluminum die-casting), 3365 (aluminum foundries), 4953 (refuse systems—materials recovery facilities), 5093 (scrap and waste materials), and 5015 (motor vehicle parts-used). The Small Business Administration criteria for each affected industry are shown in Table 5.

TABLE 5.—SECONDARY ALUMINUM NESHAP AFFECTED INDUSTRIES AND SMALL BUSINESS CRITERIA

Standard industrial classification code	Small business criteria
3341 Secondary Smelting and Refining of Nonferrous Metals.	Less than 500 employees.
3353 Aluminum Sheet, Plate, and Foil.	Less than 750 employees.
3334 Primary Aluminum Production.	Less than 1,000 employees.
3354 Aluminum Extruded Products.	Less than 750 employees.
3363 Aluminum Die-Casting.	Less than 500 employees.
3365 Aluminum Foundries.	Less than 500 employees.
4953 Refuse Systems.	Less than $6 million in annual sales revenues.
5093 Scrap and Waste Materials.	Less than 100 employees.
5015 Motor Vehicle Parts—Used.	Less than 100 employees.

The EPA received responses to an information collection request from 135 secondary aluminum facilities producing products in SIC 3334, 3341, 3353 and 3355. To define the small business entities, the 135 facilities were matched with their parent companies. It was determined that 32 of these companies employ less than 750 employees and meet the Small Business Administration's definition of a small business entity. (Note the criterion of 750 employees was used for secondary aluminum producers, because it results in a larger number of small businesses. None of the affected firms in the data base producing principally primary aluminum products in SIC 3334 are small businesses.)

There are 320 aluminum die casting companies and approximately 1530 aluminum foundries currently operating domestically. The vast majority of these firms are small businesses employing less than 500 employees. No small businesses within aluminum die casting companies or aluminum foundries have been specifically identified that are impacted by the final rule under applicability as defined. Only large businesses have come forward with information regarding applicability of the standard(s) to their operations. Based on that information, we have performed a small business analysis based on a probable over estimate of the number of small businesses within these industry sectors that may be affected by the final rule. (Docket A–92–61).

It is estimated that around 1650 sweat furnaces are operated by businesses in the United States that will be subject to this rule. Firms owning sweat furnaces are primarily small businesses.

The analysis of small business impacts for these industries focused on a comparison of compliance costs as a percentage of sales (cost/sales ratio). When available, the analysis used actual firm sales data. However, actual firm data were unavailable for a number of small businesses. To estimate the impact for such firms, an analysis comparing model plant control cost estimates to model plant revenue data was conducted. As Table 6 shows, cost to sales ratios based on model plant revenue and cost data yield ratios of less than 1 percent for all model plants other than model plant 7. The cost to sales ratio for model plant 7 is 1.08 percent. For the affected industries, cost to sales ratios of 3 percent or greater are considered an indicator of the potential for significant economic impact. Based upon this criterion, the model plant analysis indicates that small business firms are not likely to experience significant economic impacts as a result of this regulation.

TABLE 6.—SECONDARY ALUMINUM NESHAP COST TO SALES RATIOS ASSUMING MODEL PLANT COST AND REVENUE DATA

Model plant	Model plant cost to sales ratio (percent)
1	0.70
2	0.35
3	0.82
4	0.71
5	0.13
6	0.07
7	1.08
8	0.07
Sweat Furnace 1	0.16
Sweat Furnace 2	0.06
Sweat Furnace 3	0.08
Die Casting 1	<0.01
Die Casting 2	0.01
Die Casting 3	0.04
Foundry 1	0.16
Foundry 2	0.04

A search for actual company revenue data for small businesses was completed. Data were located for 26 of the 32 small secondary aluminum firms (model plants 1–6) and aluminum dross fabricators (model plants 7 and 8) identified by the survey. Data were also collected for 53 small die casting firms, 22 small aluminum foundries, and for 65 small business that may potentially operate sweat furnaces. A summary of the cost to sales ratios for the small secondary aluminum producers using actual company sales data is shown in Table 7 below.

TABLE 7.—SECONDARY ALUMINUM NESHAP COMPANY SPECIFIC COST TO SALES RATIOS FOR AFFECTED SMALL BUSINESSES

Cost/sales ratio	Number of small companies in each cost to sales range
Secondary Aluminum Industry:	
0.00%–0.99%	19
1.00%–1.99%	5
2.00%–2.99%	2
Mean cost to sales ratio=0.74%	Total firms=26
Mean cost to sales ratio	**Number of small companies evaluated (firms)**
Aluminum Die Casting Industry: 0.04%	53
Aluminum Foundry Industry: 0.04%	22
Firms Owning Sweat Furnaces: 0.01%	65

As depicted in Table 7, the majority of small businesses modeled are anticipated to experience cost to sales ratios below 1 percent. Seven small companies show cost to sales ratios above 1 percent, but less than 3 percent. Since no company exhibits cost to sales above 3 percent and the majority of small businesses are expected to incur cost to sales ratios less than 1 percent, significant impacts to small entities are not expected. The results of the analyses conducted using both model plant data and actual small business firm data indicate that impacts from this regulation are not likely to be significant to small business firms. As previously stated, the analysis is based on a probable over estimate of the number of small businesses within these industry sectors that may be affected by the final rule. The EPA concludes that this regulation will not result in a significant economic impact for a substantial number of small entities. For more detailed information, please see Economic Impact Analysis for the Secondary Aluminum NESHAP Final Report, October 1999.

H. Paperwork Reduction Act

The information collection requirements in this final rule are being submitted for approval to OMB under the requirements of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* An Information Collection Request (ICR) document has been prepared by EPA (ICR No. 1894.01), and a copy may be obtained from Sandy Farmer, OPPE Regulatory Division, U.S. Environmental Protection Agency (2136), 401 M Street SW, Washington, DC 20460, or by calling (202) 260–2740.

The promulgated information requirements include mandatory notifications, records, and reports required by the NESHAP General Provisions (40 CFR part 63, subpart A). These information requirements are needed to confirm the compliance status of major sources, to identify any nonmajor sources not subject to the standards and any new or reconstructed sources subject to the standards, to confirm that emission control devices are being properly operated and maintained, and to ensure that the standards are being achieved. Based on the recorded and reported information, EPA can decide which facilities, records, or processes should be inspected. These recordkeeping and reporting requirements are specifically authorized under section 114 of the CAA (42 U.S.C. 7414). All information submitted to EPA for which a claim of confidentiality is made will be safeguarded according to Agency policies in 40 CFR part 2, subpart B. (See 41 FR 36902, September 1, 1976; 43 FR 39999, September 28, 1978; 43 FR 42251, September 28, 1978; and 44 FR 17674, March 23, 1979.)

The EPA is required under section 112(d) of the Clean Air Act to regulate emissions of HAPs listed in section 112(b). The requested information is needed as part of the overall compliance and enforcement program. The ICR requires that secondary aluminum production facilities retain records of parameter and emissions monitoring data at facilities for a period of 5 years, which is consistent with the General Provisions to 40 CFR part 63 and the permit requirements under 40 CFR part 70. All major sources subject to this rule will be required to obtain operating permits either through the State-approved permitting program or, if one does not exist, in accordance with the provisions of 40 CFR part 71. Under this final rule, the approved state permitting program has the option to defer the requirement to obtain a title V permit for area sources affected by this rule.

The annual public reporting and recordkeeping burden for this collection of information (averaged over the first 3 years after the effective date of the rule) is estimated to total 148,000 labor hours per year at a total annual cost of $9.2 million. This estimate includes notifications; a performance test (with repeat tests for major sources); one-time preparation of a startup, shutdown, and malfunction plan with semiannual reports of any event where the procedures in the plan were not followed and an operation, maintenance, and monitoring plan; semiannual excess emissions reports; initial and semiannual furnace certifications; and recordkeeping. This estimate also includes one time preparation of emissions averaging plans and scrap sampling plans for some respondents. Total capital costs associated with monitoring requirements over the 3-year period of the ICR is estimated at $1.3 million; this estimate includes the capital and startup costs associated with installation of monitoring equipment.

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 purpose of collecting, validating, and verifying information; process and maintain information and disclose and provide information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to respond to a collection of information; search existing 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 are listed in 40 CFR part 9 and 48 CFR chapter 15.

I. National Technology Transfer and Advancement Act

Under section 12(d) of the National Technology Transfer and Advancement Act (NTTAA), the Agency is required to use voluntary consensus standards in its regulatory and procurement activities unless to do so would be inconsistent with applicable law or otherwise impracticable. Voluntary consensus standards are technical standards (*e.g.,* materials specifications, test methods, sampling procedures, and business practices) which are developed or adopted by voluntary consensus bodies. Where available and potentially applicable voluntary consensus standards are not used by EPA, the CAA requires the Agency to provide Congress, through OMB, an explanation of the reasons for not using such standards. This section summarizes the EPA's response to the requirements of the NTTAA for the analytical test methods included in the final rule.

Consistent with the NTTAA, the EPA conducted a search to identify voluntary

consensus standards. However, no candidate consensus standards were identified for measuring emissions of the HAPs or surrogates subject to emission standards in the rule. The rule requires standard EPA methods well known to the industry and States. Approved alternative methods also may be used. The EPA, in coordination with the industry and States, have agreed on the use of these test methods in the rule.

List of Subjects in 40 CFR Part 63

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

Dated: December 15, 1999.

Carol M. Browner,

Administrator.

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

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

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

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

2. Part 63 is amended by adding subpart RRR to read as follows:

Subpart RRR—National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production

Sec.

General

§ 63.1500 Applicability.

(a) The requirements of this subpart apply to the owner or operator of each secondary aluminum production facility.

(b) The requirements of this subpart apply to the following affected sources, located at a secondary aluminum production facility that is a major source of hazardous air pollutants (HAPs) as defined in § 63.2:

(1) Each new and existing aluminum scrap shredder;

(2) Each new and existing thermal chip dryer;

(3) Each new and existing scrap dryer/delacquering kiln/decoating kiln;

(4) Each new and existing group 2 furnace;

(5) Each new and existing sweat furnace;

(6) Each new and existing dross-only furnace;

(7) Each new and existing rotary dross cooler; and

(8) Each new and existing secondary aluminum processing unit.

(c) The requirements of this subpart pertaining to dioxin and furan (D/F) emissions and associated operating, monitoring, reporting and recordkeeping requirements apply to the following affected sources, located at a secondary aluminum production facility that is an area source of HAPs as defined in § 63.2:

(1) Each new and existing thermal chip dryer;

(2) Each new and existing scrap dryer/delacquering kiln/decoating kiln;

(3) Each new and existing sweat furnace;

(4) Each new and existing secondary aluminum processing unit, containing one or more group 1 furnace emission units processing other than clean charge.

(d) The requirements of this subpart do not apply to manufacturers of aluminum die castings, aluminum foundries, or aluminum extruders that melt no materials other than clean charge and materials generated within the facility; and that also do not operate a thermal chip dryer, sweat furnace or scrap dryer/delacquering kiln/decoating kiln.

(e) The requirements of this subpart do not apply to facilities and equipment used for research and development that are not used to produce a saleable product.

(f) The owner or operator of a secondary aluminum production facility subject to the provisions of this subpart, is subject to the title V permitting requirements under 40 CFR parts 70 and 71, as applicable. The permitting authority may defer the affected facility from the title V permitting requirements until December 9, 2004, if the secondary aluminum production facility is not a major source and is not located at a major source as defined under 40 CFR 63.2, 70.2, or 71.2, and is not otherwise required to obtain a title V permit. If an affected facility receives a deferral from title V permitting requirements under this section, the source must submit a title V permit application by December 9, 2005. The affected facility must continue to comply with the provisions of this subpart applicable to area sources, even if a deferral from title V permitting requirements has been granted to the facility by the permitting authority.

§ 63.1501 Dates.

(a) The owner or operator of an existing affected source must comply with the requirements of this subpart by March 24, 2003.

(b) The owner or operator of a new affected source that commences construction or reconstruction after February 11, 1999 must comply with the requirements of this subpart by March 23, 2000 or upon startup, whichever is later.

§ 63.1502 Incorporation by reference.

(a) The following material is incorporated by reference in the corresponding sections noted. The incorporation by reference (IBR) of certain publications listed in the rule will be approved by the Director of the Office of the Federal Register as of the date of publication of the final rule in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. This material is incorporated as it exists on the date of approval: (1) Chapters 3 and 5 of ''Industrial Ventilation: A Manual of Recommended Practice,'' American Conference of Governmental Industrial Hygienists, (23rd edition, 1998), IBR approved for § 63.1506(c), and (2)

''Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update'' (EPA/625/3–89/016).

(b) The material incorporated by reference is available for inspection at the Office of the Federal Register, 800 North Capitol Street NW, Suite 700, Washington, DC; and at the Air and Radiation Docket and Information Center, U.S. EPA, 401 M Street SW, Washington, DC. The material is also available for purchase from the following addresses:

(1) Customer Service Department, American Conference of Governmental Industrial Hygienists (ACGIH), 1330 Kemper Meadow Drive, Cincinnati, OH 45240–1634, telephone number (513) 742–2020; and

(2) The National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA, NTIS no. PB 90–145756.

§ 63.1503 Definitions.

Terms used in this subpart are defined in the Clean Air Act as amended (CAA), in § 63.2, or in this section as follows:

Add-on air pollution control device means equipment installed on a process vent that reduces the quantity of a pollutant that is emitted to the air.

Afterburner means an air pollution control device that uses controlled flame combustion to convert combustible materials to noncombustible gases; also known as an incinerator or a thermal oxidizer.

Aluminum scrap shredder means a unit that crushes, grinds, or breaks aluminum scrap into a more uniform size prior to processing or charging to a *scrap dryer/delacquering kiln/decoating kiln,* or furnace. A bale breaker is not an *aluminum scrap shredder.*

Bag leak detection system means an instrument that is capable of monitoring particulate matter loadings in the exhaust of a fabric filter (*i.e.,* baghouse) in order to detect bag failures. A *bag leak detection system* includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light transmittance, or other effect to monitor relative particulate matter loadings.

Chips means small, uniformly-sized, unpainted pieces of aluminum scrap, typically below 1¼ inches in any dimension, primarily generated by turning, milling, boring, and machining of aluminum parts.

Clean charge means furnace charge materials including molten aluminum; T-bar; sow; ingot; billet; pig; alloying elements; uncoated/unpainted thermally dried aluminum chips; aluminum scrap dried at 343 °C (650 °F) or higher; aluminum scrap delacquered/decoated at 482 °C (900 °F) or higher; other oil- and lubricant-free unpainted/uncoated gates and risers; oil-and lubricant-free unpainted/uncoated aluminum scrap, shapes, or products (*e.g.,* pistons) that have not undergone any process (*e.g.,* machining, coating, painting, etc.) that would cause contamination of the aluminum (with oils, lubricants, coatings, or paints); and internal runaround.

Cover flux means salt added to the surface of molten aluminum in a group 1 or group 2 furnace, without agitation of the molten aluminum, for the purpose of preventing oxidation.

D/F means dioxins and furans.

Dioxins and furans means tetra-, penta-, hexa-, and octachlorinated dibenzo dioxins and furans.

Dross means the slags and skimmings from aluminum melting and refining operations consisting of fluxing agent(s), impurities, and/or oxidized and non-oxidized aluminum, from scrap aluminum charged into the furnace.

Dross-only furnace means a furnace, typically of rotary barrel design, dedicated to the reclamation of aluminum from dross formed during melting, holding, fluxing, or alloying operations carried out in other process units. Dross and salt flux are the sole feedstocks to this type of furnace.

Emission unit means a *group 1 furnace* or *in-line fluxer* at a *secondary aluminum production facility.*

Fabric filter means an add-on air pollution control device used to capture particulate matter by filtering gas streams through filter media; also known as a baghouse.

Feed/charge means, for a furnace or other process unit that operates in batch mode, the total weight of material (including molten aluminum, T-bar, sow, ingot, etc.) and alloying agents that enter the furnace during an operating cycle. For a furnace or other process unit that operates continuously, *feed/charge* means the weight of material (including molten aluminum, T-bar, sow, ingot, etc.) and alloying agents that enter the process unit within a specified time period (*e.g.,* a time period equal to the performance test period). The *feed/charge* for a dross only furnace includes the total weight of dross and solid flux.

Fluxing means refining of molten aluminum to improve product quality, achieve product specifications, or reduce material loss, including the addition of solvents to remove impurities (solvent flux); and the injection of gases such as chlorine, or chlorine mixtures, to remove magnesium (demagging) or hydrogen bubbles (degassing). *Fluxing* may be performed in the furnace or outside the furnace by an *in-line fluxer.*

Furnace hearth means the combustion zone of a furnace in which the molten metal is contained.

Group 1 furnace means a furnace of any design that melts, holds, or processes aluminum that contains paint, lubricants, coatings, or other foreign materials with or without reactive fluxing, or processes *clean charge with reactive fluxing.*

Group 2 furnace means a furnace of any design that melts, holds, or processes only *clean charge* and that performs no *fluxing* or performs *fluxing* using only nonreactive, non-HAP-containing/non-HAP-generating gases or agents.

HCl means, for the purposes of this subpart, emissions of hydrogen chloride that serve as a surrogate measure of the total emissions of the HAPs hydrogen chloride, hydrogen fluoride and chlorine.

In-line fluxer means a device exterior to a furnace, located in a transfer line from a furnace, used to refine (flux) molten aluminum; also known as a flux box, degassing box, or demagging box.

Internal runaround means scrap material generated on-site by aluminum extruding, rolling, scalping, forging, forming/stamping, cutting, and trimming operations that do not contain paint or solid coatings. Aluminum chips generated by turning, boring, milling, and similar machining operations that have not been dried at 343 °C (650 °F) or higher, or by an equivalent non-thermal drying process, are not considered internal runaround.

Lime means calcium oxide or other alkaline reagent.

Lime-injection means the continuous addition of lime upstream of a *fabric filter.*

Melting/holding furnace, or melter/holder, means a *group 1 furnace* that processes only *clean charge*, performs melting, holding, and fluxing functions, and does not transfer molten aluminum to or from another furnace.

Operating cycle means for a batch process, the period beginning when the feed material is first charged to the operation and ending when all feed material charged to the operation has been processed. For a batch melting or holding furnace process, *operating cycle* means the period including the charging and melting of scrap aluminum and the fluxing, refining, alloying, and tapping of molten aluminum (the period from tap-to-tap).

PM means, for the purposes of this subpart, emissions of particulate matter that serve as a measure of total particulate emissions and as a surrogate for metal HAPs contained in the particulates, including but not limited to, antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, mercury, nickel, and selenium.

Pollution prevention means source reduction as defined under the Pollution Prevention Act of 1990 (*e.g.,* equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control), and other practices that reduce or eliminate the creation of pollutants through increased efficiency in the use of raw materials, energy, water, or other resources, or protection of natural resources by conservation.

Reactive fluxing means the use of any gas, liquid, or solid flux (other than cover flux) that results in a HAP emission. Argon and nitrogen are not reactive and do not produce HAPs.

Reconstruction means the replacement of components of an affected source or *emission unit* such that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new affected source, and it is technologically and economically feasible for the reconstructed source to meet relevant standard(s) established in this subpart. Replacement of the refractory in a furnace is routine maintenance and is not a *reconstruction.* The repair and replacement of *in-line fluxer* components (*e.g.,* rotors/shafts, burner tubes, refractory, warped steel) is considered to be routine maintenance and is not considered a *reconstruction. In-line fluxers* are typically removed to a maintenance/repair area and are replaced with repaired units. The replacement of an existing *in-line fluxer* with a repaired unit is not considered a *reconstruction.*

Residence time means, for an *afterburner*, the duration of time required for gases to pass through the *afterburner* combustion zone. *Residence time* is calculated by dividing the *afterburner* combustion zone volume in cubic feet by the volumetric flow rate of the gas stream in actual cubic feet per second.

Rotary dross cooler means a water-cooled rotary barrel device that accelerates cooling of dross.

Scrap dryer/delacquering kiln/decoating kiln means a unit used primarily to remove various organic contaminants such as oil, paint, lacquer, ink, plastic, and/or rubber from aluminum scrap (including used beverage containers) prior to melting.

Secondary aluminum processing unit (SAPU): an existing SAPU means all existing *group 1 furnaces* and all existing *in-line fluxers* within a *secondary aluminum production facility*. Each existing *group 1 furnace* or existing *in-line fluxer* is considered an *emission unit* within a *secondary aluminum processing unit*. A new *SAPU* means any combination of *group 1 furnaces* and *in-line fluxers* which are simultaneously constructed after February 11, 1999. Each of the *group 1 furnaces* or *in-line fluxers* within a new *SAPU* is considered an *emission unit* within that *secondary aluminum processing unit.*

Secondary aluminum production facility means any establishment using clean charge, post-consumer aluminum scrap, aluminum scrap, aluminum ingots, aluminum foundry returns, dross from aluminum production, or molten aluminum as the raw material and performing one or more of the following processes: scrap shredding, scrap drying/delacquering/decoating, thermal chip drying, furnace operations (*i.e.,* melting, holding, refining, fluxing, or alloying), in-line fluxing, or dross cooling. A *secondary aluminum production facility* may be independent or part of a primary aluminum production facility. A facility is a *secondary aluminum production facility* if it includes any of the affected sources listed in § 63.1500(b) or (c). Aluminum die casting facilities, aluminum foundries and aluminum extrusion facilities that process no materials other than materials generated within the facility, or clean charge purchased or otherwise obtained from outside the facility, and that do not operate sweat furnaces, thermal chip dryers, or scrap dryers/delacquering kilns/decoating kilns are not secondary aluminum production facilities.

Sidewell means an open well adjacent to the hearth of a furnace with connecting arches between the hearth and the open well through which molten aluminum is circulated between the hearth, where heat is applied by burners, and the open well, which is used for charging scrap and solid flux or salt to the furnace, injecting fluxing agents, and skimming dross.

Sweat furnace means a furnace used exclusively to reclaim aluminum from scrap that contains substantial quantities of iron by using heat to separate the low-melting point aluminum from the scrap while the higher melting-point iron remains in solid form.

TEQ means the international method of expressing toxicity equivalents for dioxins and furans as defined in ''Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update'' (EPA–625/3–89–016), available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161, NTIS no. PB 90–145756.

THC means, for the purposes of this subpart, total hydrocarbon emissions that also serve as a surrogate for the emissions of organic HAP compounds.

Thermal chip dryer means a device that uses heat to evaporate water, oil, or oil/water mixtures from unpainted/uncoated aluminum chips.

Three-day, 24-hour rolling average means daily calculations of the average 24-hour emission rate (lbs/ton of feed/charge), over the 3 most recent consecutive 24-hour periods, for a *secondary aluminum processing unit.*

Total reactive chlorine flux injection rate means the sum of the total weight of chlorine in the gaseous or liquid reactive flux and the total weight of chlorine in the solid reactive chloride flux, divided by the total weight of feed/charge, as determined by the procedure in § 63.1512(o).

§ 63.1504 [Reserved]

Emission Standards and Operating Requirements

§ 63.1505 Emission standards for affected sources and emission units.

(a) *Summary.* The owner or operator of a new or existing affected source must comply with each applicable limit in this section. Table 1 to this subpart summarizes the emission standards for each type of source.

(b) *Aluminum scrap shredder.* On and after the date the initial performance test is conducted or required to be conducted, whichever date is earlier, the owner or operator of an aluminum scrap shredder at a secondary aluminum production facility that is a major source must not discharge or cause to be discharged to the atmosphere:

(1) Emissions in excess of 0.023 grams (g) of PM per dry standard cubic meter (dscm) (0.010 grain (gr) of PM per dry standard cubic foot (dscf)); and

(2) Visible emissions (VE) in excess of 10 percent opacity from any PM add-on air pollution control device if a continuous opacity monitor (COM) or visible emissions monitoring is chosen as the monitoring option.

(c) *Thermal chip dryer.* On and after the date the initial performance test is conducted or required to be conducted, whichever date is earlier, the owner or operator of a thermal chip dryer must not discharge or cause to be discharged to the atmosphere emissions in excess of:

(1) 0.40 kilogram (kg) of THC, as propane, per megagram (Mg) (0.80 lb of THC, as propane, per ton) of feed/charge from a thermal chip dryer at a secondary aluminum production facility that is a major source; and

(2) 2.50 micrograms (μg) of D/F TEQ per Mg (3.5×10^{-5} gr per ton) of feed/charge from a thermal chip dryer at a secondary aluminum production facility that is a major or area source.

(d) *Scrap dryer/delacquering kiln/decoating kiln.* On and after the date the initial performance test is conducted or required to be conducted, whichever date is earlier:

(1) The owner or operator of a scrap dryer/delacquering kiln/decoating kiln must not discharge or cause to be discharged to the atmosphere emissions in excess of:

(i) 0.03 kg of THC, as propane, per Mg (0.06 lb of THC, as propane, per ton) of feed/charge from a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major source;

(ii) 0.04 kg of PM per Mg (0.08 lb per ton) of feed/charge from a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major source;

(iii) 0.25 μg of D/F TEQ per Mg (3.5×10^{-6} gr of D/F TEQ per ton) of feed/charge from a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major or area source; and

(iv) 0.40 kg of HCl per Mg (0.80 lb per ton) of feed/charge from a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major source.

(2) The owner or operator of a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major source must not discharge or cause to be discharged to the atmosphere visible emissions in excess of 10 percent opacity from any PM add-on air pollution control device if a COM is chosen as the monitoring option.

(e) *Scrap dryer/delacquering kiln/decoating kiln: alternative limits.* The owner or operator of a scrap dryer/delacquering kiln/decoating kiln may choose to comply with the emission limits in this paragraph as an alternative to the limits in paragraph (d) of this section if the scrap dryer/delacquering kiln/decoating kiln is equipped with an afterburner having a design residence time of at least 1 second and the afterburner is operated at a temperature of at least 750 °C (1400 °F) at all times. On and after the date the initial performance test is conducted or required to be conducted, whichever date is earlier:

(1) The owner or operator of a scrap dryer/delacquering kiln/decoating kiln must not discharge or cause to be discharged to the atmosphere emissions in excess of:

(i) 0.10 kg of THC, as propane, per Mg (0.20 lb of THC, as propane, per ton) of feed/charge from a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major source;

(ii) 0.15 kg of PM per Mg (0.30 lb per ton) of feed/charge from a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major source;

(iii) 5.0 μg of D/F TEQ per Mg (7.0×10^{-5} gr of D/F TEQ per ton) of feed/charge from a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major or area source; and

(iv) 0.75 kg of HCl per Mg (1.50 lb per ton) of feed/charge from a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major source.

(2) The owner or operator of a scrap dryer/ delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major source must not discharge or cause to be discharged to the atmosphere visible emissions in excess of 10 percent opacity from any PM add-on air pollution control device if a COM is chosen as the monitoring option.

(f) *Sweat furnace.* The owner or operator of a sweat furnace shall comply with the emission standard of paragraph (f)(2) of this section.

(1) The owner or operator is not required to conduct a performance test to demonstrate compliance with the emission standard of paragraph (f)(2) of this section, provided that, on and after the compliance date of this rule, the owner or operator operates and maintains an afterburner with a design residence time of two seconds or greater and an operating temperature of 1600 °F or greater.

(2) On and after the date the initial performance test is conducted or required to be conducted, or if no compliance test is required, on and after the compliance date of this rule, whichever date is earlier, the owner or operator of a sweat furnace at a secondary aluminum production facility that is a major or area source must not discharge or cause to be discharged to the atmosphere emissions in excess of 0.80 nanogram (ng) of D/F TEQ per dscm (3.5×10^{-10} gr per dscf) at 11 percent oxygen (O_2).

(g) *Dross-only furnace.* On and after the date the initial performance test is conducted or required to be conducted, whichever date is earlier, the owner or operator of a dross-only furnace at a secondary aluminum production facility that is a major source must not discharge or cause to be discharged to the atmosphere:

(1) Emissions in excess of 0.15 kg of PM per Mg (0.30 lb of PM per ton) of feed/charge.

(2) Visible emissions in excess of 10 percent opacity from any PM add-on air pollution control device if a COM is chosen as the monitoring option.

(h) *Rotary dross cooler.* On and after the date the initial performance test is conducted or required to be conducted, whichever date is earlier, the owner or operator of a rotary dross cooler at a secondary aluminum production facility that is a major source must not discharge or cause to be discharged to the atmosphere:

(1) Emissions in excess of 0.09 g of PM per dscm (0.04 gr per dscf).

(2) Visible emissions in excess of 10 percent opacity from any PM add-on air pollution control device if a COM is chosen as the monitoring option.

(i) *Group 1 furnace.* The owner or operator of a group 1 furnace must use the limits in this paragraph to determine the emission standards for a SAPU.

(1) 0.20 kg of PM per Mg (0.40 lb of PM per ton) of feed/charge from a group 1 furnace, that is not a melting/holding furnace processing only clean charge, at a secondary aluminum production facility that is a major source;

(2) 0.40 kg of PM per Mg (0.80 lb of PM per ton) of feed/charge from a group 1 melting/holding furnace processing only clean charge at a secondary aluminum production facility that is a major source;

(3) 15 μg of D/F TEQ per Mg (2.1×10^{-4} gr of D/F TEQ per ton) of feed/charge from a group 1 furnace at a secondary aluminum production facility that is a major or area source. This limit does not apply if the furnace processes only clean charge; and

(4) 0.20 kg of HCl per Mg (0.40 lb of HCl per ton) of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight, for a group 1 furnace at a secondary aluminum production facility that is a major source.

(5) The owner or operator of a group 1 furnace at a secondary aluminum production facility that is a major source must not discharge or cause to be discharged to the atmosphere visible emissions in excess of 10 percent opacity from any PM add-on air pollution control device if a COM is chosen as the monitoring option.

(6) The owner or operator may determine the emission standards for a SAPU by applying the group 1 furnace limits on the basis of the aluminum production weight in each group 1 furnace, rather than on the basis of feed/charge.

(7) The owner or operator of a sidewell group 1 furnace that conducts reactive fluxing (except for cover flux) in the hearth, or that conducts reactive fluxing in the sidewell at times when the level of molten metal falls below the top of the passage between the sidewell and the hearth, must comply with the emission limits of paragraphs (j)(1) through (j)(4) of this section on the basis of the combined emissions from the sidewell and the hearth.

(j) *In-line fluxer.* Except as provided in paragraph (j)(3) of this section for an in-line fluxer using no reactive flux material, the owner or operator of an in-line fluxer must use the limits in this paragraph to determine the emission standards for a SAPU.

(1) 0.02 kg of HCl per Mg (0.04 lb of HCl per ton) of feed/charge;

(2) 0.005 kg of PM per Mg (0.01 lb of PM per ton) of feed/charge.

(3) The emission limits in paragraphs (j)(1) and (j)(2) of this section do not apply to an in-line fluxer that uses no reactive flux materials.

(4) The owner or operator of an in-line fluxer at a secondary aluminum production facility that is a major source must not discharge or cause to be discharged to the atmosphere visible emissions in excess of 10 percent opacity from any PM add-on air pollution control device used to control emissions from the in-line fluxer, if a COM is chosen as the monitoring option.

(5) The owner or operator may determine the emission standards for a SAPU by applying the in-line fluxer limits on the basis of the aluminum production weight in each in-line fluxer, rather than on the basis of feed/charge.

(k) *Secondary aluminum processing unit.* On and after the date of approval of the operation, maintenance and monitoring (OM&M) plan, the owner or operator must comply with the emission limits calculated using the equations for PM and HCl in paragraphs (k)(1) and (k)(2) of this section for each secondary aluminum processing unit at a secondary aluminum production facility that is a major source. The owner or operator must comply with the emission limit calculated using the equation for D/F in paragraph (k)(3) of this section for each secondary aluminum processing unit at a secondary aluminum production facility that is a major or area source.

(1) The owner or operator must not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of PM in excess of:

$$L_{C_{PM}} = \frac{\sum_{i=1}^{n}\left(L_{ti_{PM}} \times T_{ti}\right)}{\sum_{i=1}^{n}\left(T_{ti}\right)} \qquad \text{(Eq. 1)}$$

Where,

L_{tiPM} = The PM emission limit for individual emission unit i in paragraph (i)(1) and (2) of this section for a group 1 furnace or in paragraph (j)(2) of this section for an in-line fluxer;

T_{ti} = The feed/charge rate for individual emission unit I; and

L_{cPM} = The PM emission limit for the secondary aluminum processing unit.

Note: In-line fluxers using no reactive flux materials cannot be included in this calculation since they are not subject to the PM limit.

(2) The owner or operator must not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of HCl in excess of:

$$L_{Cl_{HCl}} = \frac{\sum_{i=1}^{n}\left(L_{ti_{HCl}} \times T_{ti}\right)}{\sum_{i=1}^{n}\left(T_{ti}\right)} \qquad \text{(Eq. 2)}$$

Where,

L_{tiHCl} = The HCl emission limit for individual emission unit i in paragraph (i)(4) of this section for a group 1 furnace or in paragraph (j)(1) of this section for an in-line fluxer; and

L_{cHCl} = The HCl emission limit for the secondary aluminum processing unit.

Note: In-line fluxers using no reactive flux materials cannot be included in this calculation since they are not subject to the HCl limit.

(3) The owner or operator must not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of D/F in excess of:

$$L_{C_{D/F}} = \frac{\sum_{i=1}^{n}\left(L_{ti_{D/F}} \times T_{ti}\right)}{\sum_{i=1}^{n}\left(T_{ti}\right)} \qquad \text{(Eq. 3)}$$

Where,

$L_{tiD/F}$ = The D/F emission limit for individual emission unit i in paragraph (i)(3) of this section for a group 1 furnace; and

$L_{cD/F}$ = The D/F emission limit for the secondary aluminum processing unit.

Note: Clean charge furnaces cannot be included in this calculation since they are not subject to the D/F limit.

(4) The owner or operator of a SAPU at a secondary aluminum production facility that is a major source may demonstrate compliance with the emission limits of paragraphs (k)(1) through (3) of this section by demonstrating that each emission unit within the SAPU is in compliance with the applicable emission limits of paragraphs (i) and (j) of this section.

(5) The owner or operator of a SAPU at a secondary aluminum production facility that is an area source may demonstrate compliance with the emission limits of paragraph (k)(3) of this section by demonstrating that each emission unit within the SAPU is in compliance with the emission limit of paragraph (i)(3) of this section.

§ 63.1506 Operating requirements.

(a) *Summary.* (1) On and after the date on which the initial performance test is conducted or required to be conducted, whichever date is earlier, the owner or operator must operate all new and existing affected sources and control equipment according to the requirements in this section.

(2) The completion of the initial performance tests for SAPUs shall be considered to be the date of approval of the OM&M plan by the permitting authority.

(3) The owner or operator of an existing sweat furnace that meets the specifications of § 63.1505(f)(1) must operate the sweat furnace and control equipment according to the requirements of this section on and after the compliance date of this standard.

(4) The owner or operator of a new sweat furnace that meets the specifications of § 63.1505(f)(1) must operate the sweat furnace and control equipment according to the requirements of this section by March 23, 2000 or upon startup, whichever is later.

(5) Operating requirements are summarized in Table 2 to this subpart.

(b) *Labeling.* The owner or operator must provide and maintain easily

visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

(1) The type of affected source or emission unit (*e.g.,* scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer).

(2) The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (*e.g.*, clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

(3) The afterburner operating temperature and design residence time for a scrap dryer/delacquering kiln/decoating kiln.

(c) *Capture/collection systems.* For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

(1) Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of ''Industrial Ventilation: A Manual of Recommended Practice'' (incorporated by reference in § 63.1502 of this subpart);

(2) Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and

(3) Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

(d) *Feed/charge weight.* The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

(1) Except as provided in paragraph (d)(3) of this section, install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and

(2) Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.

(3) The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:

(i) The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

(ii) All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

(e) *Aluminum scrap shredder.* The owner or operator of a scrap shredder with emissions controlled by a fabric filter must operate a bag leak detection system, or a continuous opacity monitor, or conduct visible emissions observations.

(1) If a bag leak detection system is used to meet the monitoring requirements in § 63.1510, the owner or operator must:

(i) Initiate corrective action within 1-hour of a bag leak detection system alarm and complete the corrective action procedures in accordance with the OM&M plan.

(ii) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

(2) If a continuous opacity monitoring system is used to meet the monitoring requirements in § 63.1510, the owner or operator must initiate corrective action within 1-hour of any 6-minute average reading of 5 percent or more opacity and complete the corrective action procedures in accordance with the OM&M plan.

(3) If visible emission observations are used to meet the monitoring requirements in § 63.1510, the owner or operator must initiate corrective action within 1-hour of any observation of visible emissions during a daily visible emissions test and complete the corrective action procedures in accordance with the OM&M plan.

(f) *Thermal chip dryer.* The owner or operator of a thermal chip dryer with emissions controlled by an afterburner must:

(1) Maintain the 3-hour block average operating temperature of each afterburner at or above the average temperature established during the performance test.

(2) Operate each afterburner in accordance with the OM&M plan.

(3) Operate each thermal chip dryer using only unpainted aluminum chips as the feedstock.

(g) *Scrap dryer/delacquering kiln/decoating kiln.* The owner or operator of a scrap dryer/delacquering kiln/decoating kiln with emissions controlled by an afterburner and a lime-injected fabric filter must:

(1) For each afterburner,

(i) Maintain the 3-hour block average operating temperature of each afterburner at or above the average temperature established during the performance test.

(ii) Operate each afterburner in accordance with the OM&M plan.

(2) If a bag leak detection system is used to meet the fabric filter monitoring requirements in § 63.1510,

(i) Initiate corrective action within 1-hour of a bag leak detection system alarm and complete any necessary corrective action procedures in accordance with the OM&M plan.

(ii) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

(3) If a continuous opacity monitoring system is used to meet the monitoring requirements in § 63.1510, initiate corrective action within 1-hour of any 6-minute average reading of 5 percent or more opacity and complete the corrective action procedures in accordance with the OM&M plan.

(4) Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14 °C (plus 25 °F).

(5) For a continuous injection device, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.

(h) *Sweat furnace.* The owner or operator of a sweat furnace with emissions controlled by an afterburner must:

(1) Maintain the 3-hour block average operating temperature of each afterburner at or above:

(i) The average temperature established during the performance test; or

(ii) 1600 °F if a performance test was not conducted, and the afterburner meets the specifications of § 63.1505(f)(1).

(2) Operate each afterburner in accordance with the OM&M plan.

(i) *Dross-only furnace.* The owner or operator of a dross-only furnace with emissions controlled by a fabric filter must:

(1) If a bag leak detection system is used to meet the monitoring requirements in § 63.1510,

(i) Initiate corrective action within 1-hour of a bag leak detection system alarm and complete the corrective action procedures in accordance with the OM&M plan.

(ii) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

(2) If a continuous opacity monitoring system is used to meet the monitoring requirements in § 63.1510, initiate corrective action within 1-hour of any 6-minute average reading of 5 percent or more opacity and complete the corrective action procedures in accordance with the OM&M plan.

(3) Operate each furnace using dross as the sole feedstock.

(j) *Rotary dross cooler.* The owner or operator of a rotary dross cooler with emissions controlled by a fabric filter must:

(1) If a bag leak detection system is used to meet the monitoring requirements in § 63.1510,

(i) Initiate corrective action within 1-hour of a bag leak detection system alarm and complete the corrective action procedures in accordance with the OM&M plan.

(ii) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

(2) If a continuous opacity monitoring system is used to meet the monitoring requirements in § 63.1510, initiate corrective action within 1 hour of any 6-minute average reading of 5 percent or more opacity and complete the corrective action procedures in accordance with the OM&M plan.

(k) *In-line fluxer.* The owner or operator of an in-line fluxer with emissions controlled by a lime-injected fabric filter must:

(1) If a bag leak detection system is used to meet the monitoring requirements in § 63.1510,

(i) Initiate corrective action within 1-hour of a bag leak detection system alarm and complete the corrective action procedures in accordance with the OM&M plan.

(ii) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

(2) If a continuous opacity monitoring system is used to meet the monitoring requirements in § 63.1510, initiate corrective action within 1 hour of any 6-minute average reading of 5 percent or more opacity and complete the corrective action procedures in accordance with the OM&M plan.

(3) For a continuous injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.

(4) Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.

(l) *In-line fluxer using no reactive flux material.* The owner or operator of a new or existing in-line fluxer using no reactive flux materials must operate each in-line fluxer using no reactive flux materials.

(m) *Group 1 furnace with add-on air pollution control devices.* The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:

(1) If a bag leak detection system is used to meet the monitoring requirements in § 63.1510, the owner or operator must:

(i) Initiate corrective action within 1 hour of a bag leak detection system alarm.

(ii) Complete the corrective action procedures in accordance with the OM&M plan.

(iii) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

(2) If a continuous opacity monitoring system is used to meet the monitoring requirements in § 63.1510, the owner or operator must:

(i) Initiate corrective action within 1 hour of any 6-minute average reading of 5 percent or more opacity; and

(ii) Complete the corrective action procedures in accordance with the OM&M plan.

(3) Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14 °C (plus 25 °F).

(4) For a continuous lime injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.

(5) Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.

(6) Operate each sidewell furnace such that:

(i) The level of molten metal remains above the top of the passage between the

side-well and hearth during reactive flux injection, unless the hearth also is equipped with an add-on control device.

(ii) Reactive flux is added only in the sidewell unless the hearth also is equipped with an add-on control device.

(n) *Group 1 furnace without add-on air pollution control devices.* The owner or operator of a group 1 furnace (including a group 1 furnace that is part of a secondary aluminum processing unit) without add-on air pollution control devices must:

(1) Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.

(2) Operate each furnace in accordance with the work practice/pollution prevention measures documented in the OM&M plan and within the parameter values or ranges established in the OM&M plan.

(3) Operate each group 1 melting/holding furnace subject to the emission standards in § 63.1505(i)(2) using only clean charge as the feedstock.

(o) *Group 2 furnace.* The owner or operator of a new or existing group 2 furnace must:

(1) Operate each furnace using only clean charge as the feedstock.

(2) Operate each furnace using no reactive flux.

(p) *Corrective action.* When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the owner or operator must initiate corrective action. Corrective action must restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

§ 63.1507–§ 63.1509 [Reserved]

Monitoring and Compliance Requirements

§ 63.1510 Monitoring requirements.

(a) *Summary.* On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section. Monitoring requirements for each type of affected source and emission unit are summarized in Table 3 to this subpart.

(b) *Operation, maintenance, and monitoring (OM&M) plan.* The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. The owner or operator must submit the plan to the applicable permitting authority for review and approval as part of the application for a part 70 or part 71 permit. Any subsequent changes to the plan must be submitted to the applicable permitting authority for review and approval. Pending approval by the applicable permitting authority of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. Each plan must contain the following information:

(1) Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.

(2) A monitoring schedule for each affected source and emission unit.

(3) Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in § 63.1505.

(4) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:

(i) Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and

(ii) Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in subpart A of this part.

(5) Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.

(6) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in paragraph (b)(1) of this section, including:

(i) Procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and

(ii) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.

(7) A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

(8) Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in paragraph (o) of this section for each group 1 furnace not equipped with an add-on air pollution control device.

(c) *Labeling.* The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in § 63.1506(b) are intact and legible.

(d) *Capture/collection system.* The owner or operator must:

(1) Install, operate, and maintain a capture/collection system for each affected source and emission unit equipped with an add-on air pollution control device; and

(2) Inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in § 63.1506(c) and record the results of each inspection.

(e) *Feed/charge weight.* The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or μg/Mg (gr/ton) of feed/charge must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the applicable permitting authority to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.

(1) The accuracy of the weight measurement device or procedure must

be ±1 percent of the weight being measured. The owner or operator may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.

(2) The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

(f) *Fabric filters and lime-injected fabric filters.* The owner or operator of an affected source or emission unit using a fabric filter or lime-injected fabric filter to comply with the requirements of this subpart must install, calibrate, maintain, and continuously operate a bag leak detection system as required in paragraph (f)(1) of this section or a continuous opacity monitoring system as required in paragraph (f)(2) of this section. The owner or operator of an aluminum scrap shredder must install and operate a bag leak detection system as required in paragraph (f)(1) of this section, install and operate a continuous opacity monitoring system as required in paragraph (f)(2) of this section, or conduct visible emission observations as required in paragraph (f)(3) of this section.

(1) These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

(i) The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.

(ii) Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the ''Fabric Filter Bag Leak Detection Guidance,'' (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD–19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

(iii) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(iv) The bag leak detection system sensor must provide output of relative or absolute PM loadings.

(v) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.

(vi) The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.

(vii) For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.

(viii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(ix) The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.

(x) Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

(2) These requirements apply to the owner or operator of a new or existing affected source or an existing emission unit using a continuous opacity monitoring system.

(i) The owner or operator must install, calibrate, maintain, and operate a continuous opacity monitoring system to measure and record the opacity of emissions exiting each exhaust stack.

(ii) Each continuous opacity monitoring system must meet the design and installation requirements of Performance Specification 1 in appendix B to 40 CFR part 60.

(3) These requirements apply to the owner or operator of a new or existing aluminum scrap shredder who conducts visible emission observations. The owner or operator must:

(i) Perform a visible emissions test for each aluminum scrap shredder using a certified observer at least once a day according to the requirements of Method 9 in appendix A to 40 CFR part 60. Each Method 9 test must consist of five 6-minute observations in a 30-minute period; and

(ii) Record the results of each test.

(g) *Afterburner.* These requirements apply to the owner or operator of an affected source using an afterburner to comply with the requirements of this subpart.

(1) The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the operating temperature of the afterburner consistent with the requirements for continuous monitoring systems in subpart A of this part.

(2) The temperature monitoring device must meet each of these performance and equipment specifications:

(i) The temperature monitoring device must be installed at the exit of the combustion zone of each afterburner.

(ii) The monitoring system must record the temperature in 15-minute block averages and determine and record the average temperature for each 3-hour block period.

(iii) The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in § 63.1512(m).

(iv) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.

(3) The owner or operator must conduct an inspection of each afterburner at least once a year and record the results. At a minimum, an inspection must include:

(i) Inspection of all burners, pilot assemblies, and pilot sensing devices for proper operation and clean pilot sensor;

(ii) Inspection for proper adjustment of combustion air;

(iii) Inspection of internal structures (*e.g.,* baffles) to ensure structural integrity;

(iv) Inspection of dampers, fans, and blowers for proper operation;

(v) Inspection for proper sealing;

(vi) Inspection of motors for proper operation;

(vii) Inspection of combustion chamber refractory lining and clean and replace lining as necessary;

(viii) Inspection of afterburner shell for corrosion and/or hot spots;

(ix) Documentation, for the burn cycle that follows the inspection, that the

afterburner is operating properly and any necessary adjustments have been made; and

(x) Verification that the equipment is maintained in good operating condition.

(xi) Following an equipment inspection, all necessary repairs must be completed in accordance with the requirements of the OM&M plan.

(h) *Fabric filter inlet temperature.* These requirements apply to the owner or operator of a scrap dryer/delacquering kiln/decoating kiln or a group 1 furnace using a lime-injected fabric filter to comply with the requirements of this subpart.

(1) The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in subpart A of this part.

(2) The temperature monitoring device must meet each of these performance and equipment specifications:

(i) The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.

(ii) The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in § 63.1512(n).

(iii) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.

(i) *Lime injection.* These requirements apply to the owner or operator of an affected source or emission unit using a lime-injected fabric filter to comply with the requirements of this subpart.

(1) The owner or operator of a continuous lime injection system must verify that lime is always free-flowing by either:

(i) Inspecting each feed hopper or silo at least once each 8-hour period and recording the results of each inspection. If lime is found not to be free-flowing during any of the 8-hour periods, the owner or operator must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The owner or operator may return to inspections at least once every 8 hour period if corrective action results in no further blockages of lime during the 3-day period; or

(ii) Subject to the approval of the permitting agency, installing, operating and maintaining a load cell, carrier gas/lime flow indicator, carrier gas pressure drop measurement system or other system to confirm that lime is free-flowing. If lime is found not to be free-flowing, the owner or operator must promptly initiate and complete corrective action, or

(iii) Subject to the approval of the permitting agency, installing, operating and maintaining a device to monitor the concentration of HCl at the outlet of the fabric filter. If an increase in the concentration of HCl indicates that the lime is not free-flowing, the owner or operator must promptly initiate and complete corrective action.

(2) The owner or operator of a continuous lime injection system must record the lime feeder setting once each day of operation.

(3) An owner or operator who intermittently adds lime to a lime coated fabric filter must obtain approval from the permitting authority for a lime addition monitoring procedure. The permitting authority will not approve a monitoring procedure unless data and information are submitted establishing that the procedure is adequate to ensure that relevant emission standards will be met on a continuous basis.

(j) *Total reactive flux injection rate.* These requirements apply to the owner or operator of a group 1 furnace (with or without add-on air pollution control devices) or in-line fluxer. The owner or operator must:

(1) Install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to each affected source or emission unit.

(i) The monitoring system must record the weight for each 15-minute block period, during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test.

(ii) The accuracy of the weight measurement device must be ±1 percent of the weight of the reactive component of the flux being measured. The owner or operator may apply to the permitting authority for permission to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of ±1 percent impracticable. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards.

(iii) The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

(2) Calculate and record the gaseous or liquid reactive flux injection rate (kg/Mg or lb/ton) for each operating cycle or time period used in the performance test using the procedure in § 63.1512(o).

(3) Record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of:

(i) Gaseous or liquid reactive flux other than chlorine; and

(ii) Solid reactive flux.

(4) Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in § 63.1512(o).

(5) The owner or operator of a group 1 furnace or in-line fluxer performing reactive fluxing may apply to the Administrator for approval of an alternative method for monitoring and recording the total reactive flux addition rate based on monitoring the weight or quantity of reactive flux per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.

(k) *Thermal chip dryer.* These requirements apply to the owner or operator of a thermal chip dryer with emissions controlled by an afterburner. The owner or operator must:

(1) Record the type of materials charged to the unit for each operating cycle or time period used in the performance test.

(2) Submit a certification of compliance with the applicable operational standard for charge materials in § 63.1506(f)(3) for each 6-month reporting period. Each certification must contain the information in § 63.1516(b)(2)(i).

(l) *Dross-only furnace.* These requirements apply to the owner or operator of a dross-only furnace. The owner or operator must:

(1) Record the materials charged to each unit for each operating cycle or time period used in the performance test.

(2) Submit a certification of compliance with the applicable operational standard for charge materials in § 63.1506(i)(3) for each 6-month reporting period. Each certification must contain the information in § 63.1516(b)(2)(ii).

(m) *In-line fluxers using no reactive flux.* The owner or operator of an in-line fluxer that uses no reactive flux

materials must submit a certification of compliance with the operational standard for no reactive flux materials in § 63.1506(l) for each 6-month reporting period. Each certification must contain the information in § 63.1516(b)(2)(vi).

(n) *Sidewell group 1 furnace with add-on air pollution control devices.* These requirements apply to the owner or operator of a sidewell group 1 furnace using add-on air pollution control devices. The owner or operator must:

(1) Record in an operating log for each charge of a sidewell furnace that the level of molten metal was above the top of the passage between the sidewell and hearth during reactive flux injection, unless the furnace hearth was also equipped with an add-on control device.

(2) Submit a certification of compliance with the operational standards in § 63.1506(m)(7) for each 6-month reporting period. Each certification must contain the information in § 63.1516(b)(2)(iii).

(o) *Group 1 furnace without add-on air pollution control devices.* These requirements apply to the owner or operator of a group 1 furnace that is not equipped with an add-on air pollution control device.

(1) The owner or operator must develop, in consultation with the applicable permitting authority, a written site-specific monitoring plan. The site-specific monitoring plan must be part of the OM&M plan that addresses monitoring and compliance requirements for PM, HCl, and D/F emissions.

(i) The owner or operator of an existing affected source must submit the site-specific monitoring plan to the applicable permitting authority for review at least 6 months prior to the compliance date.

(ii) The permitting authority will review and approve or disapprove a proposed plan, or request changes to a plan, based on whether the plan contains sufficient provisions to ensure continuing compliance with applicable emission limits and demonstrates, based on documented test results, the relationship between emissions of PM, HCl, and D/F and the proposed monitoring parameters for each pollutant. Test data must establish the highest level of PM, HCl, and D/F that will be emitted from the furnace. Subject to permitting agency approval of the OM&M plan, this may be determined by conducting performance tests and monitoring operating parameters while charging the furnace with feed/charge materials containing the highest anticipated levels of oils and coatings and fluxing at the highest anticipated rate.

(2) Each site-specific monitoring plan must document each work practice, equipment/design practice, pollution prevention practice, or other measure used to meet the applicable emission standards.

(3) Each site-specific monitoring plan must include provisions for unit labeling as required in paragraph (c) of this section, feed/charge weight measurement (or production weight measurement) as required in paragraph (e) of this section and flux weight measurement as required in paragraph (j) of this section.

(4) Each site-specific monitoring plan for a melting/holding furnace subject to the clean charge emission standard in § 63.1505(i)(3) must include these requirements:

(i) The owner or operator must record the type of feed/ charge (*e.g.*, ingot, thermally dried chips, dried scrap, etc.) for each operating cycle or time period used in the performance test; and

(ii) The owner or operator must submit a certification of compliance with the applicable operational standard for clean charge materials in § 63.1506(n)(3) for each 6-month reporting period. Each certification must contain the information in § 63.1516(b)(2)(iv).

(5) If a continuous emission monitoring system is included in a site-specific monitoring plan, the plan must include provisions for the installation, operation, and maintenance of the system to provide quality-assured measurements in accordance with all applicable requirements of the general provisions in subpart A of this part.

(6) If a continuous opacity monitoring system is included in a site-specific monitoring plan, the plan must include provisions for the installation, operation, and maintenance of the system to provide quality-assured measurements in accordance with all applicable requirements of this subpart.

(7) If a site-specific monitoring plan includes a scrap inspection program for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in paragraph (p) of this section.

(8) If a site-specific monitoring plan includes a calculation method for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in paragraph (q) of this section.

(p) *Scrap inspection program for group 1 furnace without add-on air pollution control devices.* A scrap inspection program must include:

(1) A proven method for collecting representative samples and measuring the oil and coatings content of scrap samples;

(2) A scrap inspector training program;

(3) An established correlation between visual inspection and physical measurement of oil and coatings content of scrap samples;

(4) Periodic physical measurements of oil and coatings content of randomly-selected scrap samples and comparison with visual inspection results;

(5) A system for assuring that only acceptable scrap is charged to an affected group 1 furnace; and

(6) Recordkeeping requirements to document conformance with plan requirements.

(q) *Monitoring of scrap contamination level by calculation method for group 1 furnace without add-on air pollution control devices.* The owner or operator of a group 1 furnace dedicated to processing a distinct type of furnace feed/charge composed of scrap with a uniform composition (such as rejected product from a manufacturing process for which the coating-to-scrap ratio can be documented) may include a program in the site-specific monitoring plan for determining, monitoring, and certifying the scrap contaminant level using a calculation method rather than a scrap inspection program. A scrap contaminant monitoring program using a calculation method must include:

(1) Procedures for the characterization and documentation of the contaminant level of the scrap prior to the performance test.

(2) Limitations on the furnace feed/ charge to scrap of the same composition as that used in the performance test. If the performance test was conducted with a mixture of scrap and clean charge, limitations on the proportion of scrap in the furnace feed/charge to no greater than the proportion used during the performance test.

(3) Operating, monitoring, recordkeeping, and reporting requirements to ensure that no scrap with a contaminant level higher than that used in the performance test is charged to the furnace.

(r) *Group 2 furnace.* These requirements apply to the owner or operator of a new or existing group 2 furnace. The owner or operator must:

(1) Record a description of the materials charged to each furnace,

including any nonreactive, non-HAP-containing/non-HAP-generating fluxing materials or agents.

(2) Submit a certification of compliance with the applicable operational standard for charge materials in § 63.1506(o) for each 6-month reporting period. Each certification must contain the information in § 63.1516(b)(2)(v).

(s) *Site-specific requirements for secondary aluminum processing units.* (1) An owner or operator of a secondary aluminum processing unit at a facility must include, within the OM&M plan prepared in accordance with § 63.1510(b), the following information:

(i) The identification of each emission unit in the secondary aluminum processing unit;

(ii) The specific control technology or pollution prevention measure to be used for each emission unit in the secondary aluminum processing unit and the date of its installation or application;

(iii) The emission limit calculated for each secondary aluminum processing unit and performance test results with supporting calculations demonstrating initial compliance with each applicable emission limit;

(iv) Information and data demonstrating compliance for each emission unit with all applicable design, equipment, work practice or operational standards of this subpart; and

(v) The monitoring requirements applicable to each emission unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average using the procedure in § 63.1510(t).

(2) The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions:

(i) Any averaging among emissions of differing pollutants;

(ii) The inclusion of any affected sources other than emission units in a secondary aluminum processing unit;

(iii) The inclusion of any emission unit while it is shutdown; or

(iv) The inclusion of any periods of startup, shutdown, or malfunction in emission calculations.

(3) To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the owner or operator must submit a request to the applicable permitting authority containing the information required by paragraph (s)(1) of this section and obtain approval of the applicable permitting authority prior to implementing any revisions.

(t) *Secondary aluminum processing unit.* Except as provided in paragraph (u) of this section, the owner or operator must calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the owner or operator must:

(1) Calculate and record the total weight of material charged to each emission unit in the secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight information required in paragraph (e) of this section. If the owner or operator chooses to comply on the basis of weight of aluminum produced by the emission unit, rather than weight of material charged to the emission unit, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis.

(2) Multiply the total feed/charge weight to the emission unit, or the weight of aluminum produced by the emission unit, for each emission unit for the 24-hour period by the emission rate (in lb/ton of feed/charge) for that emission unit (as determined during the performance test) to provide emissions for each emission unit for the 24-hour period, in pounds.

(3) Divide the total emissions for each SAPU for the 24-hour period by the total material charged to the SAPU, or the weight of aluminum produced by the SAPU over the 24-hour period to provide the daily emission rate for the SAPU.

(4) Compute the 24-hour daily emission rate using Equation 4:

$$E_{day} = \frac{\sum_{i=1}^{n}\left(T_i \times ER_i\right)}{\sum_{i=1}^{n} T_i} \qquad \text{(Eq. 4)}$$

Where,

E_{day} = The daily PM, HCl, or D/F emission rate for the secondary aluminum processing unit for the 24-hour period;

T_i = The total amount of feed, or aluminum produced, for emission unit i for the 24-hour period (tons);

ER_i = The measured emission rate for emission unit i as determined in the performance test (lb/ton or μg/Mg of feed/charge); and

n = The number of emission units in the secondary aluminum processing unit.

(5) Calculate and record the 3-day, 24-hour rolling average for each pollutant each day by summing the daily emission rates for each pollutant over the 3 most recent consecutive days and dividing by 3.

(u) *Secondary aluminum processing unit compliance by individual emission unit demonstration.* As an alternative to the procedures of paragraph (t) of this section, an owner or operator may demonstrate, through performance tests, that each individual emission unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emission unit.

(v) *Alternative monitoring method for lime addition.* The owner or operator of a lime-coated fabric filter that employs intermittent or noncontinuous lime addition may apply to the Administrator for approval of an alternative method for monitoring the lime addition schedule and rate based on monitoring the weight of lime added per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.

(w) *Alternative monitoring methods.* An owner or operator may submit an application to the Administrator for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of this subpart, subject to the provisions of paragraphs (w)(1) through (6) of this section.

(1) The Administrator will not approve averaging periods other than those specified in this section.

(2) The owner or operator must continue to use the original monitoring requirement until necessary data are submitted and approval is received to use another monitoring procedure.

(3) The owner or operator shall submit the application for approval of alternate monitoring methods no later than the notification of the performance test. The application must contain the information specified in paragraphs (w)(3) (i) through (iii) of this section:

(i) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;

(ii) A description of the proposed alternative monitoring requirements, including the operating parameters to be monitored, the monitoring approach and technique, and how the limit is to be calculated; and

(iii) Data and information documenting that the alternative monitoring requirement(s) would provide equivalent or better assurance of compliance with the relevant emission standard(s).

(4) The Administrator will not approve an alternate monitoring application unless it would provide equivalent or better assurance of compliance with the relevant emission standard(s). Before disapproving any alternate monitoring application, the Administrator will provide:

(i) Notice of the information and findings upon which the intended disapproval is based; and

(ii) Notice of opportunity for the owner or operator to present additional supporting information before final action is taken on the application. This notice will specify how much additional time is allowed for the owner or operator to provide additional supporting information.

(5) The owner or operator is responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. Neither submittal of an application nor the Administrator's failure to approve or disapprove the application relieves the owner or operator of the responsibility to comply with any provisions of this subpart.

(6) The Administrator may decide at any time, on a case-by-case basis, that additional or alternative operating limits, or alternative approaches to establishing operating limits, are necessary to demonstrate compliance with the emission standards of this subpart.

§ 63.1511 Performance test/compliance demonstration general requirements.

(a) *Site-specific test plan.* Prior to conducting a performance test required by this subpart, the owner or operator must prepare and submit a site-specific test plan meeting the requirements in § 63.7(c).

(b) *Initial performance test.* Following approval of the site-specific test plan, the owner or operator must demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emission unit, and report the results in the notification of compliance status report as described in § 63.1515(b). The owner or operator must conduct each performance test according to the requirements of the general provisions in subpart A of this part and this subpart. Owners or operators of affected sources located at facilities which are area sources are subject only to those performance testing requirements pertaining to D/F. Owners or operators of sweat furnaces meeting the specifications of § 63.1505(f)(1) are not required to conduct a performance test.

(1) The owner or operator must conduct each test while the affected source or emission unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.

(2) Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours.

(3) Each performance test for a batch process must consist of three separate runs; pollutant sampling for each run must be conducted over the entire process operating cycle.

(4) Where multiple affected sources or emission units are exhausted through a common stack, pollutant sampling for each run must be conducted over a period of time during which all affected sources or emission units complete at least 1 entire process operating cycle or for 24 hours, whichever is shorter.

(5) Initial compliance with an applicable emission limit or standard is demonstrated if the average of three runs conducted during the performance test is less than or equal to the applicable emission limit or standard.

(c) *Test methods.* The owner or operator must use the following methods in appendix A to 40 CFR part 60 to determine compliance with the applicable emission limits or standards:

(1) Method 1 for sample and velocity traverses.

(2) Method 2 for velocity and volumetric flow rate.

(3) Method 3 for gas analysis.

(4) Method 4 for moisture content of the stack gas.

(5) Method 5 for the concentration of PM.

(6) Method 9 for visible emission observations.

(7) Method 23 for the concentration of D/F.

(8) Method 25A for the concentration of THC, as propane.

(9) Method 26A for the concentration of HCl. Where a lime-injected fabric filter is used as the control device to comply with the 90 percent reduction standard, the owner or operator must measure the fabric filter inlet concentration of HCl at a point before lime is introduced to the system.

(d) *Alternative methods.* The owner or operator may use an alternative test method, subject to approval by the Administrator.

(e) *Repeat tests.* The owner or operator of new or existing affected sources and emission units located at secondary aluminum production facilities that are major sources must conduct a performance test every 5 years following the initial performance test.

(f) *Testing of representative emission units.* With the approval of the permitting authority, a single representative or similar group 1 furnace or in-line fluxer which is not controlled by an add-on control device may be tested to determine the emission rate of all like affected sources at a facility provided that:

(1) The tested emission unit must use identical feed/charge and flux materials in the same proportions as the emission units that it represents;

(2) The tested emission unit is subject to the same work practices and the emission units that it represents;

(3) The tested emission unit is of the same design as the emission units that it represents;

(4) The tested emission unit is tested under the highest load or capacity reasonably expected to occur for any of the emission units that it represents;

(5) At least one of each different style of emission unit at the facility is tested; and

(6) All add-on control devices are tested.

(g) *Establishment of monitoring and operating parameter values.* The owner or operator of new or existing affected sources and emission units must establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by § 63.1510 that ensures compliance with the applicable emission limit or standard. To establish the minimum or maximum value or range, the owner or operator must use the appropriate procedures in this section and submit the information required by § 63.1515(b)(4) in the notification of compliance status report. The owner or operator may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the applicable permitting authority:

(1) The complete emission test report(s) used as the basis of the parameter(s) is submitted.

(2) The same test methods and procedures as required by this subpart were used in the test.

(3) The owner or operator certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.

(4) All process and control equipment operating parameters required to be monitored were monitored as required in this subpart and documented in the test report.

§ 63.1512 Performance test/compliance demonstration requirements and procedures.

(a) *Aluminum scrap shredder.* The owner or operator must conduct performance tests to measure PM emissions at the outlet of the control system. If visible emission observations is the selected monitoring option, the owner or operator must record visible emission observations from each exhaust stack for all consecutive 6-minute periods during the PM emission test according to the requirements of Method 9 in appendix A to 40 CFR part 60.

(b) *Thermal chip dryer.* The owner or operator must conduct a performance test to measure THC and D/F emissions at the outlet of the control device while the unit processes only unpainted aluminum chips.

(c) *Scrap dryer/delacquering kiln/decoating kiln.* The owner or operator must conduct performance tests to measure emissions of THC, D/F, HCl, and PM at the outlet of the control device.

(1) If the scrap dryer/delacquering kiln/decoating kiln is subject to the alternative emission limits in § 63.1505(e), the average afterburner operating temperature in each 3-hour block period must be maintained at or above 760 °C (1400 °F) for the test.

(2) The owner or operator of a scrap dryer/delacquering kiln/decoating kiln subject to the alternative limits in § 63.1505(e) must submit a written certification in the notification of compliance status report containing the information required by § 63.1515(b)(7).

(d) *Group 1 furnace with add-on air pollution control devices.* (1) The owner or operator of a group 1 furnace that processes scrap other than clean charge materials with emissions controlled by a lime-injected fabric filter must conduct performance tests to measure emissions of PM and D/F at the outlet of the control device and emissions of HCl at the outlet (for the emission limit) or the inlet and the outlet (for the percent reduction standard).

(2) The owner or operator of a group 1 furnace that processes only clean charge materials with emissions controlled by a lime-injected fabric filter must conduct performance tests to measure emissions of PM at the outlet of the control device and emissions of HCl at the outlet (for the emission limit) or the inlet and the outlet (for the percent reduction standard).

(3) The owner or operator may choose to determine the rate of reactive flux addition to the group 1 furnace and assume, for the purposes of demonstrating compliance with the SAPU emission limit, that all reactive flux added to the group 1 furnace is emitted. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl.

(4) The owner or operator of a sidewell group 1 furnace that conducts reactive fluxing (except for cover flux) in the hearth, or that conducts reactive fluxing in the sidewell at times when the level of molten metal falls below the top of the passage between the sidewell and the hearth, must conduct the performance tests required by paragraph (d)(1) or (d)(2) of this section, to measure emissions from both the sidewell and the hearth.

(e) *Group 1 furnace (including melting holding furnaces) without add-on air pollution control devices.* In the site-specific monitoring plan required by § 63.1510(o), the owner or operator of a group 1 furnace (including a melting/holding furnaces) without add-on air pollution control devices must include data and information demonstrating compliance with the applicable emission limits.

(1) If the group 1 furnace processes other than clean charge material, the owner or operator must conduct emission tests to measure emissions of PM, HCl, and D/F at the furnace exhaust outlet.

(2) If the group 1 furnace processes only clean charge, the owner or operator must conduct emission tests to simultaneously measure emissions of PM and HCl at the furnace exhaust outlet. A D/F test is not required. Each test must be conducted while the group 1 furnace (including a melting/holding furnace) processes only clean charge.

(3) The owner or operator may choose to determine the rate of reactive flux addition to the group 1 furnace and assume, for the purposes of demonstrating compliance with the SAPU emission limit, that all reactive flux added to the group 1 furnace is emitted. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl.

(f) *Sweat furnace.* Except as provided in § 63.1505(f)(1), the owner or operator must measure emissions of D/F from each sweat furnace at the outlet of the control device.

(g) *Dross-only furnace.* The owner or operator must conduct a performance test to measure emissions of PM from each dross-only furnace at the outlet of each control device while the unit processes only dross.

(h) *In-line fluxer.* (1) The owner or operator must conduct a performance test to measure emissions of HCl and PM. If the in-line fluxer is equipped with an add-on control device, the emissions must be measured at the outlet of the control device. If the in-line fluxer uses no reactive flux materials, emission tests for PM and HCl are not required.

(2) The owner or operator may choose to determine the rate of reactive flux addition to the in-line fluxer and assume, for the purposes of demonstrating compliance with the SAPU emission limit, that all reactive flux added to the in-line fluxer is emitted. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl.

(i) *Rotary dross cooler.* The owner or operator must conduct a performance test to measure PM emissions at the outlet of the control device.

(j) *Secondary aluminum processing unit.* The owner or operator must conduct performance tests as described in paragraphs (j)(1) through (3) of this section. The results of the performance tests are used to establish emission rates in lb/ton of feed/charge for PM and HCl and μg TEQ/Mg of feed/charge for D/F emissions from each emission unit. These emission rates are used for compliance monitoring in the calculation of the 3-day, 24-hour rolling average emission rates using the equation in § 63.1510(t). A performance test is required for:

(1) Each group 1 furnace processing only clean charge to measure emissions of PM and either:

(i) Emissions of HCl (for the emission limit); or

(ii) The mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard).

(2) Each group 1 furnace that processes scrap other than clean charge to measure emissions of PM and D/F and either:

(i) Emissions of HCl (for the emission limit); or

(ii) The mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard).

(3) Each in-line fluxer to measure emissions of PM and HCl.

(k) *Feed/charge weight measurement.* During the emission test(s) conducted to determine compliance with emission limits in a kg/Mg (lb/ton) format, the owner or operator of an affected source or emission unit, subject to an emission limit in a kg/Mg (lb/ton) of feed/charge

format, must measure (or otherwise determine) and record the total weight of feed/charge to the affected source or emission unit for each of the three test runs and calculate and record the total weight. An owner or operator that chooses to demonstrate compliance on the basis of the aluminum production weight must measure the weight of aluminum produced by the emission unit or affected source instead of the feed/charge weight.

(l) *Continuous opacity monitoring system.* The owner or operator of an affected source or emission unit using a continuous opacity monitoring system must conduct a performance evaluation to demonstrate compliance with Performance Specification 1 in appendix B to 40 CFR part 60. Following the performance evaluation, the owner or operator must measure and record the opacity of emissions from each exhaust stack for all consecutive 6-minute periods during the PM emission test.

(m) *Afterburner.* These requirements apply to the owner or operator of an affected source using an afterburner to comply with the requirements of this subpart.

(1) Prior to the initial performance test, the owner or operator must conduct a performance evaluation for the temperature monitoring device according to the requirements of § 63.8.

(2) The owner or operator must use these procedures to establish an operating parameter value or range for the afterburner operating temperature.

(i) Continuously measure and record the operating temperature of each afterburner every 15 minutes during the THC and D/F performance tests;

(ii) Determine and record the 15-minute block average temperatures for the three test runs; and

(iii) Determine and record the 3-hour block average temperature measurements for the 3 test runs.

(n) *Inlet gas temperature.* The owner or operator of a scrap dryer/delacquering kiln/decoating kiln or a group 1 furnace using a lime-injected fabric filter must use these procedures to establish an operating parameter value or range for the inlet gas temperature.

(1) Continuously measure and record the temperature at the inlet to the lime-injected fabric filter every 15 minutes during the HCl and D/F performance tests;

(2) Determine and record the 15-minute block average temperatures for the 3 test runs; and

(3) Determine and record the 3-hour block average of the recorded temperature measurements for the 3 test runs.

(o) *Flux injection rate.* The owner or operator must use these procedures to establish an operating parameter value or range for the total reactive chlorine flux injection rate.

(1) Continuously measure and record the weight of gaseous or liquid reactive flux injected for each 15 minute period during the HCl and D/F tests, determine and record the 15-minute block average weights, and calculate and record the total weight of the gaseous or liquid reactive flux for the 3 test runs;

(2) Record the identity, composition, and total weight of each addition of solid reactive flux for the 3 test runs;

(3) Determine the total reactive chlorine flux injection rate by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 5:

$$W_t = F_1W_1 + F_2W_2 \qquad \text{(Eq. 5)}$$

Where,

W_t = Total chlorine usage, by weight;
F_1 = Fraction of gaseous or liquid flux that is chlorine;
W_1 = Weight of reactive flux gas injected;
F_2 = Fraction of solid reactive chloride flux that is chlorine (*e.g.,* F = 0.75 for magnesium chloride; and
W_2 = Weight of solid reactive flux;

(4) Divide the weight of total chlorine usage (W_t) for the 3 test runs by the recorded measurement of the total weight of feed for the 3 test runs; and

(5) If a solid reactive flux other than magnesium chloride is used, the owner or operator must derive the appropriate proportion factor subject to approval by the applicable permitting authority.

(p) *Lime injection.* The owner or operator of an affected source or emission unit using a lime-injected fabric filter system must use these procedures during the HCl and D/F tests to establish an operating parameter value for the feeder setting for each operating cycle or time period used in the performance test.

(1) For continuous lime injection systems, ensure that lime in the feed hopper or silo is free-flowing at all times; and

(2) Record the feeder setting for the 3 test runs. If the feed rate setting varies during the runs, determine and record the average feed rate from the 3 runs.

(q) *Bag leak detection system.* The owner or operator of an affected source or emission unit using a bag leak detection system must submit the information described in § 63.1515(b)(6) as part of the notification of compliance status report to document conformance with the specifications and requirements in § 63.1510(f).

(r) *Labeling.* The owner or operator of each scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace and in-line fluxer must submit the information described in § 63.1515(b)(3) as part of the notification of compliance status report to document conformance with the operational standard in § 63.1506(b).

(s) *Capture/collection system.* The owner or operator of a new or existing affected source or emission unit with an add-on control device must submit the information described in § 63.1515(b)(2) as part of the notification of compliance status report to document conformance with the operational standard in § 63.1506(c).

§ 63.1513 Equations for determining compliance.

(a) *THC emission limit.* Use Equation 6 to determine compliance with an emission limit for THC:

$$E = \frac{C \times MW \times Q \times K_1 \times K_2}{M_V \times P \times 10^6} \qquad \text{(Eq. 6)}$$

Where,

E = Emission rate of measured pollutant, kg/Mg (lb/ton) of feed;
C = Measured volume fraction of pollutant, ppmv;
MW = Molecular weight of measured pollutant, g/g-mole (lb/lb-mole): THC (as propane) = 44.11;
Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr);
K_1 = Conversion factor, 1 kg/1,000 g (1 lb/lb);
K_2 = Conversion factor, 1,000 L/m^3 (1 ft^3/ft^3);
M_v = Molar volume, 24.45 L/g-mole (385.3 ft^3/lb-mole); and
P = Production rate, Mg/hr (ton/hr).

(b) *PM, HCl and D/F emission limits.* Use Equation 7 to determine compliance with an emission limit for PM, HCl, and D/F:

$$E = \frac{C \times Q \times K_1}{P} \qquad \text{(Eq. 7)}$$

Where,

E = Emission rate of PM, HCl, or D/F, kg/Mg (lb/ton) of feed;
C = Concentration of PM, HCl, or D/F, g/dscm (gr/dscf);
Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr);
K_1 = Conversion factor, 1 kg/1,000 g (1 lb/7,000 gr); and
P = Production rate, Mg/hr (ton/hr).

(c) *HCl percent reduction standard.* Use Equation 8 to determine compliance with an HCl percent reduction standard:

$$\%R = \frac{L_i - L_o}{L_i} \times 100 \qquad \text{(Eq. 8)}$$

Where,

%R = Percent reduction of the control device;

L_i = Inlet loading of pollutant, kg/Mg (lb/ton); and

L_o = Outlet loading of pollutant, kg/Mg (lb/ton).

(d) *Conversion of D/F measurements to TEQ units.* To convert D/F measurements to TEQ units, the owner or operator must use the procedures and equations in ''Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update'' (EPA–625/3–89–016), incorporated by reference in § 63.1502 of this subpart, available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia, NTIS no. PB 90–145756.

(e) *Secondary aluminum processing unit.* Use the procedures in paragraphs (e)(1), (2), and (3) or the procedure in paragraph (e)(4) of this section to determine compliance with emission limits for a secondary aluminum processing unit.

(1) Use Equation 9 to compute the mass-weighted PM emissions for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit (E_{cPM}) is less than or equal to the emission limit for the secondary aluminum processing unit (L_{cPM}) calculated using Equation 1 in § 63.1505(k).

$$E_{C_{PM}} = \frac{\sum_{i=1}^{n}\left(E_{ti_{PM}} \times T_{ti}\right)}{\sum_{i=1}^{n}\left(T_{ti}\right)} \qquad \text{(Eq. 9)}$$

Where,

E_{cPM} = The mass-weighted PM emissions for the secondary aluminum processing unit;

E_{tiPM} = Measured PM emissions for individual emission unit i;

T_{ti} = The average feed rate for individual emission unit i during the operating cycle or performance test period; and

n=The number of emission units in the secondary aluminum processing unit.

(2) Use Equation 10 to compute the aluminum mass-weighted HCl emissions for the secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit (E_{cHCl}) is less than or equal to the emission limit for the secondary aluminum processing unit (L_{cHCl}) calculated using Equation 2 in § 63.1505(k).

$$E_{C_{HCl}} = \frac{\sum_{i=1}^{n}\left(E_{ti_{HCl}} \times T_{ti}\right)}{\sum_{i=1}^{n}\left(T_{ti}\right)} \qquad \text{(Eq. 10)}$$

Where,

E_{cHCl} = The mass-weighted HCl emissions for the secondary aluminum processing unit; and

E_{tiHCl} = Measured HCl emissions for individual emission unit i.

(3) Use Equation 11 to compute the aluminum mass-weighted D/F emissions for the secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit ($L_{cD/F}$) calculated using Equation 3 in § 63.1505(k).

$$E_{C_{D/F}} = \frac{\sum_{i=1}^{n}\left(E_{ti_{D/F}} \times T_{ti}\right)}{\sum_{i=1}^{n}\left(T_{ti}\right)} \qquad \text{(Eq. 11)}$$

Where,

$E_{cD/F}$ = The mass-weighted D/F emissions for the secondary aluminum processing unit; and

$E_{tiD/F}$ = Measured D/F emissions for individual emission unit i.

(4) As an alternative to using the equations in paragraphs (e)(1), (2), and (3) of this section, the owner or operator may demonstrate compliance for a secondary aluminum processing unit by demonstrating that each existing group 1 furnace is in compliance with the emission limits for a new group 1 furnace in § 63.1505(i) and that each existing in-line fluxer is in compliance with the emission limits for a new in-line fluxer in § 63.1505(j).

§ 63.1514 [Reserved]

Notifications, Reports, And Records

§ 63.1515 Notifications.

(a) *Initial notifications.* The owner or operator must submit initial notifications to the applicable permitting authority as described in paragraphs (a)(1) through (7) of this section.

(1) As required by § 63.9(b)(1), the owner or operator must provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard.

(2) As required by § 63.9(b)(3), the owner or operator of a new or reconstructed affected source, or a source that has been reconstructed such that it is an affected source, that has an initial startup after the effective date of this subpart and for which an application for approval of construction or reconstruction is not required under § 63.5(d), must provide notification that the source is subject to the standard.

(3) As required by § 63.9(b)(4), the owner or operator of a new or reconstructed major affected source that has an initial startup after the effective date of this subpart and for which an application for approval of construction or reconstruction is required by § 63.5(d) must provide the following notifications:

(i) Intention to construct a new major affected source, reconstruct a major source, or reconstruct a major source such that the source becomes a major affected source;

(ii) Date when construction or reconstruction was commenced (submitted simultaneously with the application for approval of construction or reconstruction if construction or reconstruction was commenced before the effective date of this subpart, or no later than 30 days after the date construction or reconstruction commenced if construction or reconstruction commenced after the effective date of this subpart);

(iii) Anticipated date of startup; and

(iv) Actual date of startup.

(4) As required by § 63.9(b)(5), after the effective date of this subpart, an owner or operator who intends to construct a new affected source or reconstruct an affected source subject to this subpart, or reconstruct a source such that it becomes an affected source subject to this subpart, must provide notification of the intended construction or reconstruction. The notification must include all the information required for an application for approval of construction or reconstruction as required by § 63.5(d). For major sources, the application for approval of construction or reconstruction may be used to fulfill these requirements.

(i) The application must be submitted as soon as practicable before the construction or reconstruction is planned to commence (but no sooner than the effective date) if the construction or reconstruction commences after the effective date of this subpart; or

(ii) The application must be submitted as soon as practicable before startup but no later than 90 days after the effective date of this subpart if the construction or reconstruction had commenced and

initial startup had not occurred before the effective date.

(5) As required by § 63.9(d), the owner or operator must provide notification of any special compliance obligations for a new source.

(6) As required by § 63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests and visible emission observations. The owner or operator must notify the Administrator of the intent to conduct a performance test at least 60 days before the performance test is scheduled; notification of opacity or visible emission observations for a performance test must be provided at least 30 days before the observations are scheduled to take place.

(7) As required by § 63.9(g), the owner or operator must provide additional notifications for sources with continuous emission monitoring systems or continuous opacity monitoring systems.

(b) *Notification of compliance status report.* Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in § 63.1501. The notification must be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report must include the information specified in paragraphs (a)(1) through (10) of this section. The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination. In a State with an approved operating permit program where delegation of authority under section 112(l) of the CAA has not been requested or approved, the owner or operator must provide duplicate notification to the applicable Regional Administrator. If an owner or operator submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report must include:

(1) All information required in § 63.9(h). The owner or operator must provide a complete performance test report for each affected source and emission unit for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations (including visible emission and opacity tests).

(2) The approved site-specific test plan and performance evaluation test results for each continuous monitoring system (including a continuous emission or opacity monitoring system).

(3) Unit labeling as described in § 63.1506(b), including process type or furnace classification and operating requirements.

(4) The compliant operating parameter value or range established for each affected source or emission unit with supporting documentation and a description of the procedure used to establish the value (*e.g.,* lime injection rate, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature), including the operating cycle or time period used in the performance test.

(5) Design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in § 63.1506(c).

(6) If applicable, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in § 63.1510(f).

(7) Manufacturer's specification or analysis documenting the design residence time of no less than 1 second for each afterburner used to control emissions from a scrap dryer/delacquering kiln/decoating kiln subject to alternative emission standards in § 63.1505(e).

(8) Manufacturer's specification or analysis documenting the design residence time of no less than 2 seconds and design operating temperature of no less than 1600 °F for each afterburner used to control emissions from a sweat furnace that is not subject to a performance test.

(9) Approved OM&M plan (including site-specific monitoring plan for each group 1 furnace with no add-on air pollution control device).

(10) Startup, shutdown, and malfunction plan, with revisions.

§ 63.1516 Reports.

(a) *Startup, shutdown, and malfunction plan/reports.* The owner or operator must develop and implement a written plan as described in § 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by § 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in § 63.6(e)(3). In addition to the information required in § 63.6(e)(3), the plan must include:

(1) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and

(2) Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

(b) *Excess emissions/summary report.* As required by § 63.10(e)(3), the owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in § 63.10(c). When no deviations of parameters have occurred, the owner or operator must submit a report stating that no excess emissions occurred during the reporting period.

(1) A report must be submitted if any of these conditions occur during a 6-month reporting period:

(i) The corrective action specified in the OM&M plan for a bag leak detection system alarm was not initiated within 1 hour.

(ii) The corrective action specified in the OM&M plan for a continuous opacity monitoring deviation was not initiated within 1 hour.

(iii) The corrective action specified in the OM&M plan for visible emissions from an aluminum scrap shredder was not initiated within 1 hour.

(iv) An excursion of a compliant process or operating parameter value or range (*e.g.,* lime injection rate or screw feeder setting, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter).

(v) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in § 63.6(e)(3).

(vi) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of this subpart.

(vii) A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit.

(2) Each report must include each of these certifications, as applicable:

(i) For each thermal chip dryer: ''Only unpainted aluminum chips were used as feedstock in any thermal chip dryer during this reporting period.''

(ii) For each dross-only furnace: ''Only dross was used as the charge

material in any dross-only furnace during this reporting period.''

(iii) For each sidewell group 1 furnace with add-on air pollution control devices: ''Each furnace was operated such that the level of molten metal remained above the top of the passage between the sidewell and hearth during reactive fluxing, and reactive flux, except for cover flux, was added only to the sidewell or to a furnace hearth equipped with an add-on air pollution control device for PM, HCl, and D/F emissions during this reporting period.''

(iv) For each group 1 melting/holding furnace without add-on air pollution control devices and using pollution prevention measures that processes only clean charge material: ''Each group 1 furnace without add-on air pollution control devices subject to emission limits in § 63.1505(i)(2) processed only clean charge during this reporting period.''

(v) For each group 2 furnace: ''Only clean charge materials were processed in any group 2 furnace during this reporting period, and no fluxing was performed or all fluxing performed was conducted using only nonreactive, non-HAP-containing/non-HAP-generating fluxing gases or agents, except for cover fluxes, during this reporting period.''

(vi) For each in-line fluxer using no reactive flux: ''Only nonreactive, non-HAP-containing, non-HAP-generating flux gases, agents, or materials were used at any time during this reporting period.''

(3) The owner or operator must submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.

(c) *Annual compliance certifications.* For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:

(1) Any period of excess emissions, as defined in paragraph (b)(1) of this section, that occurred during the year were reported as required by this subpart; and

(2) All monitoring, recordkeeping, and reporting requirements were met during the year.

§ 63.1517 Records

(a) As required by § 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart.

(1) The owner or operator must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

(2) The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and

(3) The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

(b) In addition to the general records required by § 63.10(b), the owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records of:

(1) For each affected source and emission unit with emissions controlled by a fabric filter or a lime-injected fabric filter:

(i) If a bag leak detection system is used, the number of total operating hours for the affected source or emission unit during each 6-month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken.

(ii) If a continuous opacity monitoring system is used, records of opacity measurement data, including records where the average opacity of any 6-minute period exceeds 5 percent, with a brief explanation of the cause of the emissions, the time the emissions occurred, the time corrective action was initiated and completed, and the corrective action taken.

(iii) If an aluminum scrap shredder is subject to visible emission observation requirements, records of all Method 9 observations, including records of any visible emissions during a 30-minute daily test, with a brief explanation of the cause of the emissions, the time the emissions occurred, the time corrective action was initiated and completed, and the corrective action taken.

(2) For each affected source with emissions controlled by an afterburner:

(i) Records of 15-minute block average afterburner operating temperature, including any period when the average temperature in any 3-hour block period falls below the compliant operating parameter value with a brief explanation of the cause of the excursion and the corrective action taken; and

(ii) Records of annual afterburner inspections.

(3) For each scrap dryer/delacquering kiln/decoating kiln and group 1 furnace, subject to D/F and HCl emission standards with emissions controlled by a lime-injected fabric filter, records of 15-minute block average inlet temperatures for each lime-injected fabric filter, including any period when the 3-hour block average temperature exceeds the compliant operating parameter value +14 °C (+25 °F), with a brief explanation of the cause of the excursion and the corrective action taken.

(4) For each affected source and emission unit with emissions controlled by a lime-injected fabric filter:

(i) Records of inspections at least once every 8-hour period verifying that lime is present in the feeder hopper or silo and flowing, including any inspection where blockage is found, with a brief explanation of the cause of the blockage and the corrective action taken, and records of inspections at least once every 4-hour period for the subsequent 3 days. If flow monitors, pressure drop sensors or load cells are used to verify that lime is present in the hopper and flowing, records of all monitor or sensor output including any event where blockage was found, with a brief explanation of the cause of the blockage and the corrective action taken;

(ii) If lime feeder setting is monitored, records of daily inspections of feeder setting, including records of any deviation of the feeder setting from the setting used in the performance test, with a brief explanation of the cause of the deviation and the corrective action taken.

(iii) If lime addition rate for a noncontinuous lime injection system is monitored pursuant to the approved alternative monitoring requirements in § 63.1510(v), records of the time and mass of each lime addition during each operating cycle or time period used in the performance test and calculations of the average lime addition rate (lb/ton of feed/charge).

(5) For each group 1 furnace (with or without add-on air pollution control devices) or in-line fluxer, records of 15-minute block average weights of gaseous or liquid reactive flux injection, total reactive flux injection rate and calculations (including records of the identity, composition, and weight of each addition of gaseous, liquid or solid reactive flux), including records of any period the rate exceeds the compliant operating parameter value and corrective action taken.

(6) For each continuous monitoring system, records required by § 63.10(c).

(7) For each affected source and emission unit subject to an emission

standard in kg/Mg (lb/ton) of feed/charge, records of feed/charge (or throughput) weights for each operating cycle or time period used in the performance test.

(8) Approved site-specific monitoring plan for a group 1 furnace without add-on air pollution control devices with records documenting conformance with the plan.

(9) Records of all charge materials for each thermal chip dryer, dross-only furnace, and group 1 melting/holding furnaces without air pollution control devices processing only clean charge.

(10) Operating logs for each group 1 sidewell furnace with add-on air pollution control devices documenting conformance with operating standards for maintaining the level of molten metal above the top of the passage between the sidewell and hearth during reactive flux injection and for adding reactive flux only to the sidewell or a furnace hearth equipped with a control device for PM, HCl, and D/F emissions.

(11) Operating logs for each in-line fluxer using no reactive flux materials documenting each flux gas, agent, or material used during each operating cycle.

(12) Records of all charge materials and fluxing materials or agents for a group 2 furnace.

(13) Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.

(14) Records of annual inspections of emission capture/collection and closed vent systems.

(15) Records for any approved alternative monitoring or test procedure.

(16) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:

(i) Startup, shutdown, and malfunction plan;

(ii) For major sources, OM&M plan; and

(iii) Site-specific secondary aluminum processing unit emission plan (if applicable).

(17) For each secondary aluminum processing unit, records of total charge weight, or if the owner or operator chooses to comply on the basis of aluminum production, total aluminum produced for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions.

Other

§ 63.1518 Applicability of general provisions.

The requirements of the general provisions in subpart A of this part that are applicable to the owner or operator subject to the requirements of this subpart are shown in appendix A to this subpart.

§ 63.1519 Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under section 112(d) of the CAA, the authorities contained in paragraph (b) of this section are retained by the Administrator and are not transferred to a State.

(b) Applicability determinations pursuant to § 63.1.

§ 63.1520 [Reserved]

BILLING CODE 6560–50–P

Table 1 to Subpart RRR--Emission Standards for New and Existing Affected Sources

Affected source/ Emission unit	Pollutant	Limit	Units
All new and existing affected sources and emission units that are controlled with a PM add-on control device and that choose to monitor with a COM; and all new and existing aluminum scrap shredders that choose to monitor with a COM or to monitor visible emissions	Opacity	10	percent
New and existing aluminum scrap shredder	PM	0.01	gr/dscf
New and existing thermal chip dryer	THC D/F[a]	0.80 2.50	lb/ton of feed μg TEQ/Mg of feed
New and existing scrap dryer/delacquering kiln/decoating kiln	PM HCl THC D/F[a]	0.08 0.80 0.06 0.25	lb/ton of feed lb/ton of feed lb/ton of feed μg TEQ/Mg of feed
Or			
Alternative limits if afterburner has a design residence time of at least 1 second and operates at a temperature of at least 1400 °F	PM HCl THC D/F[a]	0.30 1.50 0.20 5.0	lb/ton of feed lb/ton of feed lb/ton of feed μg TEQ/Mg of feed
New and existing sweat furnace	D/F[a]	0.80	ng TEQ/dscm @ 11% O_2[b]
New and existing dross-only furnace	PM	0.30	lb/ton of feed

New and existing in-line fluxer[c]	HCl PM	0.04 0.01	lb/ton of feed lb/ton of feed
New and existing in-line fluxer with no reactive fluxing		No limit	Work practice: no reactive fluxing
New and existing rotary dross cooler	PM	0.04	gr/dscf
New and existing clean furnace (Group 2)		No limit	Work practices: clean charge only and no reactive fluxing
New and existing group 1 melting/holding furnace (processing only clean charge)[c]	PM HCl	0.80 0.40 or 10	lb/ton of feed lb/ton of feed percent of the HCl upstream of an add-on control device
New and existing group 1 furnace[c]	PM HCl	0.40 0.40 or 10	lb/ton of feed lb/ton of feed percent of the HCl upstream of an add-on control device
	D/F[a]	15.0	μg TEQ/Mg of feed
New and existing group 1 furnace[c] with clean charge only	PM HCl	0.40 0.40 Or 10	lb/ton of feed lb/ton of feed percent of the HCl upstream of an add-on control device
	D/F[a]	No Limit	Clean charge only

New and existing secondary aluminum processing unit[a,d] (consists of all existing group 1 furnaces and existing in-line flux boxes at the facility, or all simultaneously constructed new group 1 furnaces and new in-line fluxers)	PM[e]	$L_{t_{PM}} = \frac{\sum_{i=1}^{n} (L_{i_{PM}} \times T_i)}{\sum_{i=1}^{n} (T_i)}$
	HCl[f]	$L_{t_{HCl}} = \frac{\sum_{i=1}^{n} (L_{i_{HCl}} \times T_i)}{\sum_{i=1}^{n} (T_i)}$
	D/F[g]	$L_{t_{D/F}} = \frac{\sum_{i=1}^{n} (L_{i_{D/F}} \times T_i)}{\sum_{i=1}^{n} (T_i)}$

[a] D/F limit applies to a unit at a major or area source.

[b] Sweat furnaces equipped with afterburners meeting the specifications of §63.1505(f)(1) are not required to conduct a performance test.

[c] These limits are also used to calculate the limits applicable to secondary aluminum processing units.

[d] Equation definitions: L_{iPM} = the PM emission limit for individual emission unit i in the secondary aluminum processing unit [kg/Mg (lb/ton) of feed]; T_i = the feed rate for individual emission unit i in the secondary aluminum processing unit; L_{tPM} = the overall PM emission limit for the secondary aluminum processing unit [kg/Mg (lb/ton) of feed]; L_{iHCl} = the HCl emission limit for individual emission unit i in the secondary aluminum processing unit [kg/Mg (lb/ton) of feed]; L_{tHCl} = the overall HCl emission limit for the secondary aluminum processing unit [kg/Mg (lb/ton) of feed]; $L_{iD/F}$ = the D/F emission limit for individual emission unit i [μg TEQ/Mg (gr TEQ/ton) of feed]; $L_{tD/F}$ = the overall D/F emission limit for the secondary aluminum processing unit [μg TEQ/Mg (gr TEQ/ton) of feed]; n = the number of units in the secondary aluminum processing unit.

[e] In-line fluxers using no reactive flux materials cannot be included in this calculation since they are not subject to the PM limit.

[f] In-line fluxers using no reactive flux materials cannot be included in this calculation since they are not subject to the HCl limit.

[g] Clean charge furnaces cannot be included in this calculation since they are not subject to the D/F limit.

BILLING CODE 6560–50–C

TABLE 2 TO SUBPART RRR.—SUMMARY OF OPERATING REQUIREMENTS FOR NEW AND EXISTING AFFECTED SOURCES AND EMISSION UNITS

Affected source/emission unit	Monitor type/operation/process	Operating requirements
All affected sources and emission units with an add-on air pollution control device.	Emission capture and collection system.	Design and install in accordance with Industrial Ventilation: A Handbook of Recommended Practice; operate in accordance with OM&M plan.[b]
All affected sources and emission units subject to production-based (lb/ton of feed) emission limits[a].	Charge/feed weight or Production weight.	Operate a device that records the weight of each charge; Operate in accordance with OM&M plan.[b]
Group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln.	Labeling	Identification, operating parameter ranges and operating requirements posted at affected sources and emission units; control device temperature and residence time requirements posted at scrap dryer/delacquering kiln/decoating kiln.
Aluminum scrap shredder with fabric filter.	Bag leak detector or	Initiate corrective action within 1-hr of alarm and complete in accordance with OM&M plan[b]; operate such that alarm does not sound more than 5% of operating time in 6-month period.
	COM or	Initiate corrective action within 1-hr of a 6-minute average opacity reading of 5% or more and complete in accordance with OM&M plan.[b]
	VE	Initiate corrective action within 1-hr of any observed VE and complete in accordance with the OM&M plan.[b]
Thermal chip dryer with afterburner	Afterburner operating temperature	Maintain average temperature for each 3-hr period at or above average operating temperature during the performance test.
	Afterburner operation	Operate in accordance with OM&M plan.[b]
	Feed material	Operate using only unpainted aluminum chips.
Scrap dryer/delacquering kiln/decoating kiln with afterburner and lime-injected fabric filter.	Afterburner operating temperature	Maintain average temperature for each 3-hr period at or above average operating temperature during the performance test.
	Afterburner operation	Operate in accordance with OM&M plan.[b]
	Bag leak detector or	Initiate corrective action within 1-hr of alarm and complete in accordance with the OM&M plan;[b] operate such that alarm does not sound more than 5% of operating time in 6-month period.
	COM	Initiate corrective action within 1-hr of a 6-minute average opacity reading of 5% or more and complete in accordance with the OM&M plan.[b]
	Fabric filter inlet temperature	Maintain average fabric filter inlet temperature for each 3-hr period at or below average temperature during the performance test +14 °C (+25 °F).
	Lime injection rate	Maintain free-flowing lime in the feed hopper or silo at all times for continuous injection systems; maintain feeder setting at level established during the performance test for continuous injection systems.
Sweat furnace with afterburner	Afterburner operating temperature	If a performance test was conducted, maintain average temperature for each 3-hr period at or above average operating temperature during the performance test; if a performance test was not conducted, and afterburner meets specifications of §63.1505(f)(1), maintain average temperature for each 3-hr period at or above 1600 °F.
	Afterburner operation	Operate in accordance with OM&M plan.[b]
Dross-only furnace with fabric filter	Bag leak detector or	Initiate corrective action within 1-hr of alarm and complete in accordance with the OM&M plan;[b] operate such that alarm does not sound more than 5% of operating time in 6-month period.
	COM	Initiate corrective action within 1-hr of a 6-minute average opacity reading of 5% or more and complete in accordance with the OM&M plan.[b]
	Feed/charge material	Operate using only dross as the feed material.
Rotary dross cooler with fabric filter	Bag leak detector or	Initiate corrective action within 1-hr of alarm and complete in accordance with the OM&M plan;[b] operate such that alarm does not sound more than 5% of operating time in 6-month period.
	COM	Initiate corrective action within 1-hr of a 6-minute average opacity reading of 5% or more and complete in accordance with the OM&M plan.[b]
In-line fluxer with lime-injected fabric filter (including those that are part of a secondary aluminum processing unit).	Bag leak detector or	Initiate corrective action within 1-hr of alarm and complete in accordance with the OM&M plan;[b] operate such that alarm does not sound more than 5% of operating time in 6-month period.
	COM	Initiate corrective action within 1-hr of a 6-minute average opacity reading of 5% or more and complete in accordance with the OM&M plan.[b]
	Lime injection rate	Maintain free-flowing lime in the feed hopper or silo at all times for continuous injection systems; maintain feeder setting at level established during performance test for continuous injection systems.

TABLE 2 TO SUBPART RRR.—SUMMARY OF OPERATING REQUIREMENTS FOR NEW AND EXISTING AFFECTED SOURCES AND EMISSION UNITS—Continued

Affected source/emission unit	Monitor type/operation/process	Operating requirements
	Reactive flux injection rate	Maintain reactive flux injection rate at or below rate used during the performance test for each operating cycle or time period used in the performance test.
In-line fluxer (using no reactive flux material).	Flux materials	Use no reactive flux.
Group 1 furnace with lime-injected fabric filter (including those that are part of a secondary aluminum processing unit).	Bag leak detector or	Initiate corrective action within 1-hr of alarm; operate such that alarm does not sound more than 5% of operating time in 6-month period; complete corrective action in accordance with the OM&M plan.[b]
	COM	Initiate corrective action within 1-hr of a 6-minute average opacity reading of 5% or more; complete corrective action in accordance with the OM&M plan.[b]
	Fabric filter inlet temperature	Maintain average fabric filter inlet temperature for each 3-hour period at or below average temperature during the performance test +14 &degC (+25 °F).
	Reactive flux injection rate	Maintain reactive flux injection rate (lb/hr) at or below rate used during the performance test for each furnace cycle.
	Lime injection rate	Maintain free-flowing lime in the feed hopper or silo at all times for continuous injection systems; maintain feeder setting at level established at performance test for continuous injection systems.
	Maintain molten aluminum level	Operate side-well furnaces such that the level of molten metal is above the top of the passage between sidewell and hearth during reactive flux injection, unless the hearth is also controlled.
	Fluxing in sidewell furnace hearth	Add reactive flux only to the sidewell of the furnace unless the hearth is also controlled.
Group 1 furnace without add-on controls (including those that are part of a secondary aluminum processing unit).	Reactive flux injection rate	Maintain reactive flux injection rate (lb/hr) at or below rate used during the performance test for each operating cycle or time period used in the performance test.
	Site-specific monitoring plan[c]	Operate furnace within the range of charge materials, contaminant levels, and parameter values established in the site-specific monitoring plan.
	Feed material (melting/holding furnace).	Use only clean charge.
Clean (group 2) furnace	Charge and flux materials	Use only clean charge. Use no reactive flux.

[a] Thermal chip dryers, scrap dryers/delacquering kilns/decoating kilns, dross-only furnaces, in-line fluxers and group 1 furnaces including melting/holding furnaces.
[b] OM&M plan—Operation, maintenance, and monitoring plan.
[c] Site-specific monitoring plan. Owner/operators of group 1 furnaces without control devices must include a section in their OM&M plan that documents work practice and pollution prevention measures, including procedures for scrap inspection, by which compliance is achieved with emission limits and process or feed parameter-based operating requirements. This plan and the testing to demonstrate adequacy of the monitoring plan must be developed in coordination with and approved by the permitting authority.

TABLE 3 TO SUBPART RRR.—SUMMARY OF MONITORING REQUIREMENTS FOR NEW AND EXISTING AFFECTED SOURCES AND EMISSION UNITS

Affected source/Emission unit	Monitor type/Operation/Process	Monitoring requirements
All affected sources and emission units with an add-on air pollution control device.	Emission capture and collection system.	Annual inspection of all emission capture, collection, and transport systems to ensure that systems continue to operate in accordance with ACGIH standards.
All affected sources and emission units subject to production-based (lb/ton of feed/charge) emission limits[a].	Feed/charge weight	Record weight of each feed/charge, weight measurement device or other procedure accuracy of ±1%[b]; calibrate according to manufacturers specifications, or at least once every 6 months.
Group 1 furnace, group 2 furnace, in-line fluxer, and scrap dryer/delacquering kiln/decoating kiln.	Labeling	Check monthly to confirm that labels are intact and legible.
Aluminum scrap shredder with fabric filter.	Bag leak detector or	Install and operate in accordance with ''Fabric Filter Bag Leak Detection Guidance''[c]; record voltage output from bag leak detector.
	COM or	Design and install in accordance with PS–1; collect data in accordance with subpart A of 40 CFR part 63; determine and record 6-minute block averages.
	VE	Conduct and record results of 30-minute daily test in accordance with Method 9.
Thermal chip dryer with afterburner	Afterburner operating temperature	Continuous measurement device to meet specifications in §63.1510(g)(1); record average temperature for each 15-minute block; determine and record 3-hr block averages.
	Afterburner operation	Annual inspection of afterburner internal parts; complete repairs in accordance with the OM&M plan.

TABLE 3 TO SUBPART RRR.—SUMMARY OF MONITORING REQUIREMENTS FOR NEW AND EXISTING AFFECTED SOURCES AND EMISSION UNITS—Continued

Affected source/Emission unit	Monitor type/Operation/Process	Monitoring requirements
	Feed/charge material	Record identity of each feed/charge; certify feed/charge materials every 6 months.
Scrap dryer/ delacquering kiln/ decoating kiln with afterburner and lime injected fabric filter.	Afterburner operating temperature	Continuous measurement device to meet specifications in §63.1510(g)(1); record temperatures in 15-minute block averages; determine and record 3-hr block averages.
	Afterburner operation	Annual inspection of afterburner internal parts; complete repairs in accordance with the OM&M plan.
	Bag leak detector or	Install and operate in accordance with ''Fabric Filter Bag Leak Detection Guidance'' [c]; record voltage output from bag leak detector.
	COM	Design and install in accordance with PS–1; collect data in accordance with subpart A of 40 CFR part 63; determine and record 6-minute block averages.
	Lime injection rate	For continuous injection systems, inspect each feed hopper or silo every 8 hrs to verify that lime is free-flowing; record results of each inspection. If blockage occurs, inspect every 4 hrs for 3 days; return to 8-hr inspections if corrective action results in no further blockage during 3-day periode; record feeder setting daily.
	Fabric filter inlet temperature	Continuous measurement device to meet specifications in §63.1510(h)(2); record temperatures in 15-minute block averages; determine and record 3-hr block averages.
Sweat furnace with afterburner	Afterburner operating temperature	Continuous measurement device to meet specifications in §63.1510(g)(1); record temperatures in 15-minute block averages; determine and record 3-hr block averages.
	Afterburner operation	Annual inspection of afterburner internal parts; complete repairs in accordance with the OM&M plan.
Dross-only furnace with fabric filter	Bag leak detector or	Install and operate in accordance with ''Fabric Filter Bag Leak Detection Guidance'' [c]; record output voltage from bag leak detector.
	COM	Design and install in accordance with PS–1; collect data in accordance with subpart A of 40 CFR part 63; determine and record 6-minute block averages.
	Feed/charge material	Record identity of each feed/charge; certify charge materials every 6 months.
Rotary dross cooler with fabric filter	Bag leak detector or	Install and operate in accordance with ''Fabric Filter Bag Leak Detection Guidance'' [c]; record output voltage from bag leak detector.
	COM	Design and install in accordance with PS–1; collect data in accordance with subpart A of 40 CFR part 63; determine and record 6-minute block averages.
In-line fluxer with lime-injected fabric filter.	Bag leak detector or	Install and operate in accordance with ''Fabric Filter Bag Leak Detection Guidance'' [c]; record output voltage from bag leak detector.
	COM	Design and install in accordance with PS–1; collect data in accordance with subpart A of 40 CFR part 63; determine and record 6-minute block averages
	Reactive flux injection rate	Weight measurement device accuracy of ±1% [b]; calibrate according to manufacturer's specifications or at least once every 6 months; record time, weight and type of reactive flux added or injected for each 15-minute block period while reactive fluxing occurs; calculate and record total reactive flux injection rate for each operating cycle or time period used in performance test; or Alternative flux injection rate determination procedure per §63.1510(j)(5).
	Lime injection rate	For continuous injection systems, record feeder setting daily and inspect each feed hopper or silo every 8 hrs to verify that lime is free-flowing; record results of each inspection. If blockage occurs, inspect every 4 hrs for 3 days; return to 8-hour inspections if corrective action results in no further blockage during 3-day period. [d]
In-line fluxer using no reactive flux	Flux materials	Record flux materials; certify every 6 months for no reactive flux.
Group 1 furnace with lime-injected fabric filter.	Bag leak detector or	Install and operate in accordance with ''Fabric Filter Bag Leak Detection Guidance'' [c]; record output voltage from bag leak detector.
	COM	Design and install in accordance with PS–1; collect data in accordance with subpart A of 40 part CFR 63; determine and record 6-minute block averages.
	Lime injection rate	For continuous injection systems, record feeder setting daily and inspect each feed hopper or silo every 8 hours to verify that lime is free-flowing; record results of each inspection. If blockage occurs, inspect every 4 hours for 3 days; return to 8-hour inspections if corrective action results in no further blockage during 3-day period. [d]

TABLE 3 TO SUBPART RRR.—SUMMARY OF MONITORING REQUIREMENTS FOR NEW AND EXISTING AFFECTED SOURCES AND EMISSION UNITS—Continued

Affected source/Emission unit	Monitor type/Operation/Process	Monitoring requirements
	Reactive flux injection rate Weight measurement device accuracy of +1%b; calibrate every 3 months; record weight and type of reactive flux added or injected for each 15-minute block period while reactive fluxing occurs; calculate and record total reactive flux injection rate for each operating cycle or time period used in performance test; or.	
	Alternative flux injection rate determination procedure per §63.1510(j)(5)..	
	Fabric filter inlet temperature	Continuous measurement device to meet specifications in §63.1510(h)(2); record temperatures in 15-minute block averages; determine and record 3-hour block averages.
	Maintain molten aluminum level in sidewell furnace.	Maintain aluminum level operating log; certify every 6 months.
Group 1 furnace without add-on controls.	Fluxing in sidewell furnace hearth	Maintain flux addition operating log; certify every 6 months.
	Reactive flux injection rate	Weight measurement device accuracy of +1%[b]; calibrate according to manufacturers specifications or at least once every six months; record weight and type of reactive flux added or injected for each 15-minute block period while reactive fluxing occurs; calculate and record total reactive flux injection rate for each operating cycle or time period used in performance test.
	OM&M plan (approved by permitting agency).	Demonstration of site-specific monitoring procedures to provide data and show correlation of emissions across the range of charge and flux materials and furnace operating parameters.
	Feed material (melting/holding furnace).	
Record type of permissible feed/charge material; certify charge materials every 6 months..		
Clean (group 2) furnace	Charge and flux materials	Record charge and flux materials; certify every 6 months for clean charge and no reactive flux.

[a] Thermal chip dryers, scrap dryers/delacquering kilns/decoating kilns, dross-only furnaces, in-line fluxers and group 1 furnaces or melting/holding furnaces.
[b] Permitting agency may approve measurement devices of alternative accuracy, for example in cases where flux rates are very low and costs of meters of specified accuracy are prohibitive; or where feed/charge weighing devices of specified accuracy are not practicable due to equipment layout or charging practices.
[c] Non-triboelectric bag leak detectors must be installed and operated in accordance with manufacturers' specifications.
[d] Permitting agency may approve other alternatives including load cells for lime hopper weight, sensors for carrier gas pressure, or HCl monitoring devices at fabric filter outlet.

APPENDIX A TO SUBPART RRR.—GENERAL PROVISIONS APPLICABILITY TO SUBPART RRR

Citation	Requirement	Applies to RRR	Comment
§63.1(a)(1)–(4)	General Applicability	Yes.	
§63.1(a)(5)	.....	No	[Reserved].
§63.1(a)(6)–(8)	.....	Yes.	
§63.1(a)(9)	.....	No	[Reserved].
§63.1(a) (10)–(14)	.....	Yes.	
§63.1(b)	Initial Applicability Determination	Yes	EPA retains approval authority.
§63.1(c)(1)	Applicability After Standard Established	Yes.	
§63.1(c)(2)	.....	Yes	States have option to exclude area sources from title V permit program.
§63.1(c)(3)	.....	No	[Reserved].
§63.1(c)(4)–(5)	.....	Yes.	
§63.1(d)	.....	No	[Reserved].
§63.1(e)	Applicability of Permit Program	Yes.	
§63.2	Definitions	Yes	Additional definitions in §63.1503.
§63.3	Units and Abbreviations	Yes	
§63.4(a)(1)–(3)	Prohibited Activities	Yes.	
§63.4(a)(4)	.....	No	[Reserved]
§63.4(a)(5)	.....	Yes.	

APPENDIX A TO SUBPART RRR.—GENERAL PROVISIONS APPLICABILITY TO SUBPART RRR—Continued

Citation	Requirement	Applies to RRR	Comment
§ 63.4(b)–(c)	Circumvention/ Severability	Yes.	
§ 63.5(a)	Construction and Reconstruction—Applicability	Yes.	
§ 63.5(b)(1)	Existing, New, Reconstructed Sources—Requirements.	Yes.	
§ 63.5(b)(2)		No	[Reserved].
§ 63.5(b)(3)–(6)		Yes.	
§ 63.5(c)		No	[Reserved].
§ 63.5(d)	Application for Approval of Construction/ Reconstruction.	Yes.	
§ 63.5(e)	Approval of Construction/ Reconstruction	Yes.	
§ 63.5(f)	Approval of Construction/Reconstruction Based on State Review.	Yes.	
§ 63.6(a)	Compliance with Standards and Maintenance—Applicability.	Yes.	
§ 63.6(b)(1)–(5)	New and Reconstructed Sources—Dates	Yes.	
§ 63.6(b)(6)		No	[Reserved].
§ 63.6(b)(7)		Yes.	
§ 63.6(c)(1)	Existing Sources Dates	Yes	§ 63.1501 specifies dates.
§ 63.6(c)(2)		Yes.	
§ 63.6(c)(3)–(4)		No	[Reserved].
§ 63.6(c)(5)		Yes.	
§ 63.6(d)		No	[Reserved].
§ 63.6(e)(1)–(2)	Operation & Maintenance Requirements	Yes	§ 63.1510 requires plan.
§ 63.6(e)(3)	Startup, Shutdown, and Malfunction Plan	Yes.	
§ 63.6(f)	Compliance with Emission Standards	Yes.	
§ 63.6(g)	Alternative Standard	No	
§ 63.6(h)	Compliance with Opacity/VE Standards	Yes.	
§ 63.6(i)(1)–(14)	Extension of Compliance	Yes.	
§ 63.6(i)(15)		No	[Reserved].
§ 63.6(i)(16)		Yes.	
§ 63.6(j)	Exemption from Compliance	Yes.	
§ 63.7(a)–(h)	Performance Test Requirements—Applicability and Dates.	Yes	§ 63.1511 requires repeat tests every 5 years for major sources.
§ 63.7(b)	Notification	Yes.	
§ 63.7(c)	Quality Assurance/Test Plan	Yes.	
§ 63.7(d)	Testing Facilities	Yes.	
§ 63.7(e)	Conduct of Tests	Yes.	
§ 63.7(f)	Alternative Test Method	Yes.	
§ 63.7(g)	Data Analysis	Yes.	
§ 63.7(h)	Waiver of Tests	Yes.	
§ 63.8(a)(1)	Monitoring Requirements—Applicability	Yes.	
§ 63.8(a)(2)		Yes.	
§ 63.8(a)(3)		No	[Reserved]
§ 63.8(a)(4)		Yes	
§ 63.8(b)	Conduct of Monitoring	Yes.	
§ 63.8(c)(1)–(3)	CMS Operation and Maintenance	Yes.	
§ 63.8(c)(4)–(8)		Yes.	
§ 63.8(d)	Quality Control	Yes.	
§ 63.8(e)	CMS Performance Evaluation	Yes.	
§ 63.8(f)(1)–(5)	Alternative Monitoring Method	No	§ 63.1510(w) includes provisions for monitoring alternatives.
§ 63.8(f)(6)	Alternative to RATA Test	Yes.	
§ 63.8(g)(1)	Data Reduction	Yes.	
§ 63.8(g)(2)		No	§ 63.1512 requires five 6-minute averages for an aluminum scrap shredder.
§ 63.8(g)(3)–(5)		Yes.	
§ 63.9(a)	Notification Requirements—Applicability	Yes.	
§ 63.9(b)	Initial Notifications	Yes.	
§ 63.9(c)	Request for Compliance Extension	Yes.	
§ 63.9(d)	New Source Notification for Special Compliance Requirements.	Yes.	
63.9(e)	Notification of Performance Test	Yes.	
§ 63.9(f)	Notification of VE/Opacity Test	Yes.	
§ 63.9(g)	Additional CMS Notifications	Yes.	
§ 63.9(h)(1)–(3)	Notification of Compliance Status	Yes.	
§ 63.9(h)(4)		No	[Reserved].
§ 63.9(h)(5)–(6)		Yes.	
§ 63.9(i)	Adjustment of Deadlines	Yes.	
§ 63.9(j)	Change in Previous Information	Yes.	
§ 63.10(a)	Recordkeeping/Reporting—Applicability	Yes.	
§ 63.10(b)	General Requirements	Yes	§ 63.1517 includes additional requirements.

APPENDIX A TO SUBPART RRR.—GENERAL PROVISIONS APPLICABILITY TO SUBPART RRR—Continued

Citation	Requirement	Applies to RRR	Comment
§ 63.10(c)(1)	Additional CMS Recordkeeping	Yes.	
§ 63.10(c)(2)–(4)		No	[Reserved].
§ 63.10(c)(5)		Yes.	
§ 63.10(c)(6)		Yes.	
§ 63.10(c)(7)–(8)		Yes.	
§ 63.10(c)(9)		No	[Reserved].
§ 63.10(c) (10)–(13)		Yes.	
§ 63.10(c) (14)		Yes.	
§ 63.10(d)(1)	General Reporting Requirements	Yes.	
§ 63.10(d)(2)	Performance Test Results	Yes.	
§ 63.10(d)(3)	Opacity or VE Observations	Yes.	
§ 63.10(d)(4) –(5)	Progress Reports/Startup, Shutdown, and Malfunction Reports.	Yes.	
§ 63.10(e)(1)–(2)	Additional CMS Reports	Yes.	
§ 63.10(e)(3)	Excess Emissions/CMS Performance Reports	Yes.	
§ 63.10(e)(4)	COMS Data Reports	Yes.	
§ 63.10(f)	Recordkeeping/Reporting Waiver	Yes.	
§ 63.11(a)–(b)	Control Device Requirements	No	Flares not applicable.
§ 63.12(a)–(c)	State Authority and Delegations	Yes.	EPA retains authority for applicability determinations.
§ 63.13	Addresses	Yes.	
§ 63.14	Incorporation by Reference	Yes.	Chapters 3 and 5 of ACGIH Industrial Ventilation Manual for capture/collection systems.
§ 63.15	Availability of Information/Confidentiality	Yes.	

* * * * *

[FR Doc. 00–4143 Filed 3–22–00; 8:45 am]

BILLING CODE 6560–50–p