



Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

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(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Carol S. Comer
Commissioner

NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding the Renewal of a
Federally Enforceable State Operating Permit (FESOP)
for Scepter Inc. in Knox County

FESOP Renewal No.: F083-36800-00015

The Indiana Department of Environmental Management (IDEM) has received an application from Scepter Inc. located at 6467 North Scepter Road, Bicknell IN 47512 for a renewal of its FESOP issued on November 1, 2006. If approved by IDEM's Office of Air Quality (OAQ), this proposed renewal would allow Scepter Inc. to continue to operate its existing source.

This draft FESOP Renewal does not contain any new equipment that would emit air pollutants; however, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g., changes that add or modify synthetic minor emission limits). This notice fulfills the public notice procedures to which those conditions are subject. IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow for these changes.

A copy of the permit application and IDEM's preliminary findings are available at:

Bicknell-Vigo Township Public Library
201 W. 2nd Street
Bicknell, IN 47512

and

IDEM Southwest Regional Office
1120 N. Vincennes Avenue
P.O. Box 128
Petersburg, IN 47567-0128

A copy of the preliminary findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>.

How can you participate in this process?

The date that this notice is published in a newspaper marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.



A State that Works

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number F083-36800-00015 in all correspondence.

Comments should be sent to:

Katrina Gilbank
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for extension 4-9526
Or dial directly: (317) 234-9526
Fax: (317) 232-6749 attn: Katrina Gilbank
E-mail: KGilbank@idem.IN.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local officials.

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: <http://www.in.gov/idem/5881.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, at the IDEM Regional Office indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions, please contact Katrina Gilbank of my staff at the above address.



Jason R. Krawczyk, Section Chief
Permits Branch
Office of Air Quality



Indiana Department of Environmental Management

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Commissioner

Federally Enforceable State Operating Permit Renewal OFFICE OF AIR QUALITY

**Scepter, Inc.
6467 North Scepter Rd
Bicknell, Indiana 47512**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

Operation Permit No.: F083-36800-00015	
Issued by:	Issuance Date:
Jason R. Krawczyk, Section Chief Permits Branch Office of Air Quality	Expiration Date:

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary secondary aluminum smelting plant.

Source Address:	6467 North Scepter Rd., Bicknell, Indiana 47512
General Source Phone Number:	(812) 735-2500
SIC Code:	3341 (Secondary Smelting and Refining of Nonferrous Metals)
County Location:	Knox
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (a) Three (3) natural gas-fired rotary furnaces as described below:
- (1) One (1) rotary furnace, identified as EU-2, constructed in 1988, with a nominal capacity (feed/charge rate) of 7,000 pounds per hour. Particulate emissions from furnace EU-2 are controlled by a multi-compartment baghouse which exhausts through stacks S3-1, S3-2, S3-3, S3-4, S3-5, and S3-6.
 - (2) One (1) rotary furnace, identified as EU-3, constructed in 1981, with a nominal capacity (feed/charge rate) of 7,000 pounds per hour. Particulate emissions from furnace EU-3 are controlled by a multi-compartment baghouse which exhausts through stacks S4-1, S4-2, S4-3, and S4-4.
 - (3) One (1) rotary furnace, identified as EU-4, constructed in 1995, with a nominal capacity (feed/charge rate) of 7,000 pounds per hour. Particulate emissions from furnace EU-4 are controlled by a multi-compartment baghouse which exhausts through stacks S5-1, S5-2, S5-3, S5-4, and S5-5, and S5-6.

Under 40 CFR 63, Subpart RRR - National Emission Standards for Hazardous Air Pollutants: Secondary Aluminum Production, the rotary furnaces are existing group I furnaces. The furnaces are fueled using either natural gas or coal gas.

HCl emissions from the furnaces are controlled using a pH control system that injects ammonia into the exhaust stream when the pH falls below 0.5 pH units above the pH of the incoming city water. The ammonia injection is controlled using a conventional pH electrode and temperature sensor located in a slip stream of the furnace exhausts. After ammonia injection and prior to entering the baghouse, the exhaust stream is cooled by passing through an air-to-air cooling tower. After exiting the cooling system, the exhaust stream enters a baghouse, which controls the particulate emissions generated by the

reaction of HCl with ammonia.

- (b) One (1) salt cake cooling system, identified as EU-7, approved in 2012 for construction, with a maximum capacity of 4.0 tons per hour, using a baghouse for particulate control, and exhausting to stack S7-1.
- (c) One (1) aluminum can shredder, constructed in 1977, with a maximum capacity of 4.0 tons per hour with particulate matter emissions controlled by a baghouse, and exhausting to stack S6-1.

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities:

- (a) Natural gas-fired combustion sources each with heat input capacities less than 10 million British thermal units per hour; including direct heating systems for pre-heating molds and crucibles having a combined heat input capacity of 20 MMBtu per hour.
- (b) Petroleum fuel other than gasoline dispensing facility consisting of three (3) diesel storage tanks; two (2) each with a 7,500 gallon capacity and one (1) with a 1,050 gallon capacity.
- (c) Eddy current separator, installed in 2014 and permitted in 2016, with a maximum processing rate of 20 tons per hour.
- (d) Pouring and casting operations, installed in 1977, with a maximum throughput capacity of 10.1 tons per hour.
- (e) Material handling operations, installed in 1977, handling 5.0 tons of dross and/or salt cake per hour.
- (f) One (1) portable crucible with five (5) natural gas burners, permitted in 2016, each with a capacity of 1.5 million British thermal units per hour, for a total of 7.5 MMBtu per hour.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) to renew a Federally Enforceable State Operating Permit (FESOP).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

- (a) This permit, F083-36800-00015, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability [326 IAC 2-8-6][IC 13-17-12]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

- (a) A certification required by this permit meets the requirements of 326 IAC 2-8-5(a)(1) if:

- (1) it contains a certification by an "authorized individual", as defined by 326 IAC 2-1.1-1(1), and
 - (2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.9 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.10 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.11 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)]

- (a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

- (b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

The Permittee shall implement the PMPs.

- (c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.12 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ or Southwest Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865
Southwest Regional Office phone: (812) 380-2305; fax: (812) 380-2304.

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to F083-36800-00015 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.

- (b) All previous registrations and permits are superseded by this permit.

B.14 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
- (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.16 Permit Renewal [326 IAC 2-8-3(h)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(42). The renewal application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:
 - (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-8-3(g), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.18 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) and (c) without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
 - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b)(1) and (c). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(1) and (c).

- (b) **Emission Trades [326 IAC 2-8-15(b)]**
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(b).
- (c) **Alternative Operating Scenarios [326 IAC 2-8-15(c)]**
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.
- (d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.19 Source Modification Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.21 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.22 Annual Fee Payment [326 IAC 2-7-19][326 IAC 2-8-4(6)][326 IAC 2-8-16][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ no later than thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.23 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314][326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to

whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (Applicability) and 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A,

Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Open Burning [326 IAC 4-1][IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.5 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using ambient air quality modeling pursuant to 326 IAC 1-7-4.

C.8 Asbestos Abatement Projects [326 IAC 14-10][326 IAC 18][40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Licensed Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

Testing Requirements [326 IAC 2-8-4(3)]

C.9 Performance Testing [326 IAC 3-6]

- (a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4(1)][326 IAC 2-8-5(a)(1)]

C.11 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

- (a) For new units:
Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units shall be implemented on and after the date of initial start-up.
- (b) For existing units:
Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance to begin such monitoring. If, due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.12 Instrument Specifications [326 IAC 2-1.1-11][326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale. The analog instrument shall be capable of measuring values outside of the normal range.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

C.13 Risk Management Plan [326 IAC 2-8-4][40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.14 Response to Excursions or Exceedances [326 IAC 2-8-4][326 IAC 2-8-5]

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ no later than seventy-five (75) days after the date of the test.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.16 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes the following, where applicable:

- (AA) All calibration and maintenance records.
- (BB) All original strip chart recordings for continuous monitoring instrumentation.
- (CC) Copies of all reports required by the FESOP.

Records of required monitoring information include the following, where applicable:

- (AA) The date, place, as defined in this permit, and time of sampling or measurements.
- (BB) The dates analyses were performed.
- (CC) The company or entity that performed the analyses.
- (DD) The analytical techniques or methods used.
- (EE) The results of such analyses.
- (FF) The operating conditions as existing at the time of sampling or measurement.

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.17 General Reporting Requirements [326 IAC 2-8-4(3)(C)][326 IAC 2-1.1-11]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B -Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

- (b) The address for report submittal is:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

C.18 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with applicable standards for recycling and emissions reduction.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) Three (3) natural gas-fired rotary furnaces as described below:
- (1) One (1) rotary furnace, identified as EU-2, constructed in 1988, with a nominal capacity (feed/charge rate) of 7,000 pounds per hour. Particulate emissions from furnace EU-2 are controlled by a multi-compartment baghouse which exhausts through stacks S3-1, S3-2, S3-3, S3-4, S3-5, and S3-6
 - (2) One (1) rotary furnace, identified as EU-3, constructed in 1981, with a nominal capacity (feed/charge rate) of 7,000 pounds per hour. Particulate emissions from furnace EU-3 are controlled by a multi-compartment baghouse which exhausts through stacks S4-1, S4-2, S4-3, and S4-4.
 - (3) One (1) rotary furnace, identified as EU-4, constructed in 1995, with a nominal capacity (feed/charge rate) of 7,000 pounds per hour. Particulate emissions from furnace EU-4 are controlled by a multi-compartment baghouse which exhausts through stacks S5-1, S5-2, S5-3, S5-4, and S5-5, and S5-6.

Under 40 CFR 63, Subpart RRR - National Emission Standards for Hazardous Air Pollutants: Secondary Aluminum Production, the rotary furnaces are existing group I furnaces. The furnaces are fueled using either natural gas or coal gas.

HCl emissions from the furnaces are controlled using a pH control system that injects ammonia into the exhaust stream when the pH falls below 0.5 pH units above the pH of the incoming city water. The ammonia injection is controlled using a conventional pH electrode and temperature sensor located in a slip stream of the furnace exhausts. After ammonia injection and prior to entering the baghouse, the exhaust stream is cooled by passing through an air-to-air cooling tower. After exiting the cooling system, the exhaust stream enters a baghouse, which controls the particulate emissions generated by the reaction of HCl with ammonia.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 PSD Minor Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

- (a) The amount of aluminum processed in the rotary furnaces shall not exceed 91,980 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) The PM emissions from the rotary furnaces shall not exceed 1.60 pounds per ton of aluminum processed.

Compliance with these emission limits combined with the potential to emit PM from all other emissions units, including insignificant activities, shall limit the source-wide potential to emit of PM to less than 100 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.2 FESOP Limits [326 IAC 2-8][326 IAC 2-2]

In order to render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

- (a) The amount of aluminum processed in the rotary furnaces shall not exceed 91,980 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) The PM10 emissions from the rotary furnaces shall not exceed 1.60 pounds per ton of aluminum processed.
- (c) The PM2.5 emissions from the rotary furnaces shall not exceed 1.60 pounds per ton of aluminum processed.
- (d) The HCl emissions from the rotary furnaces shall not exceed 0.215 pounds per ton of aluminum processed.

Compliance with these emission limits combined with the potential to emit PM10 and PM2.5 from all other emissions units, including insignificant activities, shall limit the source-wide potential to emit of PM10 and PM2.5 to less than 100 tons per twelve (12) consecutive month period and HCl emissions to less than ten (10) tons per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable and shall render the source minor under Section 112 of the Clean Air Act.

D.1.3 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emissions from the rotary furnaces shall not exceed the following emission rates:

Process/Unit	Process Weight (tons /hour)	Particulate Emission Limit (lbs/hour)
EU-2	3.5	9.5
EU-3	3.5	9.5
EU-4	3.5	9.5

The pounds per hour limitations were calculated using the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

Compliance Determination Requirements [326 IAC 2-8-4(1)]

D.1.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for the furnaces and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-8-4(1)]

D.1.5 Particulate Matter (PM) and Hazardous Air Pollutants (HAPs)

- (a) In order to assure compliance with Conditions D.1.1(b), D.1.2(b), (c), and (d), and D.1.3, the baghouse and pH control system shall be in operation and control emissions from the rotary furnaces at all times the furnaces are in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.1.6 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

- (a) In order to demonstrate compliance with Conditions D.1.1(b), D.1.2(b) and (c), and D.1.3, the Permittee shall perform stack testing of PM, PM10, and PM2.5 emissions from a representative natural gas-fired furnace utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. The PM10 and PM2.5 include filterable and condensable particulate matter.
- (b) In order to demonstrate compliance with Condition D.1.2(d), the Permittee shall perform stack testing of HCl emissions from a representative natural gas-fired furnace utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

D.1.7 Visible Emissions Notations

- (a) Visible emission notations of the rotary furnace stack exhausts shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed at any baghouse exhaust, the Permittee shall take a reasonable response. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.1.8 Monitoring Requirements

- (a) Pursuant to the Consent Decree (Case No. 2001-10376-A, signed on February 11, 2003), the Permittee shall comply with the following:
- (1) The Permittee shall continuously monitor and record the following parameters for the HCl control system:
 - (A) The pH of the incoming city water;
 - (B) The variable pH set-point;
 - (C) The pH measurement of the gas stream; and
 - (D) The ammonia feed rate.
 - (2) The ammonia feed valve shall be opened when the gas stream pH measurement drops below the variable pH set point plus 0.5 pH units.
 - (3) The minimum ammonia feed rate shall be 50 scfh at all times when the applicable furnace/baghouse system is in one of the operational phases.
- (b) Pursuant to the Agreed Order (Case No. 2011-20554-A, signed on July 31, 2012), the Permittee shall comply with the following:
- (1) The Permittee shall monitor and record the following parameters for the HCl control system:
 - (A) Daily visual inspection of the ammonia system mechanical components when the HCl control system is in operation;
 - (B) Daily calibration check of each pH monitoring system when the HCl control system is in operation;
 - (C) Monthly maintenance inspection of all mechanical systems associated with the ammonia injection system, including the ammonia heater; and
 - (D) Monthly diagnostic check on each furnace control system verifying the system will shut down properly if the ammonia flow is interrupted.

D.1.9 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouses used in conjunction with the furnaces, at least once per day when the furnaces are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take reasonable response. The normal range for these units is provided in the table below unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Responses to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response shall be considered a deviation from this permit.

Emission Unit I.D.	Normal Pressure Drop Range (inches of water)
EU-2	3.0 to 10.0
EU-3	3.0 to 10.0
EU-4	3.0 to 10.0

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.1.10 Record Keeping Requirements

- (a) To document the compliance status with Condition D.1.1(a), the Permittee shall maintain records of the amount of aluminum processed per month through the rotary furnaces.
- (b) To document the compliance status with Condition D.1.7, the Permittee shall maintain a daily record of visible emission notations of each of the furnace stack exhausts during normal daylight operations when one or more of the furnaces are in operation. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the process did not operate that day).
- (c) To document the compliance status with Condition D.1.8, the Permittee shall maintain continuous records of the following parameters for the HCl control system:
 - (1) The pH of the incoming city water;
 - (2) The variable pH set-point;
 - (3) The pH of the gas stream; and
 - (4) The ammonia feed rate.
- (d) To document the compliance status with Condition D.1.8, the Permittee shall maintain written records of the following actions in order to assure proper operation of the HCl control system:
 - (1) Daily visual inspection of the ammonia system mechanical components. The Permittee shall include in its daily record when a visual inspection is not taken and the reason for the lack of the visual inspection (e.g., the process did not operate that day);
 - (2) Daily calibration check of each pH monitoring system. The Permittee shall include in its daily record when a calibration check is not taken and the reason for the lack of the calibration check (e.g., the process did not operate that day);
 - (3) Monthly maintenance inspection of all mechanical systems associated with the ammonia injection system, including the ammonia heater; and
 - (4) Monthly diagnostic check on each furnace control system verifying the system will shut down properly if the ammonia flow is interrupted.
- (e) To document the compliance status with Condition D.1.9, the Permittee shall maintain a daily record of the pressure drop across each baghouse. The Permittee shall include in

its daily record when a pressure drop reading is not taken and the reason for the lack of pressure drop reading (e.g., the process did not operate that day).

- (f) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.1.11 Reporting Requirements

Quarterly summaries of the information to document the compliance status with Conditions D.1.1, D.1.2, and D.1.3 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meet the requirements of 326 IAC 2-8-5(a)(1) by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (b) One (1) salt cake cooling system, identified as EU-7, approved for construction in 2012, with a maximum capacity of 4.0 tons per hour, using a baghouse for particulate control, and exhausting to stack S7-1.
- (c) One (1) aluminum can shredder with a maximum capacity of 4.0 tons per hour with particulate matter emissions controlled by a baghouse, and exhausting to stack S6-1.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 PSD Minor Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

- (a) PM emissions from the salt cake cooling system shall not exceed 1.29 pounds per hour.
- (b) The amount of aluminum processed in the aluminum shredder shall not exceed 35,040 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (c) PM emissions from the aluminum can shredder shall not exceed 0.11 pounds per ton of aluminum processed.

Compliance with these emission limits combined with the potential to emit PM from all other emissions units, including insignificant activities, shall limit the source-wide potential to emit of PM to less than 100 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.2.2 FESOP Limits [326 IAC 2-8-4][326 IAC 2-2]

In order to render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

- (a) PM₁₀ emissions from the salt cake cooling system shall not exceed 1.29 pounds per hour.
- (b) PM_{2.5} emissions from the salt cake cooling system shall not exceed 1.29 pounds per hour.
- (c) The amount of aluminum processed in the aluminum shredder shall not exceed 35,040 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (d) PM₁₀ emissions from the aluminum can shredder shall not exceed 0.11 pounds per ton of aluminum processed.
- (e) PM_{2.5} emissions from the aluminum can shredder shall not exceed 0.11 pounds per ton of aluminum processed.

Compliance with these emission limits combined with the potential to emit PM10 and PM2.5 from all other emissions units, including insignificant activities, shall limit the source-wide potential to emit of PM10 and PM2.5 to less than 100 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.2.3 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the salt cake cooling system and aluminum can shredder shall not exceed the following emission rates:

Process/Unit	Process Weight (tons /hour)	Particulate Emission Limit (lbs/hour)
Salt Cake Cooling System	4.0	10.4
Aluminum Can Shredder	4.0	10.4

The pound per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

D.2.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for the salt cake cooling system and aluminum can shredder and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-8-4(1)]

D.2.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

In order to demonstrate compliance with Conditions D.2.1(a), D.2.2(a) and (b), and D.2.3, the Permittee shall perform PM, PM₁₀, and PM_{2.5} testing of the salt cake cooling system at least once every five (5) years from the date of the most recent valid compliance demonstration, utilizing methods approved by the Commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. PM10 and PM2.5 include filterable and condensable particulate matter.

D.2.6 Particulate Control

In order to assure compliance with Conditions D.2.1(a) and (c), D.2.2(a), (b), (d), and (e), and D.2.3, the baghouses for the salt cake cooling system and aluminum can shredder shall be in operation and control emissions from each emission unit at all times when the salt cake cooling system and aluminum can shredder are in operation.

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

D.2.7 Baghouse Parametric Monitoring

- (a) The Permittee shall record the pressure drop across the baghouses used in conjunction with the salt cake cooling system and aluminum can shredder at least once per day when the salt cake cooling system and aluminum can shredder are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range, the

Permittee shall take a reasonable response. The normal range for these units is a pressure drop between 1.0 and 10.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

- (b) The instruments used for determining the pressure and temperature shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.2.8 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, or dust traces.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-16]

D.2.9 Record Keeping Requirements

- (a) To document the compliance status with Conditions D.2.1(b) and D.2.2(c), the Permittee shall keep monthly records of the amount of aluminum processed through the aluminum shredder.
- (b) To document the compliance status with Condition D.2.7, the Permittee shall maintain daily records of the pressure drop across the baghouse. The Permittee shall include in its daily record when the pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).
- (c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.2.10 Reporting Requirements

Quarterly summaries of the information to document the compliance status with Conditions D.2.1(b) and D.2.2(c), shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.3 EMISSION UNIT OPERATION CONDITIONS

Emissions Unit Description:

Insignificant Activities:

- (d) Pouring and casting operations (installed in 1977) with a maximum throughput capacity of 10.1 tons per hour.
- (e) Material handling operations (installed in 1977), handling 5.0 tons of dross and/or salt cake per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 PSD Minor Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

- (a) PM emissions from the pouring and casting process shall not exceed 0.2 pounds per hour.

Compliance with this emission limit combined with the potential to emit PM from all other emissions units, including insignificant activities, shall limit the source-wide potential to emit of PM to less than 100 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.3.2 FESOP Limits [326 IAC 2-8][326 IAC 2-2]

In order to render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

- (a) PM₁₀ emissions from the pouring and casting process shall not exceed 0.2 pounds per hour.
- (b) PM_{2.5} emissions from the pouring and casting process shall not exceed 0.2 pounds per hour.

Compliance with these emission limits combined with the potential to emit PM₁₀ and PM_{2.5} from all other emissions units, including insignificant activities, shall limit the source-wide potential to emit of PM₁₀ and PM_{2.5} to less than 100 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.3.3 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rates from the dross and salt cake handling and pouring and casting operations shall not exceed the following emission rates:

Process/Unit	Process Weight (tons /hour)	Particulate Emission Limit (lbs/hour)
Dross and Salt Cake Material Handling	5.0	12.1
Pouring and Casting Operations	10.1	19.3

These emission limits were calculated using the following equation:

Interpolation of the data for the process rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10P^{0.67}$$

Where: E = Rate of emission in pounds per hour; and
P = Process weight rate in tons per hour.

SECTION E.1

NESHAP

Emissions Unit Description:

- (a) Three (3) natural gas-fired rotary furnaces as described below:
 - (1) One (1) rotary furnace, identified as EU-2, constructed in 1988, with a nominal capacity (feed/charge rate) of 7,000 pounds per hour. Particulate emissions from furnace EU-2 are controlled by a multi-compartment baghouse which exhausts through stacks S3-1, S3-2, S3-3, S3-4, S3-5, and S3-6
 - (2) One (1) rotary furnace, identified as EU-3, constructed in 1981, with a nominal capacity (feed/charge rate) of 7,000 pounds per hour. Particulate emissions from furnace EU-3 are controlled by a multi-compartment baghouse which exhausts through stacks S4-1, S4-2, S4-3, and S4-4.
 - (3) One (1) rotary furnace, identified as EU-4, constructed in 1995, with a nominal capacity (feed/charge rate) of 7,000 pounds per hour. Particulate emissions from furnace EU-4 are controlled by a multi-compartment baghouse which exhausts through stacks S5-1, S5-2, S5-3, S5-4, and S5-5, and S5-6.

Under 40 CFR 63, Subpart RRR - National Emission Standards for Hazardous Air Pollutants: Secondary Aluminum Production, the rotary furnaces are existing group I furnaces. The furnaces are fueled using either natural gas or coal gas.

HCl emissions from the furnaces are controlled using a pH control system that injects ammonia into the exhaust stream when the pH falls below 0.5 pH units above the pH of the incoming city water. The ammonia injection is controlled using a conventional pH electrode and temperature sensor located in a slip stream of the furnace exhausts. After ammonia injection and prior to entering the baghouse, the exhaust stream is cooled by passing through an air-to-air cooling tower. After exiting the cooling system, the exhaust stream enters a baghouse, which controls the particulate emissions generated by the reaction of HCl with ammonia.

- (b) One (1) salt cake cooling system, identified as EU-7, approved in 2012 for construction, with a maximum capacity of 4.0 tons per hour, using a baghouse for particulate control, and exhausting to stack S7-1.
- (c) One (1) aluminum can shredder, constructed in 1977, with a maximum capacity of 4.0 tons per hour with particulate matter emissions controlled by a baghouse, and exhausting to stack S6-1.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-8-4(1)]

E.1.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1][40 CFR Part 63, Subpart A]

- (a) Pursuant to 40 CFR 63.1 the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 63, Subpart RRR.

- (b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

E.1.2 Secondary Aluminum Production NESHAP [40 CFR Part 63, Subpart RRR][326 IAC 20-40]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart RRR (included as Attachment A to the operating permit), which are incorporated by reference as 326 IAC 20-70. for the emission unit(s) listed above:

- (1) 40 CFR 63.10(b)
- (2) 40 CFR 63.10(d)(5)(i), (ii)
- (3) 40 CFR 63.1505(i)(3), (4)
- (4) 40 CFR 63.1506(b),(c),(d), (e), (m), (p)
- (5) 40 CFR 63.1510(b)-(f), (j), (u)
- (6) 40 CFR 63.1512(a), (d), (q), (r), (s)
- (7) 40 CFR 63.1516(b)-(e)
- (8) 40 CFR 63.1517

Compliance Determination Requirements [326 IAC 2-8-4(1)]

E.1.3 Testing Requirements [326 IAC 2-1.1-11][326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

In order to demonstrate compliance with Condition E.1.2, the Permittee shall perform the testing required under 40 CFR 63, Subpart RRR, utilizing methods as approved by the Commissioner, at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION**

Source Name: Scepter, Inc.
Source Address: 6467 North Scepter Rd., Bicknell, Indiana 47512
FESOP Permit No.: F083-36800-00015

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify) _____
- Report (specify) _____
- Notification (specify) _____
- Affidavit (specify) _____
- Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178
Fax: (317) 233-6865**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT**

Source Name: Scepter, Inc.
Source Address: 6467 North Scepter Rd., Bicknell, Indiana 47512
FESOP Permit No.: F083-36800-00015

This form consists of 2 pages

Page 1 of 2

- This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (4) daytime business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
 - The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-8-12

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

FESOP Quarterly Report

Source Name: Scepter, Inc.
Source Address: 6467 North Scepter Rd., Bicknell, Indiana 47512
FESOP Permit No.: F083-36800-00015
Facility: Natural gas-fired rotary furnaces (EU-2, EU-3, EU-4)
Parameter: Aluminum processing throughput
Limit: The amount of aluminum processed in the rotary furnaces shall not exceed 91,980 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER : _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

FESOP Quarterly Report

Source Name: Scepter, Inc.
Source Address: 6467 North Scepter Rd., Bicknell, Indiana 47512
FESOP Permit No.: F083-36800-00015
Facility: Aluminum can shredder
Parameter: Aluminum processing throughput
Limit: The amount of aluminum processed in the aluminum shredder shall not exceed 35,040 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER : _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE AND ENFORCEMENT BRANCH
 FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
 QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Scepter, Inc.
 Source Address: 6467 North Scepter Rd., Bicknell, Indiana 47512
 FESOP Permit No.: F083-36800-00015

Months: _____ **to** _____ **Year:** _____

<p>This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B -Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C- General Reporting. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

Attachment A

Federally Enforceable State Operating Permit (FESOP) Renewal No: F083-36800-00015

[eCFR Current as of September 18, 2015]

Electronic Code of Federal Regulations

Title 40: Protection of Environment

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

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

Source: 65 FR 15710, Mar. 23, 2000, unless otherwise noted.

General

§63.1500 Applicability.

(a) The requirements of this subpart apply to the owner or operator of each secondary aluminum production facility as defined in §63.1503.

(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 facilities and equipment used for research and development that are not used to produce a saleable product.

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

(f) An aluminum die casting facility, aluminum foundry, or aluminum extrusion facility shall be considered to be an area source if it does not emit, or have the potential to emit considering controls, 10 tons per year or more of any single listed HAP or 25 tons per year of any combination of listed HAP from all emission sources which are located in a contiguous area and under common control, without regard to whether or not such sources are regulated under this subpart or any other subpart. In the case of an aluminum die casting facility, aluminum foundry, or aluminum extrusion facility which is an area source and is subject to regulation under this subpart only because it operates a thermal chip dryer, no furnace operated by such a facility shall be deemed to be subject to the requirements of this subpart if it melts only clean charge, internal scrap, or customer returns.

[65 FR 15710, Mar. 23, 2000, as amended at 67 FR 79814, Dec. 30, 2002; 70 FR 75346, Dec. 19, 2005]

§63.1501 Dates.

(a) An affected source constructed before February 11, 1999, must comply with the requirements of this subpart by March 24, 2003, except as provided in paragraphs (b) and (c).

(b) The owner or operator of an affected source constructed before February 14, 2012, must comply with the following requirements of this subpart by March 16, 2016: §63.1505(k) introductory text, (k)(1) through (k)(5), other than the emission standards for HF in (k)(2); §63.1506 (a)(1), (c)(1), (g)(5), (k)(3), (m)(4), (m)(7), (n)(1); §63.1510 (b)(5), (b)(9), (d)(2), (d)(3), (f)(1)(ii), (i)(4), (j)(4), (n)(1), (o)(1), (o)(1)(ii), (s)(2)(iv), (t) introductory text, (t)(2)(i), (t)(2)(ii), (t)(4), (t)(5); §63.1511(a) introductory text, (b) introductory text, (b)(1), (b)(3), (b)(6), (c)(9), (g)(5); §63.1512(e)(1), (e)(2), (e)(3), (h)(2), (j), (j)(1)(i), (j)(2)(i), (o) introductory text, (o)(1), (o)(3), (p)(2); §63.1513 (b)(1), (e)(1), (e)(2), (e)(3), (f); §63.1516 (b) introductory text, (b)(2)(vii), (b)(3)(i); §63.1517(b)(1)(iii), (b)(4)(ii), (b)(14), (b)(19).

(c) The owner or operator of an affected source constructed before February 14, 2012, must comply with the following requirements of this subpart by September 18, 2017: §63.1505(i)(4) and (k)(2) emission standards for HF; §63.1512(e)(4) through (7) requirements for testing existing uncontrolled group 1 furnaces (that is, group 1 furnaces without add-on air pollution control devices); and §63.1514 requirements for change of furnace classification.

(d) An affected source that commenced construction or reconstruction after February 11, 1999 but before February 14, 2012 must comply with the requirements of this subpart by March 24, 2000 or upon startup, whichever is later, except as provided in paragraphs (b), (c), (e), and (f) of this section.

(e) The owner or operator of an affected source that commences construction or reconstruction after February 14, 2012, must comply with all the requirements of this subpart by September 18, 2015 or upon startup, whichever is later.

(f) The owner or operator of any affected source which is constructed or reconstructed after February 11, 1999, but before February 14, 2012 at any existing aluminum die casting facility, aluminum foundry, or aluminum extrusion facility which otherwise meets the applicability criteria set forth in §63.1500 must comply with the requirements of this subpart by March 24, 2003 or upon startup, whichever is later, except as provided in paragraphs (b) and (c) of this section. The owner or operator of any affected source which is constructed or reconstructed after February 14, 2012, at any existing aluminum die casting facility, aluminum foundry, or aluminum extrusion facility which otherwise meets the applicability criteria set forth in §63.1500 must comply with the requirements by September 18, 2015 or upon startup, whichever is later.

[80 FR 56738, Sept. 18, 2015]

§63.1502 [Reserved]

§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:

ACGIH Guidelines means chapters 3 and 5 of *Industrial Ventilation: A Manual of Recommended Practice* 23rd edition or appropriate chapters of *Industrial Ventilation: A Manual of Recommended Practice for Design* 27th edition (incorporated by reference, see §63.14).

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 means fragments of aluminum stock removed during manufacturing (*i.e.*, machining), manufactured aluminum articles or parts rejected or discarded and useful only as material for reprocessing, and waste and discarded material made of aluminum.

Aluminum scrap shredder means a high speed or low speed unit that crushes, grinds, granulates, shears 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*. Shearing and cutting operations performed at rolling mills and aluminum finishing operations (such as slitters) are not aluminum scrap shredders.

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.

Bale breaker means a device used to break apart a bale of aluminum scrap for further processing. Bale breakers are not used to crush, grind, granulate, shear or break aluminum scrap into more uniform size pieces.

Capture and collection system means the system, including duct systems and fans, and, in some cases, hoods, used to collect a contaminant at or near its source, and for affected sources equipped with an air pollution control device, transport the contaminated air to the air cleaning device.

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; aluminum scrap known by the owner or operator to be entirely free of paints, coatings, and lubricants; uncoated/unpainted aluminum chips that have been thermally dried or treated by a centrifugal cleaner; aluminum scrap dried at 343 °C (650  °F) or higher; aluminum scrap delacquered/decoated at 482 °C (900  °F) or higher; and runaround scrap. Anodized aluminum that contains dyes or sealants containing organic compounds is not clean charge.

Cover flux means salt added to the surface of molten aluminum in a *group 1* or *group 2 furnace*, without surface agitation of the molten aluminum, for the purpose of preventing oxidation. Any flux added to a rotary furnace is not a cover flux.

Customer returns means any aluminum product which is returned by a customer to the aluminum company that originally manufactured the product prior to resale of the product or further distribution in commerce, and which contains no paint or other solid coatings (*i.e.*, lacquers).

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. Unheated pots, to which no flux is added and that are used to transport metal, are not furnaces.

HCl means hydrogen chloride.

HF means hydrogen fluoride.

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 scrap means all aluminum scrap regardless of the level of contamination which originates from castings or extrusions produced by an aluminum die casting facility, aluminum foundry, or aluminum extrusion facility, and which remains at all times within the control of the company that produced the castings or extrusions.

Lime means calcium oxide or other alkaline reagent.

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

Melting/holding furnace 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 except for purposes of alloy changes, off-specification product drains, or maintenance activities.

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 HAP.

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. The combustion zone volume includes the reaction chamber of the afterburner in which the waste gas stream is exposed to the direct combustion flame and the complete refractory lined portion of the furnace stack up to the measurement thermocouple.

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

Round top furnace means a cylindrically-shaped reverberatory furnace that has a top that is removed for charging and other furnace operations.

Runaround scrap means scrap materials generated on-site by aluminum casting, extruding, rolling, scalping, forging, forming/stamping, cutting, and trimming operations and that do not contain paint or solid coatings. Uncoated/unpainted aluminum chips generated by turning, boring, milling, and similar machining operations may be clean charge if they have been thermally dried or treated by a centrifugal cleaner, but are not considered to be *runaround scrap*.

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, or that separates aluminum foil from paper and plastic in scrap.

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 individual group 1 furnaces and in-line fluxers within a secondary aluminum processing facility which either were constructed or reconstructed after February 11, 1999, or have been permanently redesignated as new emission units pursuant to §63.1505(k)(6). 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. A secondary aluminum production facility may have more than one new SAPU.

Secondary aluminum production facility means any establishment using *clean charge*, *aluminum scrap*, or dross from aluminum production, 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, sweating, refining, fluxing, or alloying), recovery of aluminum from dross, in-line fluxing, or dross cooling. A *secondary aluminum production facility* may be independent or part of a primary aluminum production facility. For purposes of this subpart, aluminum die casting facilities, aluminum foundries, and aluminum extrusion facilities are not considered to be secondary aluminum production facilities if the only materials they melt are *clean charge*, customer returns, or internal scrap, and if they do not operate sweat furnaces, thermal chip dryers, or scrap dryers/delacquering kilns/decoating kilns. The determination of whether a facility is a *secondary aluminum production facility* is only for purposes of this subpart and any regulatory requirements which are derived from the applicability of this subpart, and is separate from any determination which may be made under other environmental laws and regulations, including whether the same facility is a "secondary metal production facility" as that term is used in 42 U.S.C. §7479(1) and 40 CFR 52.21(b)(1)(i)(A) ("prevention of significant deterioration of air quality").

Shutdown means the period of operation for thermal chip dryers, scrap dryers/delacquering kilns, decoating kilns, dross-only furnaces, group 1 furnaces, in-line fluxers, sweat furnaces and group 2 furnaces that begins when the introduction of feed/charge is intentionally halted, the source of heat to the emissions unit is turned off, and product has been removed from the emission unit to the greatest extent practicable (*e.g.*, by tapping a furnace). Shutdown ends when the emission unit is near ambient temperature.

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.

Startup means the period of operation for thermal chip dryers, scrap dryers/delacquering kilns, decoating kilns, dross-only furnaces, group 1 furnaces, in-line fluxers, sweat furnaces and group 2 furnaces that begins with equipment warming from a shutdown, that is, the equipment is at or near ambient temperature. Startup ends at the point that flux or feed/charge is introduced.

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.

Tap means the end of an operating cycle of any individual furnace when processed molten aluminum is poured from that furnace.

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 oil or oil/water mixtures from unpainted/uncoated aluminum chips. Pre-heating boxes or other dryers which are used solely to remove water from aluminum scrap are not considered to be thermal chip dryers for purposes of this subpart.

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).

Total reactive fluorine flux injection rate means the sum of the total weight of fluorine in the gaseous or liquid reactive flux added to an uncontrolled group 1 furnace, and the total weight of fluorine in the solid reactive flux added to an

uncontrolled group 1 furnace, divided by the total weight of feed/charge, as determined by the procedure in §63.1512(o).

[65 FR 15710, Mar. 23, 2000, as amended at 67 FR 79814, Dec. 30, 2002; 69 FR 18803, Apr. 9, 2004; 69 FR 53984, Sept. 3, 2004; 70 FR 57517, Oct. 3, 2005; 80 FR 56738, Sept. 18, 2015]

§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 at all times with each applicable limit in this section, including periods of startup and shutdown. Table 1 to this subpart summarizes the emission standards for each type of source.

(b) *Aluminum scrap shredder.* On and after the compliance date established by §63.1501, 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 compliance date established by §63.1501, 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 compliance date established by §63.1501:

(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 (e) 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 760 °C (1400 °F) at all times. On and after the compliance date established by §63.1501:

(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 0.8 seconds or greater and an operating temperature of 1600 °F or greater.

(2) On and after the compliance date established by §63.1501, 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 (O₂).

(g) *Dross-only furnace.* On and after the compliance date established by §63.1501, 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 compliance date established by §63.1501, 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 HF per Mg (0.40 lb of HF per ton) of feed/charge from an uncontrolled group 1 furnace and 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 sidewall group 1 furnace that conducts reactive fluxing (except for cover flux) in the hearth, or that conducts reactive fluxing in the sidewall at times when the level of molten metal falls below the top of the passage between the sidewall and the hearth, must comply with the emission limits of paragraphs (i)(1) through (4) of this section on the basis of the combined emissions from the sidewall 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.* The owner or operator must comply with the emission limits calculated using the equations for PM, HCl and HF in paragraphs (k)(1) and (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:

$$L_{c,PM} = \frac{\sum_{i=1}^n (L_{ii,PM} \times T_{ii})}{\sum_{i=1}^n (T_{ii})} \quad (\text{Eq. 1})$$

Where:

$L_{ii,PM}$ = 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_{ii} = The mass of feed/charge for 24 hours for individual emission unit i; and

$L_{c,PM}$ = The daily PM emission limit for the secondary aluminum processing unit which is used to calculate the 3-day, 24-hour PM emission limit applicable to the SAPU.

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 or HF in excess of:

$$L_{c,HCl/HF} = \frac{\sum_{i=1}^n (L_{ii,HCl/HF} \times T_{ii})}{\sum_{i=1}^n (T_{ii})} \quad (\text{Eq. 2})$$

Where:

$L_{ii,HCl/HF}$ = 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; or the HF emission limit for individual emission unit i in paragraph (i)(4) of this section for an uncontrolled group 1 furnace; and

$L_{c,HCl/HF}$ = The daily HCl or HF emission limit for the secondary aluminum processing unit which is used to calculate the 3-day, 24-hour HCl or HF emission limit applicable to the SAPU.

NOTE: Only uncontrolled group 1 furnaces are included in this HF limit calculation. In-line fluxers using no reactive flux materials cannot be included in this calculation since they are not subject to the HCl or HF 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:

$$L_{c,D/F} = \frac{\sum_{i=1}^n (L_{ii,D/F} \times T_{ii})}{\sum_{i=1}^n (T_{ii})} \quad (\text{Eq. 3})$$

Where:

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

$L_{c,D/F}$ = The daily D/F emission limit for the secondary aluminum processing unit which is used to calculate the 3-day, 24-hour D/F emission limit applicable to the SAPU.

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.

(6) With the prior approval of the permitting authority for major sources, or the Administrator for area sources, an owner or operator may redesignate any existing group 1 furnace or in-line fluxer at a secondary aluminum production facility as a new emission unit. Any emission unit so redesignated may thereafter be included in a new SAPU at that facility. Any such redesignation will be solely for the purpose of this NESHAP and will be irreversible.

[65 FR 15710, Mar. 23, 2000, as amended at 67 FR 59792, Sept. 24, 2002; 67 FR 79816, Dec. 30, 2002; 70 FR 57517, Oct. 3, 2005; 80 FR 56739, Sept. 18, 2015]

§63.1506 Operating requirements.

(a) *Summary.* (1) The owner or operator must operate all new and existing affected sources and control equipment according to the requirements in this section. The affected sources, and their associated control equipment, listed in §63.1500(c)(1) through (4) of this subpart that are located at a secondary aluminum production facility that is an area source are subject to the operating requirements of paragraphs (b), (c), (d), (f), (g), (h), (m), (n), and (p) of this section.

(2) 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.

(3) 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.

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

(5) At all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(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 or facial inlet velocities as contained in the ACGIH Guidelines (incorporated by reference, see §63.14);

(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.

(4) In lieu of paragraph (c)(1) of this section, the owner or operator of a sweat furnace may design, install and operate each sweat furnace in accordance with paragraphs (c)(4)(i) through (iii) of this section.

(i) As demonstrated by an annual negative air flow test conducted in accordance with §63.1510(d)(3), air flow must be into the sweat furnace or towards the plane of the sweat furnace opening.

(ii) The owner or operator must maintain and operate the sweat furnace in a manner consistent with the good practices requirements for minimizing emissions, including unmeasured emissions, in paragraph (a)(5) of this section. Procedures that will minimize unmeasured emissions may include, but are not limited to the following:

(A) Increasing the exhaust rate from the furnace with draft fans, so as to capture emissions that might otherwise escape from the sweat furnace opening;

(B) Minimizing the time the sweat furnace doors are open;

(C) Keeping building doors and other openings closed to the greatest extent possible to minimize drafts that would divert emissions from being drawn into the sweat furnace;

(D) Maintaining burners on low-fire or pilot operation while the doors are open;

(E) Conducting periodic inspections and maintenance of sweat furnace components to ensure their proper operation and performance including but not limited to, door assemblies, seals, combustion chamber refractory material, afterburner and stack refractory, blowers, fans, dampers, burner tubes, door raise cables, pilot light assemblies, baffles, sweat furnace and afterburner shells and other internal structures.

(iii) The owner or operator must document in their operation, maintenance, and monitoring (OM&M) plan the procedures to be used to minimize emissions, including unmeasured emissions, in addition to the procedures to ensure the proper operation and maintenance of the sweat furnace.

(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) or µg/Mg (gr/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 choose 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 or above the 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 and salt flux 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 or above the 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 or above the 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 sidewell and hearth during reactive flux injection, unless emissions from both the sidewell and the hearth are included in demonstrating compliance with all applicable emission limits.

(ii) Reactive flux is added only in the sidewell, unless emissions from both the sidewell and the hearth are included in demonstrating compliance with all applicable emission limits.

(7) The operation of capture/collection systems and control devices associated with natural gas-fired, propane-fired or electrically heated group 1 furnaces that will be idled for at least 24 hours after the furnace cycle has been completed may be temporarily stopped. Operation of these capture/collection systems and control devices must be restarted before feed/charge, flux or alloying materials are added to the furnace.

(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 and fluorine 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.* 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. Area sources are subject to monitoring requirements for those affected sources listed in §63.1500(c)(1) through (4) of this subpart, and associated control equipment as required by paragraphs (b) through (k), (n) through (q), and (s) through (w) of this section, including but not limited to:

- (1) The OM&M plan required in paragraph (b) of this section pertaining to each affected source listed in §63.1500(c)(1) through (4) of this subpart,
- (2) The labeling requirements described in paragraph (c) of this section pertaining to group 1 furnaces processing other than clean charge, and scrap dryer/delacquering kiln/decoating kilns,
- (3) The requirements for capture and collection described in paragraph (d) of this section for each controlled affected source (*i.e.*, affected sources with an add-on air pollution control device), listed in §63.1500(c)(1) through (4) of this subpart,
- (4) The feed/charge weight monitoring requirements described in paragraph (e) of this section applicable to group 1 furnaces processing other than clean charge, scrap dryer/delacquering kiln/decoating kilns and thermal chip dryers,
- (5) The bag leak detection system requirements described in paragraph (f) of this section applicable to all bag leak detection systems installed on fabric filters and lime injected fabric filters used to control each affected source listed in §63.1500(c)(1)-(4) of this subpart,
- (6) The requirements for afterburners described in paragraph (g) of this section applicable to sweat furnaces, thermal chip dryers, and scrap dryer/delacquering kiln/decoating kilns,
- (7) The requirements for monitoring fabric filter inlet temperature described in paragraph (h) of this section for all lime injected fabric filters used to control group 1 furnaces processing other than clean charge, sweat furnaces and scrap dryer/delacquering kiln/decoating kilns,
- (8) The requirements for monitoring lime injection described in paragraph (i) of this section applicable to all lime injected fabric filters used to control emissions from group 1 furnaces processing other than clean charge, thermal chip dryers, sweat furnaces and scrap dryer/delacquering kiln/decoating kilns,
- (9) The requirements for monitoring total reactive flux injection described in paragraph (j) of this section for all group 1 furnaces processing other than clean charge,
- (10) The requirements described in paragraph (k) of this section for thermal chip dryers,
- (11) The requirements described in paragraph (n) of this section for controlled group 1 sidewall furnaces processing other than clean charge,
- (12) The requirements described in paragraph (o) of this section for uncontrolled group 1 sidewall furnaces processing other than clean charge,
- (13) The requirements described in paragraph (p) of this section for scrap inspection programs for uncontrolled group 1 furnaces,

- (14) The requirements described in paragraph (q) of this section for monitoring scrap contamination level for uncontrolled group 1 furnaces,
- (15) The requirements described in paragraph (s) of this section for secondary aluminum processing units, limited to compliance with limits for emissions of D/F from group 1 furnaces processing other than clean charge,
- (16) The requirements described in paragraph (t) of this section for secondary aluminum processing units limited to compliance with limits for emissions of D/F from group 1 furnaces processing other than clean charge,
- (17) The requirements described in paragraph (u) of this section for secondary aluminum processing units limited to compliance with limits for emissions of D/F from group 1 furnaces processing other than clean charge,
- (18) The requirements described in paragraph (v) of this section for alternative lime addition monitoring methods applicable to lime-injected fabric filters used to control emissions from group 1 furnaces processing other than clean charge, thermal chip dryers, sweat furnaces and scrap dryer/delacquering kiln/decoating kilns, and
- (19) The requirements described in paragraph (w) of this section for approval of alternate methods for monitoring group 1 furnaces processing other than clean charge, thermal chip dryers, scrap dryer/delacquering kiln/decoating kilns and sweat furnaces and associated control devices for the control of D/F emissions.

(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 OM&M plan. The owner or operator of an existing affected source must submit the OM&M plan to the permitting authority for major sources, or the Administrator for area sources no later than the compliance date established by §63.1501(a). The owner or operator of any new affected source must submit the OM&M plan to the permitting authority for major sources, or the Administrator for area sources within 90 days after a successful initial performance test under §63.1511(b), or within 90 days after the compliance date established by §63.1501(b) if no initial performance test is required. The plan must be accompanied by a written certification by the owner or operator that the OM&M plan satisfies all requirements of this section and is otherwise consistent with the requirements of this subpart. The owner or operator must comply with all of the provisions of the OM&M plan as submitted to the permitting authority for major sources, or the Administrator for area sources, unless and until the plan is revised in accordance with the following procedures. If the permitting authority for major sources, or the Administrator for area sources determines at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of this section or this subpart, the owner or operator must promptly make all necessary revisions and resubmit the revised plan. If the owner or operator determines that any other revisions of the OM&M plan are necessary, such revisions will not become effective until the owner or operator submits a description of the changes and a revised plan incorporating them to the permitting authority for major sources, or the Administrator for area sources. 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 lime injection rates, 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 any 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.

(9) Procedures to be followed when changing furnace classifications under the provisions of §63.1514.

(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. This inspection shall include a volumetric flow rate measurement taken at a location in the ductwork downstream of the hoods that is representative of the actual volumetric flow rate without interference due to leaks, ambient air added for cooling or ducts from other hoods. The flow rate measurement must be performed in accordance with paragraphs (d)(2)(i), (ii), or (iii) of this section. As an alternative to the flow rate measurement specified in this paragraph, the inspection may satisfy the requirements of this paragraph, including the operating requirements in §63.1506(c), by including permanent total enclosure verification in accordance with paragraph (d)(2)(i) or (iv) of this section. Inspections that fail to successfully demonstrate that the requirements of §63.1506(c) are met, must be followed by repair or adjustment to the system operating conditions and a follow up inspection within 45 days to demonstrate that §63.1506(c) requirements are fully met.

(i) Conduct annual flow rate measurements using EPA Methods 1 and 2 in Appendix A to 40 CFR part 60, or conduct annual verification of a permanent total enclosure using EPA Method 204; or you may follow one of the three alternate procedures described in paragraphs (ii), (iii), or (iv) of this section to maintain system operations in accordance with an operating limit established during the performance test. The operating limit is determined as the average reading of a parametric monitoring instrument (Magnehelic[®], manometer, anemometer, or other parametric monitoring instrument) and technique as described in paragraphs (d)(2)(ii), (iii), and (iv) of this section. A deviation, as defined in paragraphs (ii), (iii), and (iv) of this section, from the parametric monitoring operating limit requires the owner or operator to make repairs or adjustments to restore normal operation within 45 days.

(ii) As an alternative to annual flow rate measurements using EPA Methods 1 and 2, measurement with EPA Methods 1 and 2 can be performed once every 5 years, provided that:

(A) A flow rate indicator consisting of a pitot tube and differential pressure gauge (Magnehelic[®], manometer or other differential pressure gauge) is installed with the pitot tube tip located at a representative point of the duct proximate to the location of the Methods 1 and 2 measurement site; and

(B) The flow rate indicator is installed and operated in accordance with the manufacturer's specifications; and

(C) The differential pressure is recorded during the Method 2 performance test series; and

(D) Daily differential pressure readings are made by taking three measurements with at least 5 minutes between each measurement and averaging the three measurements; and readings are recorded daily and maintained at or above 90 percent of the average pressure differential indicated by the flow rate indicator during the most recent Method 2 performance test series; and

(E) An inspection of the pitot tube and associated lines for damage, plugging, leakage and operational integrity is conducted at least once per year; or

(iii) As an alternative to annual flow rate measurements using EPA Methods 1 and 2, measurement with EPA Methods 1 and 2 can be performed once every 5 years, provided that:

(A) Daily measurements of the capture and collection system's fan revolutions per minute (RPM) or fan motor amperage (amps) are made by taking three measurements with at least 5 minutes between each measurement, and averaging the three measurements; and readings are recorded daily and maintained at or above 90 percent of the average RPM or amps measured during the most recent Method 2 performance test series; or

(B) A static pressure measurement device is installed in the duct immediately downstream of the hood exit, and daily pressure readings are made by taking three measurements with at least 5 minutes between each measurement, and averaging the three measurements; and readings are recorded daily and maintained at 90 percent or better of the average vacuum recorded during the most recent Method 2 performance test series; or

(C) A hotwire anemometer, ultrasonic flow meter, cross-duct pressure differential sensor, venturi pressure differential monitoring or orifice plate equipped with an associated thermocouple and automated data logging software and associated hardware is installed; and daily readings are made by taking three measurements with at least 5 minutes between each measurement, and averaging the three measurements; and readings are recorded daily and maintained at 90 percent or greater of the average readings during the most recent Method 2 performance test series; or

(D) For booth-type hoods, hotwire anemometer measurements of hood face velocity are performed simultaneously with EPA Method 1 and 2 measurements, and the annual hood face velocity measurements confirm that the enclosure draft is maintained at 90 percent or greater of the average readings during the most recent Method 2 performance test series. Daily readings are made by taking three measurements with at least 5 minutes between each measurement, and averaging the three measurements; and readings are recorded daily and maintained at 90 percent or greater of the average readings during the most recent Method 1 and 2 performance test series.

(iv) As an alternative to the annual verification of a permanent total enclosure using EPA Method 204, verification can be performed once every 5 years, provided that:

(A) Negative pressure in the enclosure is directly monitored by a pressure indicator installed at a representative location;

(B) Pressure readings are recorded daily or the system is interlocked to halt material feed should the system not operate under negative pressure;

(C) An inspection of the pressure indicator for damage and operational integrity is conducted at least once per calendar year.

(3) For sweat furnaces, in lieu of paragraph (d)(2) of this section, the owner or operator of a sweat furnace may inspect each sweat furnace at least once each calendar year to ensure that they are being operated in accordance with the negative air flow requirements in §63.1506(c)(4). The owner or operator of a sweat furnace must demonstrate negative air flow into the sweat furnace in accordance with paragraphs (d)(3)(i) through (iii) of this section.

(i) Perform an annual visual smoke test to demonstrate airflow into the sweat furnace or towards the plane of the sweat furnace opening;

(ii) Perform the smoke test using a smoke source, such as a smoke tube, smoke stick, smoke cartridge, smoke candle or other smoke source that produces a persistent and neutral buoyancy aerosol; and

(iii) Perform the visual smoke test at a safe distance from and near the center of the sweat furnace opening.

(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 $\mu\text{g}/\text{Mg}$ (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 permitting authority for major sources, or the Administrator for area sources to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.

(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 bag leak detection system must be installed, calibrated, operated, and maintained according to the manufacturer's operating instructions.

(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.

(4) As an alternative to the requirements of paragraph (f)(3) of this section, the owner or operator of a new or existing aluminum scrap shredder may measure the opacity of the emissions discharged through a stack or stacks using ASTM Method D7520-13 (incorporated by reference, see §63.14) subject to the requirements of paragraphs §63.1510(f)(4)(i) through (iv) of this section. Each test must consist of five 6-minute observations in a 30-minute period.

(i) During the digital camera opacity technique (DCOT) certification procedure outlined in Section 9.2 of ASTM D7520-13, the owner or operator or the DCOT vendor must present the plumes in front of various backgrounds of color and contrast representing conditions anticipated during field use such as blue sky, trees, and mixed backgrounds (clouds and/or a sparse tree stand).

(ii) The owner or operator must also have standard operating procedures in place including daily or other frequency quality checks to ensure that equipment is within manufacturing specifications as outlined in Section 8.1 of ASTM D7520-13.

(iii) The owner or operator must follow the recordkeeping procedures outlined in §63.10(b)(1) for DCOT certification, compliance report, data sheets and all raw unaltered JPEGs used for opacity and certification determination.

(iv) The owner or operator or the DCOT vendor must have a minimum of four (4) independent technology users apply the software to determine the visible opacity of the 300 certification plumes. For each set of 25 plumes, the user may not exceed 15 percent opacity on any one reading and the average error must not exceed 7.5 percent opacity.

(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-injected fabric filter must obtain approval from the permitting authority for major sources, or the Administrator for area sources for a lime addition monitoring procedure. The permitting authority for major sources, or the Administrator for area sources 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.

(4) At least once per month, verify that the lime injection rate in pounds per hour (lb/hr) is no less than 90 percent of the lime injection rate used to demonstrate compliance during your most recent performance test. If the monthly check of the lime injection rate is below the 90 percent, the owner or operator must repair or adjust the lime injection system to restore normal operation within 45 days. The owner or operator may request from the permitting authority for major sources, or the Administrator for area sources, an extension of up to an additional 45 days to demonstrate that the lime injection rate is no less than 90 percent of the lime injection rate used to demonstrate compliance during the most recent performance test. In the event that a lime feeder is repaired or replaced, the feeder must be calibrated, and the feed rate must be restored to the lb/hr feed rate operating limit established during the most recent performance test within 45 days. The owner or operator may request from the permitting authority for major sources, or the Administrator for area sources, an extension of up to an additional 45 days to complete the repair or replacement and establishing a new setting. The repair or replacement, and the establishment of the new feeder setting(s) must be documented in accordance with the recordkeeping requirements of §63.1517.

(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 major sources, or the Administrator for area sources 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). For solid flux that is added intermittently, record the amount added for each operating cycle or time period used in the performance test using the procedures 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 tap of a sidewell furnace whether 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. If visual inspection of the molten metal level is not possible, the molten metal level must be determined using physical measurement methods.

(2) Submit a certification of compliance with the operational standards in §63.1506(m)(6) 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 permitting authority for major sources, or the Administrator for area sources, a written site-specific monitoring plan. The site-specific monitoring plan must be submitted to the permitting authority for major sources, or the Administrator for area sources as part of the OM&M

plan. The site-specific monitoring plan must contain sufficient procedures to ensure continuing compliance with all applicable emission limits and must demonstrate, based on documented test results, the relationship between emissions of PM, HCl, and D/F (and HF for uncontrolled group 1 furnaces), and the proposed monitoring parameters for each pollutant. Test data must establish the highest level of PM, HCl, and D/F (and HF for uncontrolled group 1 furnaces) that will be emitted from the furnace in accordance with §63.1511(b)(1). If the permitting authority for major sources, or the Administrator for area sources determines that any revisions of the site-specific monitoring plan are necessary to meet the requirements of this section or this subpart, the owner or operator must promptly make all necessary revisions and resubmit the revised plan.

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

(ii) The permitting authority for major sources, or the Administrator for area sources 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 HF for uncontrolled group 1 furnaces) and the proposed monitoring parameters for each pollutant. Test data must establish the highest level of PM, HCl, and D/F (and HF for uncontrolled group 1 furnaces) that will be emitted from the furnace. Subject to approval of the OM&M plan, the highest levels may be determined by conducting performance tests and monitoring operating parameters in accordance with §63.1511(b)(1).

(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 or shutdown 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 permitting authority for major sources, or the Administrator for area sources containing the information required by paragraph (s)(1) of this section and obtain approval of the permitting authority for major sources, or the Administrator for area sources 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 (and HF for uncontrolled group 1 furnaces) 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.

(i) Where no performance test has been conducted, for a particular emission unit, because the owner or operator has, with the approval of the permitting authority for major sources, or the Administrator for area sources, chosen to determine the emission rate of an emission unit by testing a representative unit, in accordance with §63.1511(f), the owner or operator shall use the emission rate determined from the representative unit in the SAPU emission rate calculation required in §63.1510(t)(4).

(ii) Except as provided in paragraph (t)(2)(iii) of this section, if the owner or operator has not conducted performance tests for HCl (and HF for an uncontrolled group 1 furnace) or for HCl for an in-line fluxer, in accordance with the provisions of §63.1512(d)(3), (e)(3), or (h)(2), the calculation required in §63.1510(t)(4) to determine SAPU-wide HCl and HF emissions shall be made under the assumption that all chlorine contained in reactive flux added to the emission unit is emitted as HCl and all fluorine contained in reactive flux added to the emission unit is emitted as HF.

(iii) Prior to the date by which the initial performance test for HF emissions from uncontrolled group 1 furnaces is conducted, or is required to be conducted, the calculation required in §63.1505(k) to determine the SAPU-wide HF emission limit and the calculation required in §63.1510(t)(4) to determine the SAPU-wide HF emission rate must exclude HF emissions from untested uncontrolled group 1 furnaces and feed/charge processed in untested uncontrolled group 1 furnaces.

(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:

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

Where:

E_{day} = The daily PM, HCl, and D/F (and HF for uncontrolled group 1 furnaces) 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 or Mg);

ER_i = The measured emission rate for emission unit i as determined in the performance test (lb/ton or $\mu\text{g}/\text{Mg}$ 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. The SAPU is in compliance with an applicable emission limit if the 3-day, 24-hour rolling average for each pollutant is no greater than the applicable SAPU emission limit determined in accordance with §63.1505(k)(1)-(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.* If an owner or operator wishes to use an alternative monitoring method to demonstrate compliance with any emission standard in this subpart, other than those alternative monitoring methods which may be authorized pursuant to §63.1510(j)(5) and §63.1510(v), the owner or operator may submit an application to the Administrator. Any such application will be processed according to the criteria and procedures set forth in 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.

[65 FR 15710, Mar. 23, 2000, as amended at 67 FR 59792, Sept. 24, 2002; 67 FR 79816, Dec. 30, 2002; 69 FR 53984, Sept. 3, 2004; 80 FR 56741, Sept. 18, 2015]

§63.1511 Performance test/compliance demonstration general requirements.

(a) *Site-specific test plan.* Prior to conducting any performance test required by this subpart, the owner or operator must prepare a site-specific test plan which satisfies all of the rule requirements, and must obtain approval of the plan pursuant to the procedures set forth in §63.7. Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(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 of any affected source constructed before February 14, 2012, for which an initial performance test is required to demonstrate compliance must conduct this initial performance test no later than the date for compliance established by §63.1501(a), (b), or (c). The owner or operator of any affected source constructed after February 14, 2012, for which an initial performance test is required must conduct this initial performance test within 180 days after the date for compliance established by §63.1501(e) or (f). Except for the date by which the performance test must be conducted, the owner or operator must conduct each performance test in accordance with the requirements and procedures set forth in §63.7(c). 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 performance tests must be conducted under representative conditions expected to produce the highest level of HAP emissions expressed in the units of the emission standards for the HAP (considering the extent of feed/charge contamination, reactive flux addition rate and feed/charge rate). If a single test condition is not expected to produce the highest level of emissions for all HAP, testing under two or more sets of conditions (for example high contamination at low feed/charge rate, and low contamination at high feed/charge rate) may be required. Any subsequent performance tests for the purposes of establishing new or revised parametric limits shall be allowed upon pre-approval from the permitting authority for major sources, or the Administrator for area sources. These new parametric settings shall be used to demonstrate compliance for the period being tested.

(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. Additionally, for batch processes where the length of the process operating cycle is not known in advance, and where isokinetic sampling must be conducted based on the procedures in Method 5 in appendix A to part 60, use the following procedure to ensure that sampling is conducted over the entire process operating cycle:

(i) Choose a minimum operating cycle length and begin sampling assuming this minimum length will be the run time (e.g., if the process operating cycle is known to last from four to six hours, then assume a sampling time of four hours and divide the sampling time evenly between the required number of traverse points);

(ii) After each traverse point has been sampled once, begin sampling each point again for the same time per point, in the reverse order, until the operating cycle is complete. All traverse points as required by Method 1 of appendix A to part 60, must be sampled at least once during each test run;

(iii) In order to distribute the sampling time most evenly over all the traverse points, do not perform all runs using the same sampling point order (e.g., if there are four ports and sampling for run 1 began in port 1, then sampling for run 2 could begin in port 4 and continue in reverse order.)

(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.

(6) Apply paragraphs (b)(1) through (5) of this section for each pollutant separately if a different production rate, charge material or, if applicable, reactive fluxing rate would apply and thereby result in a higher expected emissions rate for that pollutant.

(7) The owner or operator may not conduct performance tests during periods of malfunction.

(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 and HF. Method 26 may also be used, except at sources where entrained water droplets are present in the emission stream. 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 alternative test methods as provided in paragraphs (d)(1) through (3) of this section.

(1) The owner or operator may use test method ASTM D7520-13 as an alternative to EPA Method 9 subject to conditions described in §63.1510(f)(4).

(2) In lieu of conducting the annual flow rate measurements using Methods 1 and 2, the owner or operator may use Method 204 in Appendix M to 40 CFR part 51 to conduct annual verification of a permanent total enclosure for the affected source/emission unit.

(3) The owner or operator may use an alternative test method approved 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 prior approval of the permitting authority for major sources, or the Administrator for area sources, an owner or operator may utilize emission rates obtained by testing a particular type of group 1 furnace that does not have an add-on air pollution control device, or by testing an in-line flux box that does not have an add-on air pollution control device, to determine the emission rate for other units of the same type at the same facility. Such emission test results may only be considered to be representative of other units if all of the following criteria are satisfied:

(1) The tested emission unit must use feed materials and charge rates which are comparable to the emission units that it represents;

(2) The tested emission unit must use the same type of flux materials in the same proportions as the emission units it represents;

(3) The tested emission unit must be operated utilizing the same work practices as the emission units that it represents;

(4) The tested emission unit must be of the same design as the emission units that it represents; and

(5) The tested emission unit must be tested under the highest load or capacity reasonably expected to occur for any of the emission units that it represents.

(6) All 3 separate runs of a performance test must be conducted on the same emission unit.

(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 permitting authority for major sources, or the Administrator for area sources:

(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.

(5) If the owner or operator wants to conduct a new performance test and establish different operating parameter values, they must submit a revised site specific test plan and receive approval in accordance with paragraph (a) of this section. In addition, if an owner or operator wants to use existing data in addition to the results of the new performance test to establish operating parameter values, they must meet the requirements in paragraphs (g)(1) through (4) of this section.

(h) *Testing of commonly-ducted units within a secondary aluminum processing unit.* When group 1 furnaces and/or in-line fluxers are included in a single existing SAPU or new SAPU, and the emissions from more than one emission unit within that existing SAPU or new SAPU are manifolded to a single control device, compliance for all units within the SAPU is demonstrated if the total measured emissions from all controlled and uncontrolled units in the SAPU do not exceed the emission limits calculated for that SAPU based on the applicable equation in §63.1505(k).

(i) Testing of commonly-ducted units not within a secondary aluminum processing unit. With the prior approval of the permitting authority for major sources, or the Administrator for area sources, an owner or operator may do combined performance testing of two or more individual affected sources or emission units which are not included in a single existing SAPU or new SAPU, but whose emissions are manifolded to a single control device. Any such performance testing of commonly-ducted units must satisfy the following basic requirements:

(1) All testing must be designed to verify that each affected source or emission unit individually satisfies all emission requirements applicable to that affected source or emission unit;

(2) All emissions of pollutants subject to a standard must be tested at the outlet from each individual affected source or emission unit while operating under the highest load or capacity reasonably expected to occur, and prior to the point that the emissions are manifolded together with emissions from other affected sources or emission units;

(3) The combined emissions from all affected sources and emission units which are manifolded to a single emission control device must be tested at the outlet of the emission control device;

(4) All tests at the outlet of the emission control device must be conducted with all affected sources and emission units whose emissions are manifolded to the control device operating simultaneously under the highest load or capacity reasonably expected to occur; and

(5) For purposes of demonstrating compliance of a commonly-ducted unit with any emission limit for a particular type of pollutant, the emissions of that pollutant by the individual unit shall be presumed to be controlled by the same percentage as total emissions of that pollutant from all commonly-ducted units are controlled at the outlet of the emission control device.

[65 FR 15710, Mar. 23, 2000, as amended at 67 FR 59792, Sept. 24, 2002; 67 FR 79817, Dec. 30, 2002; 79 FR 11284, Feb. 27, 2014; 80 FR 56745, Sept. 18, 2015]

§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 observation 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. If emissions observations by ASTM Method D7520-13 (incorporated by reference, see §63.14) is the selected monitoring option, the owner or operator must record opacity observations from each exhaust stack for all consecutive 6-minute periods during the PM emission test.

(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, HF, 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, HCl and HF. 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 chlorine and fluorine contained in reactive flux added to the group 1 furnace is emitted as HCl and HF. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl or HF.

(4) When testing an existing uncontrolled furnace, the owner or operator must comply with the requirements of either paragraphs (e)(4)(i), (ii) or (iii) of this section at the next required performance test required by §63.1511(e).

(i) Install hooding that meets ACGIH Guidelines (incorporated by reference, see §63.14), or

(ii) At least 180 days prior to testing petition the permitting authority for major sources, or the Administrator for area sources, that such hoods are impractical under the provisions of paragraph (e)(6) of this section and propose testing procedures that will minimize unmeasured emissions during the performance test according to the paragraph (e)(7) of this section, or

(iii) Assume an 80-percent capture efficiency for the furnace exhaust (i.e., multiply emissions measured at the furnace exhaust outlet by 1.25). If the source fails to demonstrate compliance using the 80-percent capture efficiency assumption, the owner or operator must re-test with a hood that meets the ACGIH Guidelines within 180 days, or

petition the permitting authority for major sources, or the Administrator for area sources, within 180 days that such hoods are impractical under the provisions of paragraph (e)(6) of this section and propose testing procedures that will minimize unmeasured emissions during the performance test according to paragraph (e)(7) of this section.

(iv) The 80-percent capture efficiency assumption is not applicable in the event of testing conducted under an approved petition submitted pursuant to paragraphs (e)(4)(ii) or (iii) of this section.

(v) Round top furnaces constructed before February 14, 2012, and reconstructed round top furnaces are exempt from the requirements of paragraphs (e)(4)(i) and (ii) of this section. Round top furnaces must be operated to minimize unmeasured emissions according to paragraph (e)(7) of this section.

(5) When testing a new uncontrolled furnace constructed after February 14, 2012, the owner or operator must install hooding that meets ACGIH Guidelines (incorporated by reference, see §63.14) or petition the permitting authority for major sources, or the Administrator for area sources, that such hoods are impracticable under the provisions of paragraph (e)(6) of this section and propose testing procedures that will minimize unmeasured emissions during the performance test according to the provisions of paragraph (e)(7).

(6) The installation of hooding that meets ACGIH Guidelines (incorporated by reference, see §63.14) is considered impractical if any of the following conditions exist:

(i) Building or equipment obstructions (for example, wall, ceiling, roof, structural beams, utilities, overhead crane or other obstructions) are present such that the temporary hood cannot be located consistent with acceptable hood design and installation practices;

(ii) Space limitations or work area constraints exist such that the temporary hood cannot be supported or located to prevent interference with normal furnace operations or avoid unsafe working conditions for the furnace operator; or

(iii) Other obstructions and limitations subject to agreement of the permitting authority for major sources, or the Administrator for area sources.

(7) Testing procedures that will minimize unmeasured emissions may include, but are not limited to the following:

(i) Installing a hood that does not entirely meet ACGIH guidelines;

(ii) Using the building as an enclosure, and measuring emissions exhausted from the building if there are no other furnaces or other significant sources in the building of the pollutants to be measured;

(iii) Installing temporary baffles on those sides or top of furnace opening if it is practical to do so where they will not interfere with material handling or with the furnace door opening and closing;

(iv) Minimizing the time the furnace doors are open or the top is off;

(v) Delaying gaseous reactive fluxing until charging doors are closed and, for round top furnaces, until the top is on;

(vi) Agitating or stirring molten metal as soon as practicable after salt flux addition and closing doors as soon as possible after solid fluxing operations, including mixing and dross removal;

(vii) Keeping building doors and other openings closed to the greatest extent possible to minimize drafts that would divert emissions from being drawn into the furnace;

(viii) Maintaining burners on low-fire or pilot operation while the doors are open or the top is off;

(ix) Use of fans or other device to direct flow into a furnace when door is open; or

(x) Removing the furnace cover one time in order to add a smaller but representative charge and then replacing the cover.

(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 and salt flux as the sole feedstock.

(h) *In-line fluxer.* (1) The owner or operator of an in-line fluxer that uses reactive flux materials must conduct a performance test to measure emissions of HCl and PM or otherwise demonstrate compliance in accordance with paragraph (h)(2) of this section. 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.

(2) The owner or operator may choose to limit the rate at which reactive flux is added to an in-line fluxer and assume, for the purposes of demonstrating compliance with the SAPU emission limit, that all chlorine in the reactive flux added to the in-line fluxer is emitted as HCl. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl. If the owner or operator of any in-line flux box that has no ventilation ductwork manifolded to any outlet or emission control device chooses to demonstrate compliance with the emission limits for HCl by limiting use of reactive flux and assuming that all chlorine in the flux is emitted as HCl, compliance with the HCl limit shall also constitute compliance with the emission limit for PM and no separate emission test for PM is required. In this case, the owner or operator of the unvented in-line flux box must use the maximum permissible PM emission rate for the in-line flux boxes when determining the total emissions for any SAPU which includes the flux box.

(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, HCl and HF 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 HF and HCl (for determining 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 HF and HCl (for determining 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 and, for uncontrolled furnaces, the total reactive fluorine 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, HF 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 and, for uncontrolled furnaces, the total reactive fluorine flux injection rate by adding the recorded measurement of the total weight of chlorine and, for uncontrolled furnaces, fluorine in the gaseous or liquid reactive flux injected and the total weight of chlorine and, for uncontrolled furnaces, fluorine in the solid reactive flux using Equation 5:

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

Where:

W_t = Total chlorine or fluorine usage, by weight;

F_1 = Fraction of gaseous or liquid flux that is chlorine or fluorine;

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) or fraction of solid reactive fluoride flux that is fluorine (e.g., $F = 0.33$ for potassium fluoride); and

W_2 = Weight of solid reactive flux;

(4) Divide the weight of total chlorine or fluorine usage (W_1) 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 or potassium fluoride is used, the owner or operator must derive the appropriate proportion factor subject to approval by the permitting authority for major sources, or the Administrator for area sources.

(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 and lime injection rate for the 3 test runs. If the feed rate setting and lime injection rates vary between the runs, determine and record the average feed rate and lime injection 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).

[65 FR 15710, Mar. 23, 2000, as amended at 67 FR 79817, Dec. 30, 2002; 69 FR 53984, Sept. 3, 2004; 80 FR 56746, Sept. 18, 2015]

§63.1513 Equations for determining compliance.

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

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

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/m³ (1 ft³/ft³);

M_v = Molar volume, 24.45 L/g-mole (385.3 ft³/lb-mole); and

P = Production rate, Mg/hr (ton/hr).

(b) *PM, HCl, HF and D/F emission limits.* (1) Use Equation 7 of this section to determine compliance with an emission limit for PM, HCl or HF:

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

Where:

E = Emission rate of PM, HCl or HF, in kg/Mg (lb/ton) of feed;

C = Concentration of PM, HCl or HF, in g/dscm (gr/dscf);

Q = Volumetric flow rate of exhaust gases, in dscm/hr (dscf/hr);

K_1 = Conversion factor, 1 kg/1,000 g (1 lb/7,000 gr); and

P = Production rate, in Mg/hr (ton/hr).

(2) Use Equation 7A of this section to determine compliance with an emission limit for D/F:

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

Where:

E = Emission rate of D/F, µg/Mg (gr/ton) of feed;

C = Concentration of D/F, µg/dscm (gr/dscf);

Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr); 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:

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

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*, incorporated by reference see §63.14.

(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).

$$E_{cPM} = \frac{\sum_{i=1}^n (E_{iiPM} \times T_i)}{\sum_{i=1}^n (T_i)} \quad (\text{Eq. 9})$$

Where:

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

E_{iiPM} = Measured PM emissions for individual emission unit, or group of co-controlled emission units, i;

T_i = The average feed rate for individual emission unit i during the operating cycle or performance test period, or the sum of the average feed rates for all emission units in the group of co-controlled emission units i; and

n = The number of emission units, and groups of co-controlled emission units in the secondary aluminum processing unit.

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

$$E_{cHCl/HF} = \frac{\sum_{i=1}^n (E_{iiHCl/HF} \times T_i)}{\sum_{i=1}^n (T_i)} \quad (\text{Eq. 10})$$

Where:

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

$E_{iiHCl/HF}$ = Measured HCl or HF emissions for individual emission unit, or group of co-controlled emission units 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).

$$E_{cD/F} = \frac{\sum_{i=1}^n (E_{iiD/F} \times T_i)}{\sum_{i=1}^n (T_i)} \quad (\text{Eq. 11})$$

Where:

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

$E_{iD/F}$ = Measured D/F emissions for individual emission unit, or group of co-controlled emission units *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).

(f) *Periods of startup and shutdown.* For a new or existing affected source, or a new or existing emission unit subject to an emissions limit in paragraphs §63.1505(b) through (j) expressed in units of pounds per ton of feed/charge, or μg TEQ or ng TEQ per Mg of feed/charge, demonstrate compliance during periods of startup and shutdown in accordance with paragraph (f)(1) of this section or determine your emissions per unit of feed/charge during periods of startup and shutdown in accordance with paragraph (f)(2) of this section. Startup and shutdown emissions for group 1 furnaces and in-line fluxers must be calculated individually, and not on the basis of a SAPU. Periods of startup and shutdown are excluded from the calculation of SAPU emission limits in §63.1505(k), the SAPU monitoring requirements in §63.1510(t) and the SAPU emissions calculations in §63.1513(e).

(1) For periods of startup and shutdown, records establishing a feed/charge rate of zero, a flux rate of zero, and that the affected source or emission unit was either heated with electricity, propane or natural gas as the sole sources of heat or was not heated, may be used to demonstrate compliance with the emission limit, or

(2) For periods of startup and shutdown, divide your measured emissions in lb/hr or $\mu\text{g/hr}$ or ng/hr by the feed/charge rate in tons/hr or Mg/hr from your most recent performance test associated with a production rate greater than zero, or the rated capacity of the affected source if no prior performance test data is available.

[65 FR 15710, Mar. 23, 2000, as amended at 69 FR 53984, Sept. 3, 2004; 80 FR 56748, Sept. 18, 2015]

§63.1514 Change of furnace classification.

The requirements of this section are in addition to the other requirements of this subpart that apply to group 1 and group 2 furnaces.

(a) *Changing from a group 1 controlled furnace processing other than clean charge to group 1 uncontrolled furnace processing other than clean charge.* An owner or operator wishing to change operating modes must conduct performance tests in accordance with §§63.1511 and 63.1512 to demonstrate to the permitting authority for major sources, or the Administrator for area sources that compliance can be achieved under both modes. Operating parameters relevant to each mode of operation must be established during the performance test.

(1) Operators of major sources must conduct performance tests for PM, HCl and D/F, according to the procedures in §63.1512(d) with the capture system and control device operating normally if compliance has not been previously demonstrated in this operating mode. Performance tests must be repeated at least once every 5 years to demonstrate compliance for each operating mode.

(i) Testing under this paragraph must be conducted in accordance with §63.1511(b)(1) in the controlled mode.

(ii) Operating parameters must be established during these tests, as required by §63.1511(g).

(iii) The emission factors for this mode of operation for use in the demonstration of compliance with the emission limits for SAPUs specified in §63.1505(k) must be determined.

(2) Operators of major sources must conduct performance tests for PM, HCl, HF and D/F, according to the procedures in §63.1512(e) without operating a control device if compliance has not been previously demonstrated for this operating mode. Performance tests must be repeated at least once every 5 years to demonstrate compliance for each operating mode.

(i) Testing under this paragraph must be conducted in accordance with §63.1511(b)(1) in the uncontrolled mode.

(ii) Testing under this paragraph must be conducted with furnace emissions captured in accordance with the provisions of §63.1506(c) and directed to the stack or vent tested.

(iii) Operating parameters representing uncontrolled operation must be established during these tests, as required by §63.1511(g). For furnaces in batch (cyclic) operation, the number of tap-to-tap cycles (including zero, if none) elapsed using the feed/charge type, feed/charge rate and flux rate must be established as a parameter to be met before changing to uncontrolled mode. For furnaces in continuous (non-cyclic) operation, the time period elapsed (including no time, if none) using the feed/charge type, feed/charge rate and flux rate must be established as a parameter to be met before changing to uncontrolled mode.

(iv) The emission factors for this mode of operation for use in the demonstration of compliance with the emission limits for SAPUs specified in §63.1505(k) must be determined.

(3) Operators of area sources must conduct performance tests for D/F, according to the procedures in §63.1512(d) with the capture system and control device operating normally, if compliance has not been previously demonstrated for this operating mode.

(i) Testing under this paragraph must be conducted in accordance with §63.1511(b)(1) in the controlled mode.

(ii) Operating parameters must be established during these tests, as required by §63.1511(g).

(iii) The D/F emission factor for this mode of operation for use in the demonstration of compliance with the emission limits for SAPUs specified in §63.1505(k) must be determined.

(4) Operators of area sources must conduct performance tests for D/F, according to the procedures in §63.1512(e) without operating a control device, if compliance has not been previously demonstrated for this operating mode.

(i) Testing under this paragraph must be conducted in accordance with §63.1511(b)(1).

(ii) Testing under this paragraph must be conducted with furnace emissions captured in accordance with the provisions of §63.1506(c) and directed to the stack or vent tested.

(iii) Operating parameters representing uncontrolled operation must be established during these tests, as required by §63.1511(g). For furnaces in batch (cyclic) operation, the number of tap-to-tap cycles (including zero, if none) elapsed using the feed/charge type, feed/charge rate and flux rate must be established as a parameter to be met before changing to uncontrolled mode. For furnaces in continuous (non-cyclic) operation, the time period elapsed (including no time, if none) using the feed/charge type, feed/charge rate and flux rate must be established as a parameter to be met before changing to uncontrolled mode.

(iv) The D/F emission factor for this mode of operation for use in the demonstration of compliance with the emission limits for SAPUs specified in §63.1505(k) must be determined.

(5) To change modes of operation from uncontrolled to controlled, the owner or operator must perform the following, before charging scrap to the furnace that exceeds the contaminant level established for uncontrolled mode:

(i) Change the label on the furnace to reflect controlled operation;

(ii) Direct the furnace emissions to the control device;

(iii) Turn on the control device and begin lime addition to the control device at the rate established for controlled mode; and

(iv) Ensure the control device is operating properly.

(6) To change modes of operation from controlled to uncontrolled, the owner or operator must perform the following, before turning off or bypassing the control device:

- (i) Change the label on the furnace to reflect uncontrolled operation;
- (ii) Charge scrap with a level of contamination no greater than that used in the performance test for uncontrolled furnaces for the number of tap-to-tap cycles that elapsed (or, for continuously operated furnaces, the time elapsed) before the uncontrolled mode performance test was conducted; and
- (iii) Decrease the flux addition rate to no higher than the flux addition rate used in the uncontrolled mode performance test.

(7) In addition to the recordkeeping requirements of §63.1517, the owner or operator must maintain records of the nature of each mode change (controlled to uncontrolled, or uncontrolled to controlled), the time the change is initiated, and the time the exhaust gas is diverted from control device to bypass or bypass to control device.

(b) Changing from a group 1 controlled furnace processing other than clean charge to a group 1 uncontrolled furnace processing clean charge. An owner or operator wishing to change operating modes must conduct performance tests in accordance with §§63.1511 and 63.1512 to demonstrate to the permitting authority for major sources, or the Administrator for area sources that compliance can be achieved in both modes. Operating parameters relevant to each mode of operation must be established during the performance test.

(1) Operators of major sources must conduct performance tests for PM, HCl and D/F, according to the procedures in §63.1512(d) with the capture system and control device operating normally if compliance has not been previously demonstrated in this operating mode. Performance tests must be repeated at least once every 5 years to demonstrate compliance for each operating mode.

- (i) Testing under this paragraph must be conducted in accordance with §63.1511(b)(1) in the controlled mode.
- (ii) Operating parameters must be established during these tests, as required by §63.1511(g).
- (iii) The emission factors for this mode of operation for use in the demonstration of compliance with the emission limits for SAPUs specified in §63.1505(k) must be determined.

(2) Operators of major sources must conduct performance tests for PM, HCl, HF and D/F, according to the procedures in §63.1512(e) without operating a control device if compliance has not been previously demonstrated for this operating mode. Performance tests must be repeated at least once every 5 years to demonstrate compliance for each operating mode.

- (i) Testing under this paragraph may be conducted at any time after operation with clean charge has commenced.
- (ii) Testing under this paragraph must be conducted with furnace emissions captured in accordance with the provisions of §63.1506(c) and directed to the stack or vent tested.
- (iii) Operating parameters representing uncontrolled operation must be established during these tests, as required by §63.1511(g). For furnaces in batch (cyclic) operation, the number of tap-to-tap cycles (including zero, if none) elapsed using the feed/charge type, feed/charge rate and flux rate must be established as a parameter to be met before changing to uncontrolled mode. For furnaces in continuous (non-cyclic) operation, the time period elapsed (including no time if none) using the feed/charge type, feed/charge rate and flux rate must be established as a parameter to be met before changing to uncontrolled mode.

(iv) Emissions of D/F during this test must not exceed 1.5 µg TEQ/Mg of feed/charge.

(v) The emission factors for this mode of operation for use in the demonstration of compliance with the emission limits for SAPUs specified in §63.1505(k), must be determined.

(3) Operators of area sources must conduct performance tests for D/F, according to the procedures in §63.1512(d) with the capture system and control device operating normally, if compliance has not been previously demonstrated for this operating mode.

(i) Testing under this paragraph must be conducted in accordance with §63.1511(b)(1).

(ii) Operating parameters must be established during these tests, as required by §63.1511(g).

(iii) The D/F emission factor for this mode of operation for use in the demonstration of compliance with the emission limits for SAPUs specified in §63.1505(k) must be determined.

(4) Operators of area sources must conduct performance tests for D/F, according to the procedures in §63.1512(e) without operating a control device if compliance has not been previously demonstrated for this operating mode.

(i) Testing under this paragraph must be conducted at any time after operation with clean charge has commenced and must be conducted in accordance with §63.1511(b)(1) and under representative conditions expected to produce the highest level of D/F in the uncontrolled mode.

(ii) Testing under this paragraph must be conducted with furnace emissions captured in accordance with the provisions of §63.1506(c) and directed to the stack or vent tested.

(iii) Operating parameters representing uncontrolled operation must be established during these tests, as required by §63.1511(g). For furnaces in batch (cyclic) operation, the number of tap-to-tap cycles elapsed (including zero, if none) using the feed/charge type, feed/charge rate and flux rate must be established as a parameter to be met before changing to uncontrolled mode. For furnaces in continuous (non-cyclic) operation, the time period elapsed (including no time, if none) using the feed/charge type, feed/charge rate and flux rate must be established as a parameter to be met before changing to uncontrolled mode.

(iv) Emissions of D/F during this test must not exceed 1.5 µg TEQ/Mg of feed/charge.

(5) To change modes of operation from uncontrolled to controlled, the owner or operator must perform the following, before charging scrap to the furnace that exceeds the contaminant level established for uncontrolled mode:

(i) Change the label on the furnace to reflect controlled operation;

(ii) Direct the furnace emissions to the control device;

(iii) Turn on the control device and begin lime addition to the control device at the rate established for controlled mode; and

(iv) Ensure the control device is operating properly.

(6) To change modes of operation from controlled to uncontrolled, the owner or operator must perform the following, before turning off or bypassing the control device:

(i) Change the label on the furnace to reflect uncontrolled operation;

(ii) Charge clean charge for the number of tap-to-tap cycles that elapsed (or, for continuously operated furnaces, the time elapsed) before the uncontrolled mode performance test was conducted; and

(iii) Decrease the flux addition rate to no higher than the flux addition rate used in the uncontrolled mode performance test.

(7) In addition to the recordkeeping requirements of §63.1517, the owner or operator must maintain records of the nature of each mode change (controlled to uncontrolled, or uncontrolled to controlled), the time the furnace operating

mode change is initiated, and the time the exhaust gas is diverted from control device to bypass or from bypass to control device.

(c) *Changing from a group 1 controlled or uncontrolled furnace to a group 2 furnace.* An owner or operator wishing to change operating modes must conduct performance tests in accordance with §§63.1511 and 63.1512 to demonstrate to the permitting authority for major sources, or the Administrator for area sources that compliance can be achieved under both modes and establish the number of cycles (or time) of operation with clean charge and no reactive flux addition necessary before changing to group 2 mode. Operating parameters relevant to group 1 operation must be established during the performance test.

(1) Operators of major sources must conduct performance tests for PM, HCl and D/F (and HF for uncontrolled group 1 furnaces) according to the procedures in §63.1512 if compliance has not been previously demonstrated for the operating mode. Controlled group 1 furnaces must conduct performance tests according to the procedures in §63.1512(d) with the capture system and control device operating normally. Uncontrolled group 1 furnaces must conduct performance tests according to the procedures in §63.1512(e) without operating a control device. Performance tests must be repeated at least once every 5 years to demonstrate compliance for each operating mode.

(i) Testing under this paragraph must be conducted in accordance with §63.1511(b)(1) in both modes.

(ii) Operating parameters must be established during these tests, as required by §63.1511(g).

(iii) The emission factors for this mode of operation for use in the demonstration of compliance with the emission limits for SAPUs specified in §63.1505(k) must be determined.

(2) While in compliance with the operating requirements of §63.1506(o) for group 2 furnaces, operators of major sources must conduct performance tests for PM, HCl, HF and D/F, according to the procedures in §63.1512(e) without operating a control device if compliance has not been previously demonstrated for this operating mode. Performance tests must be repeated at least once every 5 years to demonstrate compliance for each operating mode.

(i) Testing under this paragraph may be conducted at any time after the furnace has commenced operation with clean charge and without reactive flux addition.

(ii) Testing under this paragraph must be conducted with furnace emissions captured in accordance with the provisions of §63.1506(c) and directed to the stack or vent tested.

(iii) Owners or operators must demonstrate that emissions are no greater than:

(A) 1.5 µg D/F (TEQ) per Mg of feed/charge;

(B) 0.040 lb HCl or HF per ton of feed/charge; and

(C) 0.040 lb PM per ton of feed/charge.

(iv) The number of tap-to-tap cycles, or time elapsed between starting operation with clean charge and no reactive flux addition and the group 2 furnace performance test must be established as an operating parameter to be met before changing to group 2 mode.

(3) Operators of area sources must conduct a performance tests for D/F, according to the procedures in §63.1512 if compliance has not been previously demonstrated for the operating mode. Controlled group 1 furnaces must conduct performance tests according to the procedures in §63.1512(d) with the capture system and control device operating normally. Uncontrolled group 1 furnaces must conduct performance tests according to the procedures in §63.1512(e) without operating a control device.

(i) The performance tests must be conducted in accordance with §63.1511(b)(1) under representative conditions expected to produce the highest expected level of D/F in the group 1 mode.

(ii) Operating parameters must be established during these tests, as required by §63.1511(g).

(iii) The D/F emission factor for this mode of operation, for use in the demonstration of compliance with the emission limits for SAPUs specified in §63.1505(k) must be determined.

(4) While in compliance with the operating requirements of §63.1506(o) for group 2 furnaces, operators of area sources must conduct performance tests for D/F, according to the procedures in §63.1512(e) without operating a control device if compliance has not been previously demonstrated for this operating mode.

(i) Testing under this paragraph may be conducted at any time after the furnace has commenced operation with clean charge, and without reactive flux addition.

(ii) Testing under this paragraph must be conducted with furnace emissions captured in accordance with the provisions of §63.1506(c) and directed to the stack or vent tested.

(iii) Owners or operators must demonstrate that emissions are no greater than 1.5 µg D/F (TEQ) per Mg of feed/charge.

(iv) The number of tap-to-tap cycles, or time elapsed between starting operation with clean charge and no reactive flux and the group 2 furnace performance tests must be established as an operating parameter to be met before changing to group 2 mode.

(5) To change modes of operation from a group 2 furnace to a group 1 furnace, the owner or operator must perform the following before adding other than clean charge and before adding reactive flux to the furnace:

(i) Change the label on the furnace to reflect group 1 operation;

(ii) Direct the furnace emissions to the control device, if it is equipped with a control device;

(iii) If the furnace is equipped with a control device, turn on the control device and begin lime addition to the control device at the rate established for group 1 mode; and

(iv) Ensure the control device is operating properly.

(6) To change mode of operation from a group 1 furnace to group 2 furnace, the owner or operator must perform the following, before turning off or bypassing the control device:

(i) Change the label on the furnace to reflect group 2 operation;

(ii) Charge clean charge for the number of tap-to-tap cycles that elapsed (or, for continuously operated furnaces, the time elapsed) before the group 2 performance test was conducted; and,

(iii) Use no reactive flux.

(7) In addition to the recordkeeping requirements of §63.1517, the owner or operator must maintain records of the nature of each mode change (controlled or uncontrolled to group 2), the time the change is initiated, and the time the exhaust gas is diverted from control device to bypass or from bypass to control device.

(d) Changing from a group 1 controlled or uncontrolled furnace to group 2 furnace, for tilting reverberatory furnaces capable of completely removing furnace contents between batches. An owner or operator of a tilting reverberatory furnace capable of completely removing furnace contents between batches who wishes to change operating modes must conduct performance tests in accordance with §§63.1511 and 63.1512 to demonstrate to the permitting authority for major sources, or the Administrator for area sources that compliance can be achieved under group 1 modes. Operating parameters relevant to group 1 operation must be established during the performance test.

(1) Operators of major sources must conduct performance tests for PM, HCl, and D/F (and HF for uncontrolled furnaces) according to the procedures in §63.1512 if compliance has not been previously demonstrated for this operating mode. Controlled group 1 furnaces must conduct performance tests with the capture system and control device operating normally if compliance has not been previously demonstrated for the operating mode. Controlled group 1 furnaces must conduct performance tests according to the procedures in §63.1512(d) with the capture system and control device operating normally. Uncontrolled group 1 furnaces must conduct performance tests according to the procedures in §63.1512(e) without operating a control device. Performance tests must be repeated at least once every 5 years to demonstrate compliance for each operating mode.

(i) Testing under this paragraph must be conducted in accordance with §63.1511(b)(1) in both modes.

(ii) Operating parameters must be established during these tests, as required by §63.1511(g).

(iii) The emission factors for this mode of operation for use in the demonstration of compliance with the emission limits for SAPUs specified in §63.1505(k), must be determined.

(2) Operators of area sources must conduct performance tests for D/F according to the procedures in §63.1512 if compliance has not been previously demonstrated for this operating mode. Controlled group 1 furnaces must conduct performance tests according to the procedures in §63.1512(d) with the capture system and control device operating normally. Uncontrolled group 1 furnaces must conduct performance tests according to the procedures in §63.1512(e) without operating a control device.

(i) The performance test must be conducted in accordance with §63.1511(b)(1) under representative conditions expected to produce the highest expected level of D/F in the group 1 mode.

(ii) Operating parameters must be established during these tests, as required by §63.1511(g).

(iii) The D/F emission factor for this mode of operation for use in the demonstration of compliance with the emission limits for SAPUs specified in §63.1505(k) must be determined.

(3) To change modes of operation from a group 1 furnace to a group 2 furnace, the owner or operator must perform the following before turning off or bypassing the control device:

(i) Completely remove all aluminum from the furnace;

(ii) Change the label on the furnace to reflect group 2 operation;

(iii) Use only clean charge; and

(iv) Use no reactive flux.

(4) To change modes of operation from a group 2 furnace to a group 1 furnace, the owner or operator must perform the following before adding other than clean charge and before adding reactive flux to the furnace:

(i) Change the label on the furnace to reflect group 1 operation;

(ii) Direct the furnace emissions to the control device, if it is equipped with a control device,;

(iii) If the furnace is equipped with a control device, turn on the control device and begin lime addition to the control device at the rate established for group 1 mode; and

(iv) Ensure the control device is operating properly.

(5) In addition to the recordkeeping requirements of §63.1517, the owner or operator must maintain records of the nature of each mode change (group 1 to group 2, or group 2 to group 1), the time the furnace operating mode change

is initiated, and, if the furnace is equipped with a control device, the time the exhaust gas is diverted from control device to bypass or from bypass to control device.

(e) *Limit on Frequency of changing furnace operating mode.* (1) Changing furnace operating mode including reversion to the previous mode, as provided in paragraphs (a) through (d) of this section, may not be done more frequently than 4 times in any 6-month period unless you receive approval from the permitting authority or Administrator for additional changes pursuant to paragraph (e)(2).

(2) If additional changes are needed, the owner or operator must apply in advance to the permitting authority, for major sources, or the Administrator, for area sources, for approval of the additional changes in operating mode.

[80 FR 56749, Sept. 18, 2015]

Notifications, Reports, And Records

§63.1515 Notifications.

(a) *Initial notifications.* The owner or operator must submit initial notifications to the permitting authority for major sources, or the Administrator for area sources 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 of an existing affected source must submit a notification of compliance status report within 60 days after the compliance date established by §63.1501(a). Each owner or operator of a new affected source must submit a notification of compliance status report within 90 days after conducting the initial performance test required by §63.1511(b), or within 90 days after the compliance date established by §63.1501(b) if no initial performance test is required. 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, total reactive fluorine flux injection rate for uncontrolled group 1 furnaces, 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 0.8 seconds and design operating temperature of no less than 1,600 °F for each afterburner used to control emissions from a sweat furnace that is not subject to a performance test.

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

[65 FR 15710, Mar. 23, 2000, as amended at 67 FR 59793, Sept. 24, 2002; 67 FR 79818, Dec. 30, 2002; 80 FR 56752, Sept. 18, 2015]

§63.1516 Reports.

(a) [Reserved]

(b) *Excess emissions/summary report.* The owner or operator of a major or area source must submit semiannual reports according to the requirements in §63.10(e)(3). Except, the owner or operator must submit the semiannual reports within 60 days after the end of each 6-month period instead of within 30 days after the calendar half as specified in §63.10(e)(3)(v). 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) [Reserved]

(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 and salt flux were used as the charge materials 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."

(vii) For each affected source choosing to demonstrate compliance during periods of startup and shutdown in accordance with §63.1513(f)(1): "During each startup and shutdown, no flux and no feed/charge were added to the emission unit, and electricity, propane or natural gas were used as the sole source of heat or the emission unit was not heated."

(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.

(i) Within 60 days after the date of completing each performance test (as defined in §63.2) required by this subpart, you must submit the results of the performance tests, including any associated fuel analyses, following the procedure specified in either paragraph (b)(3)(i)(A) or (B) of this section.

(A) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (<http://www.epa.gov/ttn/chief/ert/index.html>), you must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (http://cdx.epa.gov/epa_home.asp). Performance test data must be submitted in a file format generated through the use of the EPA's ERT. Alternatively, you may submit performance test data in an electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site once the XML schema is available. If you claim that some of the performance test information being submitted is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(B) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site, you must submit the results of the performance test to the Administrator at the appropriate address listed in §63.13.

(ii) [Reserved]

(c) *Annual compliance certifications.* For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator of a major source subject to this subpart 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.

(d) If there was a malfunction during the reporting period, the owner or operator must submit a report that includes the emission unit ID, monitor ID, pollutant or parameter monitored, beginning date and time of the event, end date and time of the event, cause of the deviation or exceedance and corrective action taken for each malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be

exceeded. The report must include a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions, including, but not limited to, product-loss calculations, mass balance calculations, measurements when available, or engineering judgment based on known process parameters. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §§63.1506(a)(5) and 63.1520(a)(8).

(e) All reports required by this subpart not subject to the requirements in paragraph (b) of this section must be sent to the Administrator at the appropriate address listed in §63.13. If acceptable to both the Administrator and the owner or operator of a source, these reports may be submitted on electronic media. The Administrator retains the right to require submittal of reports subject to paragraph (b) of this section in paper format.

[65 FR 15710, Mar. 23, 2000, as amended at 69 FR 53984, Sept. 3, 2004; 71 FR 20461, Apr. 20, 2006; 80 FR 56753, Sept. 18, 2015]

§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 or records of all ASTM D7520-13 observations (incorporated by reference, see §63.14), including data sheets and all raw unaltered JPEGs used for opacity determination, 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 and monthly 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. If a lime feeder has been repaired or replaced, this action must be documented along with records of the new feeder calibration and the feed mechanism set points necessary to maintain the lb/hr feed rate operating limit. These records must be maintained on site and available upon request.

(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 sidewall 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 sidewall and hearth during reactive flux injection and for adding reactive flux only to the sidewall or a furnace hearth equipped with a control device for PM, HCl, and D/F emissions.

(11) For each in-line fluxer for which the owner or operator has certified that no reactive flux was used:

(i) Operating logs which establish that no source of reactive flux was present at the in-line fluxer;

(ii) Labels required pursuant to §63.1506(b) which establish that no reactive flux may be used at the in-line fluxer; or

(iii) Operating logs which document 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 or, if the alternative to the annual flow rate measurements is used, records of differential pressure; fan RPM or fan motor amperage; static pressure measurements; or duct centerline velocity using a hotwire anemometer, ultrasonic flow meter, cross-duct pressure differential sensor, venturi pressure differential monitoring or orifice plate equipped with an associated thermocouple, as appropriate.

(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) [Reserved]

(ii) 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.

(18) For any failure to meet an applicable standard, the owner or operator must maintain the following records:

(i) Records of the emission unit ID, monitor ID, pollutant or parameter monitored, beginning date and time of the event, end date and time of the event, cause of the deviation or exceedance and corrective action taken.

(ii) Records of actions taken during periods of malfunction to minimize emissions in accordance with §§63.1506(a)(5) and 63.1520(a)(8), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(19) For each period of startup or shutdown for which the owner or operator chooses to demonstrate compliance for an affected source, the owner or operator must comply with (b)(19)(i) or (ii) of this section.

(i) To demonstrate compliance based on a feed/charge rate of zero, a flux rate of zero and the use of electricity, propane or natural gas as the sole sources of heating or the lack of heating, the owner or operator must submit a semiannual report in accordance with §63.1516(b)(2)(vii) or maintain the following records:

(A) The date and time of each startup and shutdown;

(B) The quantities of feed/charge and flux introduced during each startup and shutdown; and

(C) The types of fuel used to heat the unit, or that no fuel was used, during startup and shutdown; or

(ii) To demonstrate compliance based on performance tests, the owner or operator must maintain the following records:

(A) The date and time of each startup and shutdown;

(B) The measured emissions in lb/hr or µg/hr or ng/hr;

(C) The measured feed/charge rate in tons/hr or Mg/hr from your most recent performance test associated with a production rate greater than zero, or the rated capacity of the affected source if no prior performance test data is available; and

(D) An explanation to support that such conditions are considered representative startup and shutdown operations.

(20) For owners or operators that choose to change furnace operating modes, the following records must be maintained:

(i) The date and time of each change in furnace operating mode, and

(ii) The nature of the change in operating mode (for example, group 1 controlled furnace processing other than clean charge to group 2).

[65 FR 15710, Mar. 23, 2000, as amended at 67 FR 79818, Dec. 30, 2002; 80 FR 56753, Sept. 18, 2015]

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 Implementation and enforcement.

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this regulation. Contact the applicable U.S. EPA Regional Office to find out if this subpart is delegated to a State, local, or Tribal agency.

(b) In delegating implementation and enforcement authority of this regulation to a State, local, or Tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local, or Tribal agency.

(c) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the requirements in §§63.1500 through 63.1501 and 63.1505 through 63.1506.

(2) Approval of major alternatives to test methods for under §63.7(e)(2)(ii) and (f), as defined in §63.90, and as required in this subpart.

(3) Approval of major alternatives to monitoring under §63.8(f), as defined in §63.90, and as required in this subpart.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.

[68 FR 37359, June 23, 2003]

§63.1520 [Reserved]

Table 1 to Subpart RRR of Part 63—Emission Standards for New and Existing Affected Sources

Table 1 to Subpart RRR of Part 63—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 continuous opacity monitor (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	0.80	lb/ton of feed
	D/F ^a	2.50	µg TEQ/Mg of feed
New and existing scrap dryer/delacquering kiln/decoating kiln 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	0.08	lb/ton of feed
	HCl	0.80	lb/ton of feed
	THC	0.06	lb/ton of feed
	D/F ^a	0.25	µg TEQ/Mg of feed
New and existing sweat furnace	PM	0.30	lb/ton of feed
	HCl	1.50	lb/ton of feed
	THC	0.20	lb/ton of feed
	D/F ^a	5.0	µg TEQ/Mg of feed
New and existing gross-only furnace	D/F ^a	0.80	ng TEQ/dscm 11% O ₂ ^b
New and existing gross-only furnace	PM	0.30	lb/ton of feed
New and existing in-line fluxer ^c	HCl	0.04	lb/ton of feed
	PM	0.01	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 gross 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	0.80	lb/ton of feed
	HF ^b	0.40	lb/ton of feed
	HCl	0.40	lb/ton of feed
	or 10		percent of the HCl upstream of the add-on control device
New and existing group 1 furnace ^c	PM	0.40	lb/ton of feed
	HF ^b	0.40	lb/ton of feed
	HCl	0.40	lb/ton of feed
	or 10		percent of the HCl upstream of the add-on control device
	D/F ^a	15.0	µg TEQ/Mg of feed

Affected source/ Emission unit	Pollutant	Limit	Units
New and existing group 1 furnace with clean charge only ^c	PM	0.40	lb/ton of feed
	HCl	0.40	lb/ton of feed
	HF ^b	0.40	lb/ton of feed
		or 10	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 ^{3,4} (consists of all existing group 1 furnaces and existing in-line flux boxes at the facility, or any combination of new group 1 furnaces and new in-line fluxers)	PM ^e	$L_{i,PM} = \frac{\sum_{i=1}^n (L_{i,PM} \times T_i)}{\sum_{i=1}^n (T_i)} \quad (\text{Eq. 1})$	
	HCl and HF ^{e, h}	$L_{i,HCl/HF} = \frac{\sum_{i=1}^n (L_{i,HCl/HF} \times T_i)}{\sum_{i=1}^n (T_i)} \quad (\text{Eq. 2})$	
	D/F ^g	$L_{i,D/F} = \frac{\sum_{i=1}^n (L_{i,D/F} \times T_i)}{\sum_{i=1}^n (T_i)} \quad (\text{Eq. 3})$	

^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: $L_{i,PM}$ = 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; $L_{i,HCl/HF}$ = the HCl or HF emission limit for individual emission unit i in the secondary aluminum processing unit [kg/Mg (lb/ton) of feed]; $L_{i,D/F}$ = the D/F emission limit for individual emission unit i [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 and HF limit. Controlled group 1 furnaces cannot be included in the HF emissions calculation because they are not subject to HF limits.

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

^h HF limits apply only to uncontrolled group 1 furnaces.

[80 FR 56754, Sept. 18, 2015]

Table 2 to Subpart RRR of Part 63—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 ACGIH Guidelines; ^e operate in accordance with OM&M plan (sweat furnaces may be operated according to 63.1506(c)(4)). ^b

Affected source/emission unit	Monitor type/operation/process	Operating requirements
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 or above the level established during the performance test for continuous injection systems.

Affected source/emission unit	Monitor type/operation/process	Operating requirements
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 or above the level established during performance test for continuous injection systems.
	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 of 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

Affected source/emission unit	Monitor type/operation/process	Operating requirements
	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 °C (+25 °F).
	Natural gas-fired, propane-fired or electrically heated group 1 furnaces that will be idled for at least 24 hours	Operation of associated capture/collection systems and APCD ^b may be temporarily stopped. Operation of these capture/collection systems and control devices must be restarted before feed/charge, flux or alloying materials are added to the furnace.
	Reactive flux injection rate	Maintain reactive flux injection rate (kg/Mg) (lb/ton) 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 or above the level established at performance test for continuous injection systems.
	Maintain molten aluminum level	Operate sidewell 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 air pollution controls (including those that are part of a secondary aluminum processing unit)	Reactive flux injection rate	Maintain the total reactive chlorine flux injection rate and total reactive fluorine 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.
	Site-specific monitoring plan. ^c	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.
	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.

^aThermal chip dryers, scrap dryers/delacquering kilns/decoating kilns, dross-only furnaces, in-line fluxers and group 1 furnaces including melting/holding furnaces.

^bOM&M plan—Operation, maintenance, and monitoring plan.

^cSite-specific monitoring plan. Owner/operators of group 1 furnaces without add-on APCD 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 for major sources, or the Administrator for area sources.

^dAPCD—Air pollution control device.

^eIncorporated by reference, see §63.14.

[65 FR 15710, Mar. 23, 2000, as amended at 67 FR 79818, Dec. 30, 2002; 69 FR 53984, Sept. 3, 2004; 80 FR 56757, Sept. 18, 2015]

Table 3 to Subpart RRR of Part 63—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 Guidelines. ^e Inspection includes volumetric flow rate measurements or verification of a permanent total enclosure using EPA Method 204. ^d
All affected sources and emission units subject to production-based (lb/ton or gr/ton of feed/charge) emission limits. ^a	Feed/charge weight	Record weight of each feed/charge, weight measurement device or other procedure accuracy of $\pm 1\%$; ^b calibrate according to manufacturer's 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 manufacturer's operating instructions.
	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 or ASTM D7520-13. ^e
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.
	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 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.
	Bag leak detector or	Install and operate in accordance with manufacturer's operating instructions.

Affected source/Emission unit	Monitor type/Operation/Process	Monitoring requirements
	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 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, record feeder setting daily. Verify monthly that lime injection rate is no less than 90 percent of the rate used during the compliance demonstration test.
	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 manufacturer's operating instructions.
	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 manufacturer's operating instructions.
	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 manufacturer's operating instructions.
	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 $\pm 1\%$; ^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 chlorine flux injection rate and the total reactive fluorine flux injection rate 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). For solid flux added intermittently, record the amount added for each operating cycle or time period used in the performance test.

Affected source/Emission unit	Monitor type/Operation/Process	Monitoring requirements
	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. ^c Verify monthly that the lime injection rate is no less than 90 percent of the rate used during the compliance demonstration test.
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 manufacturer's operating instructions.
	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. ^c Verify monthly that the lime injection rate is no less than 90 percent of the rate used during the compliance demonstration test.
	Reactive flux injection rate	Weight measurement device accuracy of $\pm 1\%$; ^d 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 chlorine flux injection rate and the total reactive fluorine 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). For solid flux added intermittently, record the amount added for each operating cycle or time period used in the performance test.
	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. If visual inspection of molten metal level is not possible, use physical measurement methods.
Group 1 furnace without add-on controls	Fluxing in sidewell furnace hearth	Maintain flux addition operating log; certify every 6 months.

Affected source/Emission unit	Monitor type/Operation/Process	Monitoring requirements
	Reactive flux injection rate	Weight measurement device accuracy of +1%; ^b calibrate according to manufacturer's 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. For solid flux added intermittently, record the amount added for each operating cycle or time period used in the 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.

^aThermal chip dryers, scrap dryers/delacquering kilns/decoating kilns, dross-only furnaces, in-line fluxers and group 1 furnaces or melting/holding furnaces.

^bPermitting 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.

^cPermitting authority for major sources, or the Administrator for area sources may approve other alternatives including load cells for lime hopper weight, sensors for carrier gas pressure, or HCl monitoring devices at fabric filter outlet.

^dThe frequency of volumetric flow rate measurements may be decreased to once every 5 years if daily differential pressure measures, daily fan RPM, or daily fan motor amp measurements are made in accordance with §63.1510(d)(2)(ii-iii). The frequency of annual verification of a permanent total enclosure may be decreased to once every 5 years if negative pressure measurements in the enclosure are made daily in accordance with §63.1510(d)(2)(iv). In lieu of volumetric flow rate measurements or verification of permanent total enclosure, sweat furnaces may demonstrate annually negative air flow into the sweat furnace opening in accordance with §63.1510(d)(3).

^eIncorporated by reference, see §63.14.

[65 FR 15710, Mar. 23, 2000, as amended at 69 FR 53985, Sept. 3, 2004; 80 FR 56758, Sept. 18, 2015]

Appendix A to Subpart RRR of Part 63—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].

Citation	Requirement	Applies to RRR	Comment
§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	§63.1500(e) exempts area sources subject to this subpart from the obligation to obtain Title V operating permits.
§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(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].

Citation	Requirement	Applies to RRR	Comment
§63.6(c)(5)		Yes.	
§63.6(d)		No	[Reserved].
§63.6(e)(3)	Startup, Shutdown, and Malfunction Plan	Yes.	
§63.6(g)	Alternative Standard	No	
§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	Except §63.1511 establishes dates for initial performance tests.
§63.7(b)	Notification	Yes.	
§63.7(c)	Quality Assurance/Test Plan	Yes.	
§63.7(d)	Testing Facilities	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)(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.	

Citation	Requirement	Applies to RRR	Comment
§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	Except §63.1515 establishes dates for notification of compliance status reports.
§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(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	Reporting deadline given in §63.1516.
§63.10(e)(4)	COMS Data Reports	Yes.	
§63.10(f)	Recordkeeping/Reporting Waiver	Yes.	

Citation	Requirement	Applies to RRR	Comment
§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; and Interim Procedures for Estimating Risk Associated with Exposure to Mixtures of Chlorinated Dibenzofurans (CDDs and CDFs) and 1989 Update (incorporated by reference in §63.1502).
§63.15	Availability of Information/Confidentiality	Yes.	

[65 FR 15710, Mar. 23, 2000, as amended at 67 FR 59793, Sept. 24, 2002; 67 FR 79818, Dec. 30, 2002; 69 FR 53986, Sept. 3, 2004; 70 FR 75346, Dec. 19, 2005]

EDITORIAL NOTE: At 80 FR 56760, Sept. 18, 2015, 38 entries to the table in appendix A to subpart RRR of part 63 were revised or added; however, these edits could not be made because the table was missing a column of data.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a
Federally Enforceable State Operating Permit Renewal

Source Background and Description

Source Name:	Scepter Inc.
Source Location:	6467 North Scepter Road, Bicknell, Indiana 47512
County:	Knox
SIC Code:	3341(Secondary Smelting and Refining of Nonferrous Metals)
Permit Renewal No.:	F083-36800-00015
Permit Reviewer:	Katrina Gilbank

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Scepter Inc. relating to the operation of a secondary aluminum smelting plant. On February 2, 2016, Scepter Inc. submitted an application to the OAQ requesting to renew its operating permit. Scepter Inc. was issued its first FESOP Renewal (F 083-12850-00015) on November 1, 2006.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

- (a) Three (3) natural gas-fired rotary furnaces as described below:
- (1) One (1) rotary furnace, identified as EU-2, constructed in 1988, with a nominal capacity (feed/charge rate) of 7,000 pounds per hour. Particulate emissions from furnace EU-2 are controlled by a multi-compartment baghouse which exhausts through stacks S3-1, S3-2, S3-3, S3-4, S3-5, and S3-6.
 - (2) One (1) rotary furnace, identified as EU-3, constructed in 1981, with a nominal capacity (feed/charge rate) of 7,000 pounds per hour. Particulate emissions from furnace EU-3 are controlled by a multi-compartment baghouse which exhausts through stacks S4-1, S4-2, S4-3, and S4-4.
 - (3) One (1) rotary furnace, identified as EU-4, constructed in 1995, with a nominal capacity (feed/charge rate) of 7,000 pounds per hour. Particulate emissions from furnace EU-4 are controlled by a multi-compartment baghouse which exhausts through stacks S5-1, S5-2, S5-3, S5-4, and S5-5, and S5-6.

Under 40 CFR 63, Subpart RRR – National Emission Standards for Hazardous Air Pollutants: Secondary Aluminum Production, the rotary furnaces are existing group I furnaces. The furnaces are fueled using either natural gas or coal gas.

HCl emissions from the furnaces are controlled using a pH control system that injects ammonia into the exhaust stream when the pH falls below 0.5 pH units above the pH of the incoming city water. The ammonia injection is controlled using a conventional pH electrode and temperature sensor located in a slip stream of the furnace exhausts. After ammonia injection and prior to entering the baghouse, the exhaust stream is cooled by passing through a water spray cooling system followed by an air-to-air cooling tower. The water used in the water spray cooling system will be pre-filtered landfill leachate and/or city water from the Restricted Waste Type I Landfill located on Bruce Road, Bicknell,

Indiana. The pre-filtered landfill leachate is used on the exhaust gases from either Rotary Furnace EU-2 or Rotary Furnace EU-3. The maximum leachate injection rate will be 5,000 gallons per day total for both EU-2 and EU-3. After exiting the cooling system, the exhaust stream enters a baghouse, which controls the particulate emissions generated by the reaction of HCl with ammonia.

- (b) One (1) salt cake cooling system, identified as EU-7, approved in 2012 for construction, with a maximum capacity of 4.0 tons per hour, using a baghouse for particulate control, and exhausting to stack S7-1.
- (c) One (1) aluminum can shredder, constructed in 1977, with a maximum capacity of 4.0 tons per hour with particulate matter emissions controlled by a baghouse, and exhausting to stack S6-1.

Emission Units and Pollution Control Equipment Removed From the Source

The source has removed the following emission units:

- (a) Diesel-fired aluminum bale breaker, identified as bale breaker, approved for construction in 2008, with a maximum capacity of 600 HP.
- (b) Degreasing operations consisting of one (1) cold cleaner unit with a maximum solvent usage of 145 gallons per twelve month period.

Insignificant Activities

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources each with heat input capacities less than 10 million British thermal units per hour; including direct heating systems for pre-heating molds and crucibles having a combined heat input capacity of 20 MMBtu per hour.
- (b) Petroleum fuel other than gasoline dispensing facility consisting of two (2) diesel storage tanks each with a 7,500 gallon capacity.
- (c) Eddy current separator, installed in 2014 and permitted in 2016, with a maximum processing rate of 20 tons per hour.
- (d) Pouring and casting operations, installed in 1977, with a maximum throughput capacity of 10.1 tons per hour.
- (e) Material handling operations, installed in 1977, handling 5.0 tons of dross and/or salt cake per hour.
- (f) One (1) portable crucible with five (5) natural gas burners, permitted in 2016, each with a capacity of 1.5 million British thermal units per hour, for a total of 7.5 MMBtu per hour.

Existing Approvals

Since the issuance of the FESOP 083-12850-00015 on November 1, 2006, the source has constructed or has been operating under the following additional approvals:

- (a) Administrative Amendment No. 083-24486, issued May 11, 2007
- (b) Administrative Amendment No. 083-25327, issued November 5, 2007
- (c) Minor Permit Revision No. 083-27107, issued December 9, 2008

- (d) Minor Permit Revision No. 083-27924, issued June 3, 2009
- (e) Significant Permit Revision No. 083-31692, issued June 22, 2012
- (f) Administrative Amendment No. 083-32189, issued September 5, 2012.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the State Implementation Plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Knox County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Unclassifiable or attainment as of June 15, 2004, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.

¹Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.
Unclassifiable or attainment effective April 5, 2005, for PM_{2.5}.

- (a) **Ozone Standards**
Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Knox County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) **PM_{2.5}**
Knox County has been classified as attainment for PM_{2.5}. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5} emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct PM_{2.5} significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct PM_{2.5} and SO₂ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.
- (c) **Other Criteria Pollutants**
Knox County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this source is classified as a secondary metal production plant, it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7. Therefore, fugitive emissions are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Unrestricted Potential Emissions	
Pollutant	Tons/year
PM	>250
PM ₁₀	>250
PM _{2.5}	>250
SO ₂	<100
NO _x	<100
VOC	<100
CO	<100
Single HAP (HCl)	<10
Combined HAPs	<25

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court’s decision. U.S. EPA’s guidance states that U.S. EPA will no longer require PSD or Title V permits for sources “previously classified as ‘Major’ based solely on greenhouse gas emissions.”

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(30)) of PM10 and PM2.5 is equal to or greater than 100 tons per year. However, the Permittee has agreed to limit the source’s PM10 and PM2.5 emissions to less than Title V levels, therefore the Permittee will be issued a FESOP Renewal.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(30)) of all other criteria pollutants are less than 100 tons per year.
- (c) The potential to emit (as defined in 326 IAC 2-7-1(30)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(30)) of a combination of HAPs is less than twenty-five (25) tons per year.

Potential to Emit After Issuance

The source has opted to remain a FESOP source. The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable

only after issuance of this FESOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)								
	PM	PM ₁₀ *	PM _{2.5} **	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
Furnace EU-2	73.58	73.58	73.58	22.78	13.14	3.07	11.04	<24	<10 (HCl)
Furnace EU-3				22.78	16.43	3.07	13.80		
Furnace EU-4				22.78	16.43	3.07	13.80		
Dross/Salt cake handling	5.48	6.57	6.57	negl.	negl.	negl.	negl.	negl.	negl.
Aluminum shredder	1.93	1.93	1.93	negl.	negl.	negl.	negl.	negl.	negl.
Salt cake cooling system EU-7	5.63	5.63	5.63	negl.	negl.	negl.	negl.	negl.	negl.
Pouring and casting operations	0.88	0.88	0.88	0.88	0.44	6.19	negl.	negl.	negl.
Insignificant combustion sources	0.23	0.92	0.92	0.07	12.05	0.66	10.12	0.23	negl.
Eddy current separator	0.26	0.10	negl.	negl.	negl.	negl.	negl.	negl.	negl.
Roads Fugitive Emissions	3.59	0.72	0.18	negl.	negl.	negl.	negl.	negl.	negl.
Total PTE of Entire Source	91.58	90.32	89.68	69.29	58.48	16.55	48.75	<25	<10
Title V Major Source Thresholds	NA	100	100	100	100	100	100	25	10
PSD Major Source Thresholds	100	100	100	100	100	100	100	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	100	100	100	100	100	100	100	NA	NA
negl. = negligible * Under the Part 70 Permit program (40 CFR 70), PM ₁₀ and PM _{2.5} , not particulate matter (PM), are each considered as a "regulated air pollutant". **PM _{2.5} listed is direct PM _{2.5} .									

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule,

or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

- (a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no PSD regulated pollutant is emitted at a rate of one hundred (100) tons per year or more and it is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).
- (b) This existing source is not a major source of HAPs, as defined in 40 CFR 63.2, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

Federal Rule Applicability

Compliance Assurance Monitoring (CAM)

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the potential to emit of the source is limited to less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

New Source Performance Standards (NSPS)

- (a) The requirements of 40 CFR 60, Subpart K, Ka, and Kb are not included in this permit for the diesel storage tanks. The two diesel storage tanks each have maximum capacities of 7,500 gallons, which is less than the applicability thresholds for 40 CFR 60, Subpart K, Ka, and Kb.
- (b) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (a) The requirements for the National Emission Standards for Hazardous Air Pollutants (NESHAP), Subpart T are not included in this permit for the degreasing operations. Scepter uses only non-halogenated organic solvents in its degreasing operation.
- (b) The rotary furnaces are subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR 63, Subpart RRR - Secondary Aluminum Production (326 IAC 20-70) pertaining to dioxins and furans. Scepter is considered an existing secondary aluminum process unit, containing one or more Group 1 furnace emission units processing other than clean charge [63.1500(c)(4)]. This NESHAP was promulgated by the U.S. EPA on March 23, 2000 and became effective March 23, 2003. Although the Permittee has voluntarily agreed to limit its emissions to below major source levels, this source is subject to 40 CFR 63, Subpart RRR because this NESHAP contains requirements for secondary aluminum production facilities that are area sources. Under 40 CFR 63, Subpart RRR, area sources are subject to limitations on emissions of dioxins and furans.

Applicable portions of the NESHAP are the following:

- (1) 40 CFR 63.10(b)
- (2) 40 CFR 63.10(d)(5)(i), (ii)
- (3) 40 CFR 63.1505(i)(3), (4)
- (4) 40 CFR 63.1506(b),(c),(d), (e), (m), (p)

- (5) 40 CFR 63.1510(b)-(f), (j), (u)
- (6) 40 CFR 63.1512(a), (d), (q), (r), (s)
- (7) 40 CFR 63.1516(b)-(e)
- (8) 40 CFR 63.1517

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This source is in one of the 28 listed source categories. The potential to emit (PTE) of PM, PM₁₀, and PM_{2.5} before controls are over 100 tons per year (tpy). The Permittee uses baghouses on all of the furnaces and the shredder to reduce these emissions to less than 100 tons per year. This draft FESOP includes PSD limits for PM, PM₁₀, and PM_{2.5} to keep the source classified as minor for PSD. The PM10 and PM2.5 emission limits are included under the 326 IAC 2-8 (FESOP Limitations) applicability determination below.

The limits included in the draft FESOP Renewal are outlined below:

- (a) The amount of aluminum processed in the rotary furnaces shall not exceed 91,980 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) The PM emissions from the rotary furnaces shall not exceed 1.60 pounds per ton of aluminum processed.
- (c) The amount of aluminum processed in the aluminum shredder shall not exceed 35,040 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (d) The PM emissions from the aluminum shredder shall not exceed 0.11 pounds per ton of aluminum processed.
- (e) PM emissions from the pouring and casting process shall not exceed 0.20 pounds per hour.

Compliance with these emission limits combined with the potential to emit PM from all other emissions units, including insignificant activities, shall limit the source-wide potential to emit of PM to less than 100 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

This source is not subject to the requirements of 326 IAC 2-4.1, since the unlimited potential to emit of HAPs is less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs.

326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting) because it is not required to have an operating permit pursuant to 326 IAC 2-7 (Part 70 Permits); it is not located in Lake, Porter, or LaPorte County, and its potential to emit lead is less than 5 tons per year. Therefore, this rule does not apply.

326 IAC 2-8 (FESOP Limitations)

The potentials to emit PM₁₀ and PM_{2.5} exceed the Title V thresholds of 100 tons per year. Scepter has agreed to continue limiting the emissions of PM₁₀ and PM_{2.5} from the furnaces, aluminum shredder, pouring/casting and dross/cake handling, such that the potential to emit PM₁₀ and PM_{2.5} for the entire source will be below the Title V thresholds. The following conditions have been included in the permit:

In order to render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

- (a) The amount of aluminum processed in the rotary furnaces shall not exceed 91,980 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) The PM10 emissions from the rotary furnaces shall not exceed 1.60 pounds per ton of aluminum processed.
- (c) The PM2.5 emissions from the rotary furnaces shall not exceed 1.60 pounds per ton of aluminum processed.
- (d) The HCl emissions from the rotary furnaces shall not exceed 0.215 pounds per ton of aluminum processed.
- (e) The amount of aluminum processed in the aluminum shredder shall not exceed 35,040 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (f) The PM10 emissions from the aluminum shredder shall not exceed 0.11 pounds per ton of aluminum processed.
- (g) The PM2.5 emissions from the aluminum shredder shall not exceed 0.11 pounds per ton of aluminum processed.
- (h) PM10 emissions from the pouring and casting process shall not exceed 0.20 pounds per hour.
- (i) PM2.5 emissions from the pouring and casting process shall not exceed 0.20 pounds per hour.

Compliance with these emission limits combined with the potential to emit PM10 and PM2.5 from all other emissions units, including insignificant activities, shall limit the source-wide potential to emit of PM10 and PM2.5 to less than 100 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A,

Method 9 or fifteen (15) one (1) minute non-overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions Limitations)

Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.

326 IAC 6-5 (Fugitive Particle Matter Emission Limitations)

This source is not subject to the particulate matter emission limitations because potential uncontrolled fugitive emissions are less than twenty five (25) tons per year.

326 IAC 6.5 (Particulate Matter Limitations Except Lake County)

This source is not subject to 326 IAC 6.5 because it is not located in Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo, or Wayne County.

326 IAC 6.8 (Particulate Matter Limitations For Lake County)

This source is not subject to 326 IAC 6.8 because it is not located in Lake County.

326 IAC 7 (Sulfur Dioxide Rules)

This source is not subject to 326 IAC 7-1.1 because no emission unit has a potential to emit over twenty five (25) tons of sulfur dioxide per year (326 IAC 7-1.1-1).

326 IAC 9 (Carbon Monoxide Rules)

This source is not subject to 326 IAC 9 because no emission units at this source are listed in 326 IAC 9-1-2.

326 IAC 12 (New Source Performance Standards)

See Federal Rule Applicability Section of this TSD.

326 IAC 20 (Harzardous Air Pollutants)

See Federal Rule Applicability Section of this TSD.

State Rule Applicability – Individual Facilities

State Rule Applicability - Rotary Furnaces

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

The allowable particulate emission rates from the rotary furnaces shall not exceed the following pounds per hour emission rate:

Process/Unit	Process Weight (tons /hour)	Particulate Emission Limit (lbs/hour)
EU-2	3.5	9.5
EU-3	3.5	9.5
EU-4	3.5	9.5

These limitations were calculated using the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The baghouses shall be in operation at all times the rotary furnaces are in operation, in order to comply with this limit. Compliance with the PM limits under 326 IAC 2-2 ensures compliance with these limits.

[Note: The rates provided are not limits, only the basis for calculating maximum emission rates.]

State Rule Applicability - Aluminum Shredder, Dross Handling, Salt Cake Handling, Casting and Pouring

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rates from the aluminum shredder, dross handling, salt cake handling, and casting and pouring operations shall not exceed the following pounds per hour emission rates:

Process/Unit	Process Weight (tons /hour)	Particulate Emission Limit (lbs/hour)
Material Handling	5	12.1
Pouring and Casting operations	10.1	19.3
Shredder	4.0	10.4

These emission limits were calculated using the following equation:

Interpolation of the data for the process weight rate up to sixteen thousand (16,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

Compliance with the PM emission limitation under 326 IAC 2-2 ensures compliance with these limits.

State Rule Applicability - Heaters

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

The heaters are not part of a manufacturing process listed in 326 IAC 6-3-2, and therefore, pursuant to 326 IAC 6-3-2(a), are not subject to the requirements of this rule.

State Rule Applicability - Two Diesel Storage Tanks

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

The diesel storage tanks are not subject to the requirements of 326 IAC 8-9, because this rule applies only to storage tanks located in Clark, Floyd, Lake, and Porter Counties.

State Rule Applicability – Salt Cake Cooling System

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the salt cake cooling system shall not exceed 10.38 pounds per hour when operating at a process weight rate of 4.0 tons per hour. The pound per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The baghouse shall be in operation at all times the salt cake cooling system is in operation, in order to comply with this limit.

There are no 326 IAC 8 Rules that are applicable to the salt cake cooling system because they do not have a potential to emit VOC.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

- (a) In order to demonstrate compliance with the FESOP Limitations contained in the draft permit, the source is required to conduct performance testing for PM, PM10, PM2.5, and HCl emissions from a representative natural gas-fired rotary furnace. The PM, PM10, and PM2.5 stack tests shall be performed no later than five years after the last valid compliance demonstration. PM10 and PM2.5 include filterable and condensable particulate matter.

In the consent decree signed on February 11, 2003, the source was required to perform stack tests for HCl emissions by September 30, 2003. These tests have been successfully completed. The Permittee will be required to repeat these tests once every five (5) years.

These testing requirements are necessary because the furnaces account for the majority of the PM, PM10, PM2.5, and HCl emissions before controls. The source is also required to conduct the performance tests required by 40 CFR 63, Subpart RRR. The requirements for the performance testing are outlined in Condition D.1.6 and in the Federal Rule Applicability section of this document.

The compliance monitoring requirements applicable to this source are as follows:

Control	Parameter	Frequency	Range	Excursions and Exceedances
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Control	Parameter	Frequency	Range	Excursions and Exceedances
Baghouses serving the rotary furnaces (EU-2, EU-3, and EU-4)	Water Pressure Drop	Daily	3 to 10 inches	Response steps
	Visible Emissions		Normal-Abnormal	
Baghouse Serving Salt Cake Cooling System	Water Pressure Drop	Daily	1 to 10 inches	Response steps

These monitoring conditions are necessary because:

The baghouses for the rotary furnaces and the salt cake cooling system must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-8 (FESOP).

Additional Changes

The changes listed below have been made to FESOP Permit No. F083-36800-00015 for clarification, to reduce redundancy, or to match the most current version of the applicable rule. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

- (1) On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court’s decision. U.S. EPA’s guidance states that U.S. EPA will no longer require PSD or Title V permits for sources “previously classified as ‘Major’ based solely on greenhouse gas emissions.”

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

Therefore, IDEM, OAQ, is making the following changes to the permit to remove all GHG related permit requirements.

- (2) IDEM is changing the Section C Compliance Monitoring Condition to clearly describe when new monitoring for new and existing units must begin.
- (3) IDEM clarified the Section C Instrument Specifications Condition to indicate that the analog instrument must be capable of measuring the parameters outside the normal range.

- (4) IDEM added "where applicable" to the lists in Section C - General Record Keeping Requirements to more closely match the underlying rule.
- (5) IDEM added the rule citation 326 IAC 2-8-4(1) to the Compliance Determination Requirements subsection title in Section D. 1 to clarify the authority of these conditions. Additionally, sections of D .1 referencing NESHAP or NSPS rules were moved to section E.1 for clarity. IDEM, OAQ has corrected typographical errors and revised emission limitations and compliance monitoring and compliance determination requirements to address inconsistencies and make limitations practically enforceable. Additionally, the source has requested to remove D.2.7 (Visible Emission Notations). IDEM, OAQ has agreed to remove Condition D.2.7 - Visible Emission Notations from the permit since the source is required to perform pressure drop readings of the salt cake cooling system and aluminum can shredder baghouse stack exhaust in accordance with Condition D.2.8. IDEM, OAQ currently does not require two compliance monitoring methods for a single control device. Additionally, Section D.2.6 has been revised to clarify the requirements for the single compartment baghouses for the salt cake cooling system and teh aluminum can shredder.
- (6) IDEM revised Section E.1 for clarity. IDEM added the rule citation 326 IAC 2-8-4(1) to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements subsection title in Section E.1 to clarify the authority of these conditions.
- (7) The Quarterly Report form has been modified to include the word "Quarter" of the year and to remove the numbered months. The Permittee should state which quarter and months are being reported.
- (8) 326 IAC 2-8-12 states that the Permittee must notify IDEM within "four (4) daytime business hours" for emergencies. The FESOP Emergency Occurrence Report Form lacked the word 'daytime'. 'Daytime' is being added to be consistent with the rule. In addition, the existing rule cite is being corrected to refer to the FESOP rules.
- (9) Section A.1 has been amended to clarify the source status.
- (10) Emission unit descriptions have been revised and removed at the Permittee's request.
- (11) The dross cooling system unit name has been clarified to salt cake cooling system at the Permittee's request.
- (12) IDEM has revised sections of the permit to correct typographical errors.

...

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a secondary aluminum smelting plant.

Source Address:	6467 N. Scepter Road, Bicknell, Indiana 47512
General Source Phone Number:	(812)-735-2500
SIC Code:	3341 (Secondary Smelting and Refining of Nonferrous Metals)
County Location:	Knox
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD and Emission Offset Rules ; Minor Source, Section 112 of the Clean Air Act

1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (a) Three (3) natural gas-fired rotary furnaces as described below:
 - (1) One (1) rotary furnace, identified as EU-2, **constructed in 1988**, with a nominal capacity (feed/charge rate) of 7,000 pounds per hour. Particulate emissions from furnace EU-2 are controlled by a multi-compartment baghouse which exhausts through stacks S3-1, S3-2, S3-3, S3-4, S3-5, and S3-6. ~~EU-2 was constructed in 1988.~~
 - (2) One (1) rotary furnace, identified as EU-3, **constructed in 1981**, with a nominal capacity (feed/charge rate) of 7,000 pounds per hour. Particulate emissions from furnace EU-3 are controlled by a multi-compartment baghouse which exhausts through stacks S4-1, S4-2, S4-3, and S4-4. ~~EU-3 was constructed in 1981.~~
 - (3) One (1) rotary furnace, identified as EU-4, **constructed in 1995**, with a nominal capacity (feed/charge rate) of 7,000 pounds per hour. Particulate emissions from furnace EU-4 are controlled by a multi-compartment baghouse which exhausts through stacks S5-1, S5-2, S5-3, S5-4, and S5-5, and S5-6. ~~EU-4 was constructed in 1995.~~

Under 40 CFR 63, Subpart RRR – National Emission Standards for Hazardous Air Pollutants: Secondary Aluminum Production, the rotary furnaces are existing group I furnaces. The furnaces are fueled using either natural gas or coal gas.

HCl emissions from the furnaces are controlled using a pH control system that injects ammonia into the exhaust stream when the pH falls below 0.5 pH units above the pH of the incoming city water. The ammonia injection is controlled using a conventional pH electrode and temperature sensor located in a slip stream of the furnace exhausts. After ammonia injection and prior to entering the baghouse, the exhaust stream is cooled by passing through ~~a water spray cooling system followed by~~ an air-to-air cooling tower. ~~The water used in the water spray cooling system will be pre-filtered landfill leachate and/or city water from the Restricted Waste Type I Landfill located on Bruce Road, Bicknell, Indiana. The pre-filtered landfill leachate is used on the exhaust gases from either Rotary Furnace EU-2 or Rotary Furnace EU-3. The maximum leachate injection rate will be 5,000 gallons per day total for both EU-2 and EU-3.~~ After exiting the cooling system, the exhaust stream enters a baghouse, which controls the particulate emissions generated by the reaction of HCl with ammonia.

- (b) One (1) ~~dress~~ **salt cake** cooling system, identified as EU-7, approved for construction in 2012, with a maximum capacity of 4.0 tons per hour, using a baghouse for particulate control, and exhausting to stack S7-1.
- (c) One (1) aluminum can shredder, **constructed in 1977**, with a maximum capacity of 4.0 tons per hour with particulate matter emissions controlled by a baghouse, and exhausting to stack S6-1.
- ~~(d) Pouring and casting operations (installed in 1977) with a maximum throughput capacity of 10.1 tons per hour.~~
- ~~(e) Diesel-fired aluminum bale breaker, identified as bale breaker, approved for construction in 2008, with a maximum capacity of 600 HP.~~

- (f) ~~Material handling operations (installed in 1977), handling 5.0 tons of dross and/or salt cake per hour.~~

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources each with heat input capacities less than 10 million British thermal units per hour; including direct heating systems for pre-heating molds and crucibles having a combined heat input capacity of 20 MMBtu per hour.
- (b) ~~Petroleum fuel other than gasoline dispensing facility consisting of two (2) diesel storage tanks each with a 7,500 gallon capacity.~~ **Petroleum fuel other than gasoline dispensing facility consisting of three (3) diesel storage tanks; two (2) each with a 7,500 gallon capacity and one (1) with a 1,050 gallon capacity.**
- (c) ~~Degreasing operations consisting of one (1) cold cleaner unit with a maximum solvent usage of 145 gallons per twelve month period.~~
- (c) **Eddy current separator, installed in 2014 and permitted in 2016, with a maximum processing rate of 20 tons per hour.**
- (d) **Pouring and casting operations, installed in 1977, with a maximum throughput capacity of 10.1 tons per hour.**
- (e) **Material handling operations, installed in 1977, handling 5.0 tons of dross and/or salt cake per hour.**
- (f) **One (1) portable crucible with five (5) natural gas burners, permitted in 2016, each with a capacity of 1.5 million British thermal units per hour, for a total of 7.5 MMBtu per hour.**

...

B.2 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

- (a) This permit, F083-~~42850~~**36800**-00015, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

...

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to F083-~~42850~~**36800**-00015 and issued pursuant to permitting programs approved into the state implementation plan have been either:
- (1) incorporated as originally stated,
- (2) revised, or

(3) deleted.

(b) All previous registrations and permits are superseded by this permit.

...

C.2 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit any regulated pollutant, except particulate matter (PM) ~~and greenhouse gases (GHGs)~~, from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

(2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

(3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

~~(4) The potential to emit greenhouse gases (GHGs) from the entire source shall be limited to less than one hundred thousand (100,000) tons of CO₂ equivalent emissions (CO₂e) per twelve (12) consecutive month period.~~

(b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

...

Compliance Monitoring Requirements [326 IAC 2-8-4(1)][326 IAC 2-8-5(a)(1)]

C.11 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

~~Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such monitoring. If due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance or the date of initial startup, whichever is later, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:~~

~~Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003~~

~~Indianapolis, Indiana 46204-2251~~

~~in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.~~

~~The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.~~

- (a) For new units:**
Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units shall be implemented on and after the date of initial start-up.
- (b) For existing units:**
Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance to begin such monitoring. If, due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

**Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251**

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale. **The analog instrument shall be capable of measuring values outside of the normal range.**

...

C.16 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes the following, **where applicable:**

- (AA) All calibration and maintenance records.
- (BB) All original strip chart recordings for continuous monitoring instrumentation.
- (CC) Copies of all reports required by the FESOP.

Records of required monitoring information include the following, **where applicable:**

- (AA) The date, place, as defined in this permit, and time of sampling or measurements.
- (BB) The dates analyses were performed.
- (CC) The company or entity that performed the analyses.
- (DD) The analytical techniques or methods used.
- (EE) The results of such analyses.
- (FF) The operating conditions as existing at the time of sampling or measurement.

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

...

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Emissions Unit Description:

(a) Three (3) natural gas-fired rotary furnaces as described below:

- (1) One (1) rotary furnace, identified as EU-2, constructed in 1988, with a nominal capacity (feed/charge rate) of 7,000 pounds per hour. Particulate emissions from furnace EU-2 are controlled by a multi-compartment baghouse which exhausts through stacks S3-1, S3-2, S3-3, S3-4, S3-5, and S3-6. EU-2 was constructed in 1988.
- (2) One (1) rotary furnace, identified as EU-3, constructed in 1981, with a nominal capacity (feed/charge rate) of 7,000 pounds per hour. Particulate emissions from furnace EU-3 are controlled by a multi-compartment baghouse which exhausts through stacks S4-1, S4-2, S4-3, and S4-4. EU-3 was constructed in 1981.
- (3) One (1) rotary furnace, identified as EU-4, constructed in 1995, with a nominal capacity (feed/charge rate) of 7,000 pounds per hour. Particulate emissions from furnace EU-4 are controlled by a multi-compartment baghouse which exhausts through stacks S5-1, S5-2, S5-3, S5-4, and S5-5, and S5-6. EU-4 was constructed in 1995.

Under 40 CFR 63, Subpart RRR—National Emission Standards for Hazardous Air Pollutants: Secondary Aluminum Production, the rotary furnaces are existing group I furnaces. The furnaces are fueled using either natural gas or coal gas.

HCl emissions from the furnaces are controlled using a pH control system that injects

ammonia into the exhaust stream when the pH falls below 0.5 pH units above the pH of the incoming city water. The ammonia injection is controlled using a conventional pH electrode and temperature sensor located in a slip stream of the furnace exhausts. After ammonia injection and prior to entering the baghouse, the exhaust stream is cooled by passing through a water spray cooling system followed by an air to air cooling tower. The water used in the water spray cooling system will be pre-filtered landfill leachate and/or city water from the Restricted Waste Type I Landfill located on Bruce Road, Bicknell, Indiana. The pre-filtered landfill leachate is used on the exhaust gases from either Rotary Furnace EU-2 or Rotary Furnace EU-3. The maximum leachate injection rate will be 5,000 gallons per day total for both EU-2 and EU-3. After exiting the cooling system, the exhaust stream enters a baghouse, which controls the particulate emissions generated by the reaction of HCl with ammonia.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Emission Limitations for PM, PM10 and PM2.5 [326 IAC 2-8] [326 IAC 2-2]

- (a) The amount of aluminum processed in the rotary furnaces shall not exceed 91,980 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) The PM, PM10 and PM2.5 emissions from the rotary furnaces shall not exceed 1.6 pounds per ton of aluminum processed. This limit combined with the aluminum throughput limit in (a) is equivalent to 73.58 tons of PM, PM10, and PM2.5 per year.

Compliance with these limits and the PM, PM10, and PM2.5 emission limits in Condition D.2.1 makes 326 IAC 2-7 (Part 70 Permit Program) and 326 IAC 2-2 (PSD) not applicable.

D.1.2 Emission Limitations for HCl [326 IAC 2-8]

The HCl emissions from the rotary furnaces shall not exceed 0.215 pounds per ton of aluminum processed. This limit combined with the aluminum throughput limit in Condition D.1.1 (a) is equivalent to 9.89 tons of HCl per year. Compliance with this limit makes 326 IAC 2-7 (Part 70 Permit Program) not applicable.

D.1.3 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emissions from the rotary furnaces shall not exceed the following emission rates:

Process/Unit	Process Weight (tons /hour)	Particulate Emission Limit (lbs/hour)
EU-2	3.5	9.5
EU-3	3.5	9.5
EU-4	3.5	9.5

The pounds per hour limitations were calculated using the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \text{ where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

Compliance with the emission limitations in Condition D.1.1 ensures compliance with this condition.

~~D.1.4 General Provisions Relating to NESHAPs [326 IAC 20-1] [40 CFR 63, Subpart A]~~

~~The provisions of 40 CFR 63, Subpart A—General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the rotary furnaces except when otherwise specified in 40 CFR 63, Subpart RRR.~~

~~D.1.5 Secondary Aluminum Smelting [40 CFR 63, Subpart RRR]~~

~~Pursuant to 40 CFR 63.1505(i)(3), the Permittee shall not discharge or allow to be discharged to the atmosphere from a Group 1 furnace any 3-day, 24-hour rolling average emissions of total tetra-, penta-, hexa-, and octachlorinated dibenzo dioxins and furans (D/F) in excess of 15 g of D/F TEQ per Mg (2.1×10^{-4} gr of D/F TEQ per ton) of feed/charge, where TEQ is the 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).~~~~

~~D.1.6 Operating and Monitoring Requirements [40 CFR 63.1506] [40 CFR 63.1510]~~

~~(a) Pursuant to 40 CFR 63.1506(b), the Permittee shall provide and maintain easily visible labels at each furnace that identifies the applicable emission limit and means of compliance. The labels shall include:~~

- ~~(1) The type of affected emission unit (i.e., Group 1 Furnace); and~~
- ~~(2) The applicable operational standard and control method, including the type of charge to be used in the furnace, flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the Operation, Maintenance, and Monitoring (OM&M) Plan.~~

~~(b) Pursuant to 40 CFR 63.1506(c), the Permittee shall comply with the following requirements:~~

- ~~(1) Each furnace shall be equipped with a capture and collection system that meets 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."~~
- ~~(2) Captured emissions shall be vented 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.~~
- ~~(3) The capture/collection system shall be operated according to the procedures and requirements in the Operation, Maintenance, and Monitoring Plan.~~

~~(c) Pursuant to 40 CFR 63.1506(d), the Permittee shall calibrate, operate, and maintain a device to measure and record the weight of feed/charge to each furnace. The Permittee shall operate the measurement system in accordance with the Operation, Maintenance, and Monitoring Plan. The accuracy of the weight measuring device shall be within one (1) percent of the weight being measured. The Permittee shall 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.~~

- (d) Pursuant to 40 CFR 63.1506(M), the Permittee shall:
- (1) Maintain the 3-hour block average inlet temperature of each fabric filter at or below the average temperature established during the performance test, plus 14°C (25°F).
 - (2) During all operational phases for a given furnace/baghouse system, maintain free flowing lime (or other alkaline agent such as ammonia) in the storage tank to the feed device and maintain the feeder setting at the same rate established during the performance test.
 - (3) 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.
- (e) Pursuant to 40 CFR 63.1510(e), the Permittee shall calibrate, operate and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the furnaces over the same operating cycle or time period used in the performance test. The feed/charge or aluminum production must be measured and recorded on an emission unit basis. The accuracy of the weight measurement device shall be ±1 percent of the weight being measured. The Permittee shall 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) Pursuant to 40 CFR 63.1506(p), when a process parameter deviates from the value or range established during the performance test and incorporated in the Operation, Maintenance, and Monitoring (OM&M) Plan (see Condition D.1.7), the Permittee shall initiate corrective action. The corrective action shall restore operation of the affected emission unit (including the furnace 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 shall include follow up actions necessary to return the furnace or control device parameter level(s) to the value or range of values established during the performance tests and steps to prevent the likely recurrence of the cause of the deviations.

D.1.7 Operation, Maintenance, and Monitoring (OM&M) Plan and Startup, Shutdown, and Malfunction (SSM) Plan [40 CFR 63.1510(b) and 63.1516(a)]

- (a) Pursuant to 40 CFR 63.1510(b), the Permittee shall implement and revise as necessary a written Operation, Maintenance, and Monitoring (OM&M) Plan. Any changes to the OM&M Plan shall be submitted to the permitting authority for review and approval. Pending approval of the amended OM&M Plan, the Permittee shall comply with the provisions of the submitted plan. The OM&M Plan shall 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 limit in Condition D.1.5.
 - (4) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:

- (A) ~~Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer=s instructions; and~~
- (B) ~~Procedures for the quality control and quality assurance of continuous emission monitoring systems as required by the general provisions in 40 CFR 63, Subpart A.~~
- (5) ~~Procedures for monitoring process and control device parameters.~~
- (6) ~~Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established during the performance testing, including:~~
 - (A) ~~Procedures to determine and record the cause of a deviation or excursion, and the time the deviation or excursion began and ended; and~~
 - (B) ~~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.~~
- (b) ~~Pursuant to 40 CFR 63.1516(a), the Permittee shall maintain and implement a Startup, Shutdown, and Malfunction (SSM) Plan as required in 40 CFR 63.10(b). The SSM Plan shall contain 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.~~

D.1.8 Compliance Determination Requirements [40 CFR 63.1510]

- (a) Pursuant to 40 CFR 63.1510, the Permittee shall calculate and record the 3-day, 24-hour rolling average emissions of D/F TEQ for each furnace on a daily basis. To calculate the 3-day, 24-hour rolling average, the Permittee shall:
 - (1) Calculate and record the total weight of material charged to each furnace for each 24-hour day of operation using the feed/charge weight data;
 - (2) Multiply the total feed/charge weight to the furnace for the 24-hour period by the emission rate (in lb/ton of feed/charge) for the furnace; and
 - (3) Calculate and record the 3-day, 24-day rolling average for D/F TEQ each day by summing the daily emission rate over the three (3) most recent consecutive days and dividing by 3.
- (b) Pursuant to 40 CFR 63.1510(u) and as an alternative to the procedures in paragraphs (a) of this condition, the Permittee may demonstrate compliance with the D/F TEQ limit through performance tests on each emission unit.

D.1.9 Compliance Monitoring Requirements For 40 CFR 63, Subpart RRR [40 CFR 63.1510]

- (a) Pursuant to 40 CFR 63.1510(c), the Permittee shall inspect the labels for each furnace at least once per calendar month to confirm that posted labels required by the operational standard in 40 CFR 63.1506(b) (Condition D.1.6) are intact and legible.

- (b) Pursuant to 40 CFR 63.1510(d), the Permittee shall 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 40 CFR 63.1506(c) and record the results of each inspection.
- (c) Pursuant to 40 CFR 63.1510(h), the Permittee shall 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 40 CFR 63, Subpart A. The temperature monitoring device must meet each of the following performance and equipment specifications.
- (1) 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.
 - (2) The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(a).
 - (3) 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 Commissioner.
- (d) Pursuant to 40 CFR 63.1510(i), the Permittee shall verify that the lime (or other alkaline agent) is always free-flowing by operating and maintaining a flow indicator system that confirms that lime (or other alkaline agent) is free-flowing during all operational phases for each furnace/baghouse system. If lime (or other alkaline agent) is found to not be free-flowing, the Permittee shall promptly initiate and complete corrective action.
- (e) Pursuant to Alternative Monitoring Plan approved by the U.S. EPA on December 3, 2004 and to comply with 40 CFR 63.1510(j)(3), the Permittee shall record the weight of the reactive flux charged into the furnace at the beginning of the batch cycle, the charge time, the material type, and the weight of any additional flux material added to the batch during the batch cycle.

D.1.10 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for the furnaces and their control devices. Section B- Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition. The approved Operation, Maintenance, and Monitoring (OM&M) Plan required by 40 CFR 63.63.150(b) and described in Condition D.1.7 satisfies the requirements of this condition.

Compliance Determination Requirements

D.1.11 Particulate Matter (PM) and Hazardous Air Pollutants (HAPs)

- (a) Pursuant to F083-6099-00015, issued on December 12, 1996, and in order to comply with Conditions D.1.1, D.1.2, and D.1.3, the baghouse and pH control system shall be in operation and control emissions from the rotary furnaces at all times the furnaces are in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.1.12 Particulate Matter and HCl

- (a) ~~The Permittee shall perform stack testing of PM and PM10 emissions from a representative natural gas-fired furnace utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. The PM10 shall include filterable and condensable PM10.~~
- (b) ~~The Permittee shall perform stack testing of HCl emissions from a representative natural gas-fired furnace utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.~~

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.13 Visible Emissions Notations

- (a) ~~Visible emission notations of the rotary furnace stack exhausts shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.~~
- (b) ~~For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.~~
- (c) ~~In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.~~
- (d) ~~A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.~~
- (e) ~~If abnormal emissions are observed at any baghouse exhaust, the Permittee shall take response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.~~

D.1.14 Monitoring Requirements

- (a) Pursuant to the Consent Decree (Case No. 2001-10376-A, signed on February 11, 2003), the Permittee shall comply with the following:
- (1) The Permittee shall continuously monitor and record the following parameters for the HCl control system:
- (A) The pH of the incoming city water;
 - (B) The variable pH set point;
 - (C) The pH measurement of the gas stream; and
 - (D) The ammonia feed rate.

- ~~(2) The ammonia feed valve shall be opened when the gas stream pH measurement drops below the variable pH set point plus 0.5 pH units.~~
- ~~(3) The minimum ammonia feed rate shall be 50 scfh at all times when the applicable furnace/baghouse system is in one of the operational phases.~~
- ~~(b) Pursuant to the Agreed Order (Case No. 2011-20554-A, signed on July 31, 2012), the Permittee shall comply with the following:
 - ~~(1) The Permittee shall monitor and record the following parameters for the HCl control system:
 - ~~(A) Daily visual inspection of the ammonia system mechanical components when the HCl control system is in operation;~~
 - ~~(B) Daily calibration check of each pH monitoring system when the HCl control system is in operation;~~
 - ~~(C) Monthly maintenance inspection of all mechanical systems associated with the ammonia injection system, including the ammonia heater; and~~
 - ~~(D) Monthly diagnostic check on each furnace control system verifying the system will shut down properly if the ammonia flow is interrupted.~~~~~~

D.1.15 Parametric Monitoring

~~The Permittee shall record the pressure drop across the baghouses used in conjunction with the furnaces, at least once per day when the furnaces are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take reasonable response. The normal range for these units is provided in the table below unless a different upper bound or lower bound value for this range is determined during the latest stack test. Section C – Responses to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response shall be considered a deviation from this permit.~~

Emission Unit I.D.	Normal Pressure Drop Range (inches of water)
EU-2	3.0 to 10.0
EU-3	3.0 to 10.0
EU-4	3.0 to 10.0

~~The instrument used for determining the pressure shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.~~

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.16 Record Keeping Requirements

- ~~(a) To document the compliance status with Condition D.1.13, the Permittee shall maintain a daily record of visible emission notations of each of the furnace stack exhausts during normal daylight operations when one or more of the furnaces are in operation. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the process did not operate that day).~~

- ~~(b) — To document the compliance status with Condition D.1.14(a), the Permittee shall maintain continuous records of the following parameters for the HCl control system:~~
- ~~(1) — The pH of the incoming city water;~~
 - ~~(2) — The variable pH set point;~~
 - ~~(3) — The pH of the gas stream; and~~
 - ~~(4) — The ammonia feed rate.~~
- ~~(c) — To document the compliance status with Condition D.1.14(b), the Permittee shall maintain written records of the following actions in order to assure proper operation of the HCl control system:~~
- ~~(1) — Daily visual inspection of the ammonia system mechanical components. The Permittee shall include in its daily record when a visual inspection is not taken and the reason for the lack of the visual inspection (e.g., the process did not operate that day);~~
 - ~~(2) — Daily calibration check of each pH monitoring system. The Permittee shall include in its daily record when a calibration check is not taken and the reason for the lack of the calibration check (e.g., the process did not operate that day);~~
 - ~~(3) — Monthly maintenance inspection of all mechanical systems associated with the ammonia injection system, including the ammonia heater; and~~
 - ~~(4) — Monthly diagnostic check on each furnace control system verifying the system will shut down properly if the ammonia flow is interrupted.~~
- ~~(d) — To document the compliance status with Condition D.1.15, the Permittee shall maintain a daily record of the pressure drop across each baghouse. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of pressure drop reading (e.g., the process did not operate that day).~~
- ~~(e) — To document the compliance status with Condition D.1.1(a), the Permittee shall maintain records of the amount of aluminum processed per month.~~
- ~~(f) — Section C – General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.~~

~~D.1.17 Record Keeping Requirements for 40 CFR 63, Subpart RRR~~

- ~~(a) — To document the compliance status with Condition D.1.5, the Permittee shall maintain files of all information, including reports and notifications, required by 40 CFR 63.10 and 40 CFR 63.1517. The Permittee shall retain each record for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent two (2) years of records shall be retained at the source. The remaining three (3) years of records may be retained off-site. The Permittee may retain records on microfilm, computer disks, magnetic tape or microfiche.~~
- ~~(b) — All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.~~

~~D.1.18 Reporting Requirements For 40 CFR 63, Subpart RRR [40 CFR 63.1516]~~

- ~~(a) Pursuant to 40 CFR 63.1516(a), the Permittee shall keep records of each malfunction and record and report if an action taken during startup, shutdown, or malfunction is not consistent with the procedures in the Startup, Shutdown, and Malfunction (SSM) Plan. The plan shall include:~~
- ~~(1) The procedures to determine and record the cause of a 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 the actions taken to correct the malfunction or minimize emissions.~~
- ~~(b) Pursuant to 40 CFR 63.1516(b), the Permittee shall submit a semi-annual Excess Emissions/Summary Report within 60 days after the end of each six (6) month period. The report shall contain the information specified in 40 CFR 63.10(c). When no deviations have occurred, the Permittee shall submit a report stating that no excess emissions occurred during the reporting period. A report shall be submitted if any following conditions occur:~~
- ~~(1) An excursion of a compliant process or operating parameter value or range occurred.~~
 - ~~(2) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the SSM Plan.~~
 - ~~(3) A furnace was not operated according to the requirements of 40 CFR 63, Subpart RRR.~~
- ~~(c) The Permittee shall submit an Annual Compliance Certification certifying compliance based upon, but not limited to, the following conditions:~~
- ~~(1) Any period of excess emissions that occurred during the year were reported as required by 40 CFR 63, Subpart RRR; and~~
 - ~~(2) All monitoring, recordkeeping, and reporting requirements were met during the year.~~

D.1.19 Reporting Requirements

~~A quarterly summary of the information to document the compliance status with Conditions D.1.1, D.1.2, and D.1.3 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meet the requirements of 326 IAC 2-8-5(a)(1) by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- ~~(b) One (1) dress cooling system, identified as EU-7, approved for construction in 2012, with a maximum capacity of 4.0 tons per hour, using a baghouse for particulate control, and exhausting to stack S7-1.~~
- ~~(c) One (1) aluminum can shredder with a maximum capacity of 4.0 tons per hour with particulate matter emissions controlled by a baghouse, and exhausting to stack S6-1.~~

~~(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)~~

~~Emission Limitations and Standards [326 IAC 2-8-4(1)]~~

~~D.2.1 Particulate Matter (PM) [326 IAC 2-2]~~

~~In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:~~

- ~~(a) PM emissions from the dross cooling system shall not exceed 1.29 pounds per hour.~~
- ~~(b) PM emissions from the aluminum can shredder shall not exceed 0.11 pounds per ton of aluminum processed when operating at the maximum shredding capacity of 4.0 tons of aluminum per hour.~~

~~Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 100 tons per 12 consecutive month period and shall render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.~~

~~D.2.2 FESOP Limits [326 IAC 2-8-4] [326 IAC 2-2]~~

~~Pursuant to 326 IAC 2-8-4, the Permittee shall comply with the following:~~

- ~~(a) PM10 emissions from the dross cooling system shall not exceed 1.29 pounds per hour.~~
- ~~(b) PM2.5 emissions from the dross cooling system shall not exceed 1.29 pounds per hour.~~
- ~~(c) PM10 emissions from the aluminum can shredder shall not exceed 0.11 pounds per ton of aluminum processed when operating at the maximum shredding capacity of 4.0 tons of aluminum per hour.~~
- ~~(d) PM2.5 emissions from the aluminum can shredder shall not exceed 0.11 pounds per ton of aluminum processed when operating at the maximum shredding capacity of 4.0 tons of aluminum per hour.~~

~~Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM10 and PM2.5 to less than 100 tons per 12 consecutive month period and shall render 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.~~

~~D.2.3 Particulate [326 IAC 6-3-2]~~

~~Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the dross cooling system and aluminum can shredder shall not exceed the following emission rates:~~

Process/Unit	Process Weight (tons /hour)	Particulate Emission Limit (lbs/hour)
Dross Cooling System	4.0	10.4
Aluminum Can Shredder	4.0	10.4

The pound per hour limitation was calculated with the following equation:

~~Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:~~

$$E = 4.10 P^{0.67} \text{ where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

~~D.2.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]~~

~~A Preventive Maintenance Plan is required for the dross cooling system and aluminum can shredder and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.~~

Compliance Determination Requirements

~~D.2.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]~~

~~In order to demonstrate compliance with Conditions D.2.1(a), D.2.2(a), D.2.2(b), and D.2.3, the Permittee shall perform PM, PM10, and PM2.5 testing of the dross cooling system no later than sixty (60) days after achieving maximum capacity, but not later than one hundred and eighty (180) days after initial startup. This testing shall be conducted utilizing methods approved by the Commissioner and shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.~~

~~D.2.6 Particulate Control~~

- ~~(a) In order to comply with Conditions D.2.1(a), D.2.1(b), D.2.2(a), D.2.2(b), D.2.2(c), D.2.2(d), and D.2.43, the baghouses for the dross cooling system and aluminum can shredder shall be in operation and control emissions from each emission unit at all times when the dross cooling system and aluminum can shredder are in operation.~~
- ~~(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.~~

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

~~D.2.7 Visible Emissions Notations~~

- ~~(a) Visible emission notations of the aluminum can shredder stack (S6-1) exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.~~
- ~~(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.~~
- ~~(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.~~
- ~~(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.~~

- ~~(e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C – Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.~~

D.2.8 Baghouse Parametric Monitoring

- ~~(a) The Permittee shall record the pressure drop across the baghouses used in conjunction with the dross cooling system and aluminum can shredder at least once per day when the dross cooling system and aluminum can shredder are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal, the Permittee shall take reasonable response. The normal range for these units is a pressure drop between 1.0 and 10.0 inches of water unless a different upper bound or lower bound value for this range is determined during the latest stack test. Section C – Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.~~
- ~~(b) The instruments used for determining the pressure and temperature shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.~~

D.2.9 Broken or Failed Bag Detection

- ~~(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).~~
- ~~(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).~~

~~Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, or dust traces.~~

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.2.10 Record Keeping Requirements

- ~~(a) To document the compliance status with Condition D.2.7, the Permittee shall maintain records of the visible emission notations once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).~~
- ~~(b) To document the compliance status with Condition D.2.8, the Permittee shall maintain records once per day of the pressure drop during normal operation. The Permittee shall include in its daily record when the pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).~~
- ~~(c) Section C – General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.~~

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)] Insignificant Activities:

(d) ~~Pouring and casting operations (installed in 1977) with a maximum throughput capacity of 10.1 tons per hour.~~

(e) ~~Diesel-fired aluminum bale breaker, identified as bale breaker, approved for construction in 2008, with a maximum capacity of 600 HP.~~

(f) ~~Material handling operations (installed in 1977), handling 5.0 tons of dross and/or salt cake per hour.~~

~~(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)~~

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 Emission Limitations for PM, PM10, and PM2.5 [326 IAC 2-8] [326 IAC 2-2]

- (a) ~~PM emissions from the pouring and casting process shall not exceed 0.2 pounds per hour. When operating at the maximum throughput capacity of 10.1 tons per hour.~~
- (b) ~~PM10 emissions from the pouring and casting process shall not exceed 0.2 pounds per hour. When operating at the maximum throughput capacity of 10.1 tons per hour.~~
- (c) ~~PM2.5 emissions from the pouring and casting process shall not exceed 0.2 pounds per hour. When operating at the maximum throughput capacity of 10.1 tons per hour.~~
- (d) ~~PM emissions from the dross and salt cake handling shall not exceed 0.22 pounds per ton of material processed.~~
- (e) ~~PM10 emissions from the dross and salt cake handling shall not exceed 0.20 pounds per ton of material processed when operating at a maximum capacity of 5.0 tons per hour.~~
- (f) ~~PM2.5 emissions from the dross and salt cake handling shall not exceed 0.20 pounds per ton of material processed when operating at a maximum capacity of 5.0 tons per hour.~~

Compliance with these limits, combined with the potential to emit PM, PM10, and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM, PM10, and PM2.5 to less than 100 tons per 12 consecutive month period and shall render 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.3.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rates from the dross and salt cake handling and pouring and casting operations shall not exceed the following emission rates:

Process/Unit	Process Weight (tons /hour)	Particulate Emission Limit (lbs/hour)
Dross and Salt Cake Material Handling	5.0	12.1
Pouring and Casting		

Operations	10.1	19.3
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These emission limits were calculated using the following equation:

Interpolation of the data for the process rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10P^{0.67}$$

Where: E = Rate of emission in pounds per hour; and
P = Process weight rate in tons per hour.

~~D.3.3 Fuel Limitations [326 IAC 2-8] [326 IAC 2-2] [326 IAC 2-7]~~

~~Pursuant to 326 IAC 2-8-4, the diesel fuel usage in the diesel-fired aluminum bale breaker combustion unit, and the NOx emissions shall be limited as follows:~~

- ~~(a) The total usage of diesel fuel for the 4.2 MMBtu per hour (600 hp-hr) diesel-fired aluminum bale breaker shall not exceed 70,000 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.~~
- ~~(b) Nitrogen oxides (NOx) emissions from the diesel-fired aluminum bale breaker combustion unit shall be less twenty five (25) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.~~

~~Compliance with these limits, combined with the potential to emit NOx, emissions from all other units at this source, shall limit the source-wide total potential to emit of NOx to less than one hundred (100) tons per twelve (12) consecutive month period each and render 326 IAC 2-7 (Part 70 Permit) and 326 IAC 2-2 (PSD) not applicable.~~

~~D.3.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]~~

~~A Preventive Maintenance Plan is required for the bale breaker and its control device. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.~~

~~Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]~~

~~D.3.5 Record Keeping Requirements~~

- ~~(a) To document the compliance status with Conditions D.3.3(a), the Permittee shall keep records of the amount of fuel combusted through the diesel-fired aluminum bale breaker combustion unit. Records necessary to demonstrate compliance shall be available not later than thirty (30) days of the end of each compliance period.~~
- ~~(b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.~~

~~D.3.6 Reporting Requirements~~

~~A quarterly summary of the information to document the compliance status with Condition D.3.3 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meet the requirements of 326 IAC 2-8-5(a)(1) by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~SECTION D.4 FACILITY OPERATION CONDITIONS~~

Facility Description [326 IAC 2-8-4(10)]: Insignificant Activities
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~~(c) — Degreasing operations consisting of one (1) cold cleaner unit with a maximum solvent usage of 145 gallons per twelve month period.~~

~~(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)~~

Emission Limitations and Standards [326 IAC 2-8-4(1)]

~~D.4.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]~~

~~Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the Permittee shall:~~

- ~~(a) — Equip the cleaner with a cover;~~
- ~~(b) — Equip the cleaner with a facility for draining cleaned parts;~~
- ~~(c) — Close the degreaser cover whenever parts are not being handled in the cleaner;~~
- ~~(d) — Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;~~
- ~~(e) — Provide a permanent, conspicuous label summarizing the operation requirements;~~
- ~~(f) — Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.~~

~~D.4.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]~~

~~(a) — Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without a remote reservoir constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:~~

- ~~(1) — Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - ~~(A) — The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38^oC) (one hundred degrees Fahrenheit (100^oF));~~
 - ~~(B) — The solvent is agitated; or~~
 - ~~(C) — The solvent is heated.~~~~
- ~~(2) — Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^oC) (one hundred degrees Fahrenheit (100^oF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.~~
- ~~(3) — Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).~~

- ~~(4) — The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.~~
 - ~~(5) — Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - ~~(A) — A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.~~
 - ~~(B) — A water cover when solvent used is insoluble in, and heavier than, water.~~
 - ~~(C) — Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.~~~~
- ~~(b) — Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the Permittee shall ensure that the following operating requirements are met:~~
- ~~(1) — Close the cover whenever articles are not being handled in the degreaser.~~
 - ~~(2) — Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.~~
 - ~~(3) — Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.~~

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) Three (3) natural gas-fired rotary furnaces as described below:**
 - (1) One (1) rotary furnace, identified as EU-2, constructed in 1988, with a nominal capacity (feed/charge rate) of 7,000 pounds per hour. Particulate emissions from furnace EU-2 are controlled by a multi-compartment baghouse which exhausts through stacks S3-1, S3-2, S3-3, S3-4, S3-5, and S3-6**
 - (2) One (1) rotary furnace, identified as EU-3, constructed in 1981, with a nominal capacity (feed/charge rate) of 7,000 pounds per hour. Particulate emissions from furnace EU-3 are controlled by a multi-compartment baghouse which exhausts through stacks S4-1, S4-2, S4-3, and S4-4.**
 - (3) One (1) rotary furnace, identified as EU-4, constructed in 1995, with a nominal capacity (feed/charge rate) of 7,000 pounds per hour. Particulate emissions from furnace EU-4 are controlled by a multi-compartment baghouse which exhausts through stacks S5-1, S5-2, S5-3, S5-4, and S5-5, and S5-6.**

Under 40 CFR 63, Subpart RRR - National Emission Standards for Hazardous Air Pollutants: Secondary Aluminum Production, the rotary furnaces are existing group I furnaces. The furnaces are fueled using either natural gas or coal gas.

HCl emissions from the furnaces are controlled using a pH control system that injects ammonia into the exhaust stream when the pH falls below 0.5 pH units above the pH of the incoming city water. The ammonia injection is controlled using a conventional pH electrode and temperature sensor located in a slip stream of the furnace exhausts. After ammonia injection and prior to entering the baghouse, the exhaust stream is cooled by passing through an air-to-air cooling tower. After exiting the cooling system, the exhaust stream enters a baghouse, which controls the particulate emissions generated by the reaction of HCl with ammonia.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 PSD Minor Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

- (a) The amount of aluminum processed in the rotary furnaces shall not exceed 91,980 tons per twelve (12) consecutive month period with compliance determined at the end of each month.**
- (b) The PM emissions from the rotary furnaces shall not exceed 1.60 pounds per ton of aluminum processed.**

Compliance with these emission limits combined with the potential to emit PM from all other emissions units, including insignificant activities, shall limit the source-wide potential to emit of PM to less than 100 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.2 FESOP Limits [326 IAC 2-8][326 IAC 2-2]

In order to render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

- (a) The amount of aluminum processed in the rotary furnaces shall not exceed 91,980 tons per twelve (12) consecutive month period with compliance determined at the end of each month.**
- (b) The PM10 emissions from the rotary furnaces shall not exceed 1.60 pounds per ton of aluminum processed.**
- (c) The PM2.5 emissions from the rotary furnaces shall not exceed 1.60 pounds per ton of aluminum processed.**
- (d) The HCl emissions from the rotary furnaces shall not exceed 0.215 pounds per ton of aluminum processed.**

Compliance with these emission limits combined with the potential to emit PM10 and PM2.5 from all other emissions units, including insignificant activities, shall limit the

source-wide potential to emit of PM10 and PM2.5 to less than 100 tons per twelve (12) consecutive month period and HCl emissions to less than ten (10) tons per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable and shall render the source minor under Section 112 of the Clean Air Act.

D.1.3 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emissions from the rotary furnaces shall not exceed the following emission rates:

Process/Unit	Process Weight (tons /hour)	Particulate Emission Limit (lbs/hour)
EU-2	3.5	9.5
EU-3	3.5	9.5
EU-4	3.5	9.5

The pounds per hour limitations were calculated using the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

Compliance Determination Requirements [326 IAC 2-8-4(1)]

D.1.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for the furnaces and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-8-4(1)]

D.1.5 Particulate Matter (PM) and Hazardous Air Pollutants (HAPs)

- (a) In order to assure compliance with Conditions D.1.1(b), D.1.2(b), (c), and (d), and D.1.3, the baghouse and pH control system shall be in operation and control emissions from the rotary furnaces at all times the furnaces are in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.1.6 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

- (a) In order to demonstrate compliance with Conditions D.1.1(b), D.1.2(b) and (c), and D.1.3, the Permittee shall perform stack testing of PM, PM10, and PM2.5 emissions from a representative natural gas-fired furnace utilizing methods as approved by

the Commissioner at least once every five (5) years from the date of the most recent compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. The PM10 and PM2.5 include filterable and condensable particulate matter.

- (b) In order to demonstrate compliance with Condition D.1.2(d), the Permittee shall perform stack testing of HCl emissions from a representative natural gas-fired furnace utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

D.1.7 Visible Emissions Notations

- (a) Visible emission notations of the rotary furnace stack exhausts shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed at any baghouse exhaust, the Permittee shall take a reasonable response. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.1.8 Monitoring Requirements

- (a) Pursuant to the Consent Decree (Case No. 2001-10376-A, signed on February 11, 2003), the Permittee shall comply with the following:
 - (1) The Permittee shall continuously monitor and record the following parameters for the HCl control system:
 - (A) The pH of the incoming city water;
 - (B) The variable pH set-point;
 - (C) The pH measurement of the gas stream; and
 - (D) The ammonia feed rate.

- (2) The ammonia feed valve shall be opened when the gas stream pH measurement drops below the variable pH set point plus 0.5 pH units.
- (3) The minimum ammonia feed rate shall be 50 scfh at all times when the applicable furnace/baghouse system is in one of the operational phases.
- (b) Pursuant to the Agreed Order (Case No. 2011-20554-A, signed on July 31, 2012), the Permittee shall comply with the following:
 - (1) The Permittee shall monitor and record the following parameters for the HCl control system:
 - (A) Daily visual inspection of the ammonia system mechanical components when the HCl control system is in operation;
 - (B) Daily calibration check of each pH monitoring system when the HCl control system is in operation;
 - (C) Monthly maintenance inspection of all mechanical systems associated with the ammonia injection system, including the ammonia heater; and
 - (D) Monthly diagnostic check on each furnace control system verifying the system will shut down properly if the ammonia flow is interrupted.

D.1.9 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouses used in conjunction with the furnaces, at least once per day when the furnaces are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take reasonable response. The normal range for these units is provided in the table below unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Responses to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response shall be considered a deviation from this permit.

Emission Unit I.D.	Normal Pressure Drop Range (inches of water)
EU-2	3.0 to 10.0
EU-3	3.0 to 10.0
EU-4	3.0 to 10.0

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.1.10 Record Keeping Requirements

- (a) To document the compliance status with Condition D.1.1(a), the Permittee shall maintain records of the amount of aluminum processed per month through the rotary furnaces.

- (b) To document the compliance status with Condition D.1.7, the Permittee shall maintain a daily record of visible emission notations of each of the furnace stack exhausts during normal daylight operations when one or more of the furnaces are in operation. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the process did not operate that day).**
- (c) To document the compliance status with Condition D.1.8, the Permittee shall maintain continuous records of the following parameters for the HCl control system:**

 - (1) The pH of the incoming city water;**
 - (2) The variable pH set-point;**
 - (3) The pH of the gas stream; and**
 - (4) The ammonia feed rate.**
- (d) To document the compliance status with Condition D.1.8, the Permittee shall maintain written records of the following actions in order to assure proper operation of the HCl control system:**

 - (1) Daily visual inspection of the ammonia system mechanical components. The Permittee shall include in its daily record when a visual inspection is not taken and the reason for the lack of the visual inspection (e.g., the process did not operate that day);**
 - (2) Daily calibration check of each pH monitoring system. The Permittee shall include in its daily record when a calibration check is not taken and the reason for the lack of the calibration check (e.g., the process did not operate that day);**
 - (3) Monthly maintenance inspection of all mechanical systems associated with the ammonia injection system, including the ammonia heater; and**
 - (4) Monthly diagnostic check on each furnace control system verifying the system will shut down properly if the ammonia flow is interrupted.**
- (e) To document the compliance status with Condition D.1.9, the Permittee shall maintain a daily record of the pressure drop across each baghouse. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of pressure drop reading (e.g., the process did not operate that day).**
- (f) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.**

D.1.11 Reporting Requirements

Quarterly summaries of the information to document the compliance status with Conditions D.1.1, D.1.2, and D.1.3 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meet the requirements of 326 IAC 2-8-5(a)(1) by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (b) One (1) salt cake cooling system, identified as EU-7, approved for construction in 2012, with a maximum capacity of 4.0 tons per hour, using a baghouse for particulate control, and exhausting to stack S7-1.
- (c) One (1) aluminum can shredder with a maximum capacity of 4.0 tons per hour with particulate matter emissions controlled by a baghouse, and exhausting to stack S6-1.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 PSD Minor Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

- (a) PM emissions from the salt cake cooling system shall not exceed 1.29 pounds per hour.
- (b) The amount of aluminum processed in the aluminum shredder shall not exceed 35,040 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (c) PM emissions from the aluminum can shredder shall not exceed 0.11 pounds per ton of aluminum processed.

Compliance with these emission limits combined with the potential to emit PM from all other emissions units, including insignificant activities, shall limit the source-wide potential to emit of PM to less than 100 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.2.2 FESOP Limits [326 IAC 2-8-4][326 IAC 2-2]

In order to render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

- (a) PM₁₀ emissions from the salt cake cooling system shall not exceed 1.29 pounds per hour.

- (b) **PM_{2.5} emissions from the salt cake cooling system shall not exceed 1.29 pounds per hour.**
- (c) **The amount of aluminum processed in the aluminum shredder shall not exceed 35,040 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.**
- (d) **PM₁₀ emissions from the aluminum can shredder shall not exceed 0.11 pounds per ton of aluminum processed.**
- (e) **PM_{2.5} emissions from the aluminum can shredder shall not exceed 0.11 pounds per ton of aluminum processed.**

Compliance with these emission limits combined with the potential to emit PM10 and PM2.5 from all other emissions units, including insignificant activities, shall limit the source-wide potential to emit of PM10 and PM2.5 to less than 100 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.2.3 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the salt cake cooling system and aluminum can shredder shall not exceed the following emission rates:

Process/Unit	Process Weight (tons /hour)	Particulate Emission Limit (lbs/hour)
Salt Cake Cooling System	4.0	10.4
Aluminum Can Shredder	4.0	10.4

The pound per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

D.2.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for the salt cake cooling system and aluminum can shredder and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-8-4(1)]

D.2.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

In order to demonstrate compliance with Conditions D.2.1(a), D.2.2(a) and (b), and D.2.3, the Permittee shall perform PM, PM₁₀, and PM_{2.5} testing of the salt cake cooling system at least once every five (5) years from the date of the most recent valid compliance demonstration, utilizing methods approved by the Commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with

regard to the performance testing required by this condition. PM10 and PM2.5 include filterable and condensable particulate matter.

D.2.6 Particulate Control

In order to assure compliance with Conditions D.2.1(a) and (c), D.2.2(a), (b), (d), and (e), and D.2.3, the baghouses for the salt cake cooling system and aluminum can shredder shall be in operation and control emissions from each emission unit at all times when the salt cake cooling system and aluminum can shredder are in operation.

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

D.2.7 Baghouse Parametric Monitoring

- (a) The Permittee shall record the pressure drop across the baghouses used in conjunction with the salt cake cooling system and aluminum can shredder at least once per day when the salt cake cooling system and aluminum can shredder are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for these units is a pressure drop between 1.0 and 10.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (b) The instruments used for determining the pressure and temperature shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.2.8 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, or dust traces.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-16]

D.2.9 Record Keeping Requirements

- (a) To document the compliance status with Conditions D.2.1(b) and D.2.2(c), the Permittee shall keep monthly records of the amount of aluminum processed through the aluminum shredder.

- (b) To document the compliance status with Condition D.2.7, the Permittee shall maintain daily records of the pressure drop across the baghouse. The Permittee shall include in its daily record when the pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).
- (c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.2.10 Reporting Requirements

Quarterly summaries of the information to document the compliance status with Conditions D.2.1(b) and D.2.2(c), shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.3 EMISSION UNIT OPERATION CONDITIONS

<p>Emissions Unit Description:</p> <p>Insignificant Activities:</p> <ul style="list-style-type: none">(d) Pouring and casting operations (installed in 1977) with a maximum throughput capacity of 10.1 tons per hour.(e) Material handling operations (installed in 1977), handling 5.0 tons of dross and/or salt cake per hour. <p>(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)</p>
--

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 PSD Minor Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

- (a) PM emissions from the pouring and casting process shall not exceed 0.2 pounds per hour.

Compliance with this emission limit combined with the potential to emit PM from all other emissions units, including insignificant activities, shall limit the source-wide potential to emit of PM to less than 100 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.3.2 FESOP Limits [326 IAC 2-8][326 IAC 2-2]

In order to render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

- (3) One (1) rotary furnace, identified as EU-4, constructed in 1995, with a nominal capacity (feed/charge rate) of 7,000 pounds per hour. Particulate emissions from furnace EU-4 are controlled by a multi-compartment baghouse which exhausts through stacks S5-1, S5-2, S5-3, S5-4, and S5-5, and S5-6.

Under 40 CFR 63, Subpart RRR - National Emission Standards for Hazardous Air Pollutants: Secondary Aluminum Production, the rotary furnaces are existing group I furnaces. The furnaces are fueled using either natural gas or coal gas.

HCl emissions from the furnaces are controlled using a pH control system that injects ammonia into the exhaust stream when the pH falls below 0.5 pH units above the pH of the incoming city water. The ammonia injection is controlled using a conventional pH electrode and temperature sensor located in a slip stream of the furnace exhausts. After ammonia injection and prior to entering the baghouse, the exhaust stream is cooled by passing through an air-to-air cooling tower. After exiting the cooling system, the exhaust stream enters a baghouse, which controls the particulate emissions generated by the reaction of HCl with ammonia.

- (b) One (1) salt cake cooling system, identified as EU-7, approved in 2012 for construction, with a maximum capacity of 4.0 tons per hour, using a baghouse for particulate control, and exhausting to stack S7-1.
- (c) One (1) aluminum can shredder, constructed in 1977, with a maximum capacity of 4.0 tons per hour with particulate matter emissions controlled by a baghouse, and exhausting to stack S6-1.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-8-4(1)]

E.1.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1][40 CFR Part 63, Subpart A]

- (a) Pursuant to 40 CFR 63.1 the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 63, Subpart RRR.
- (b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

E.1.2 Secondary Aluminum Production NESHAP [40 CFR Part 63, Subpart RRR][326 IAC 20-40]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart RRR (included as Attachment A to the operating permit), which are incorporated by reference as 326 IAC 20-70. for the emission unit(s) listed above:

- (1) 40 CFR 63.10(b)
- (2) 40 CFR 63.10(d)(5)(i), (ii)
- (3) 40 CFR 63.1505(i)(3), (4)
- (4) 40 CFR 63.1506(b),(c),(d), (e), (m), (p)
- (5) 40 CFR 63.1510(b)-(f), (j), (u)
- (6) 40 CFR 63.1512(a), (d), (q), (r), (s)
- (7) 40 CFR 63.1516(b)-(e)
- (8) 40 CFR 63.1517

Compliance Determination Requirements [326 IAC 2-8-4(1)]

E.1.3 Testing Requirements [326 IAC 2-1.1-11][326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

In order to demonstrate compliance with Condition E.1.2, the Permittee shall perform the testing required under 40 CFR 63, Subpart RRR, utilizing methods as approved by the Commissioner, at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION

Source Name: Scepter, Inc.
Source Address: 6467 N. Scepter Road, Bicknell, Indiana 47512
FESOP Permit No.: F083-4285036800-00015

...

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178
Fax: (317) 233-6865

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: Scepter, Inc.
Source Address: 6467 N. Scepter Road, Bicknell, Indiana 47512
FESOP Permit No.: F083-4285036800-00015

This form consists of 2 pages

Page 1 of 2

- This is an emergency as defined in 326 IAC 2-7-1(12)
 - The Permittee must notify the Office of Air Quality (OAQ), within four (4) **daytime** business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
 - The Permittee must submit notice in writing or by facsimile within two (2) working days

(Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-162-8-12

...

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE AND ENFORCEMENT BRANCH**

FESOP Quarterly Report

Source Name: Scepter, Inc.
 Source Address: 6467 N. Scepter Road, Bicknell, Indiana 47512
 Mailing Address: ~~6467 N. Scepter Road, Bicknell, Indiana 47512~~
 FESOP No.: F083-4285036800-00015
 Facility: **Natural gas-fired Rotary Furnaces (EU-2, EU-3, EU-4)**
 Parameter: **Aluminum processing throughput**
 Limit: The amount of aluminum processed shall not exceed 91,980 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER : _____ YEAR: _____

...

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE AND ENFORCEMENT BRANCH**

FESOP Quarterly Report

Source Name: Scepter, Inc.
 Source Address: 6467 North Scepter Rd., Bicknell, Indiana 47512
 FESOP Permit No.: F083-36800-00015
 Facility: **Aluminum can shredder**
 Parameter: **Aluminum processing throughput**
 Limit: The amount of aluminum processed in the aluminum shredder shall not exceed 35,040 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER : _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.
 Deviation has been reported on: _____

Submitted by: _____
 Title / Position: _____
 Signature: _____
 Date: _____
 Phone: _____

~~INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT~~

~~OFFICE OF AIR QUALITY
 COMPLIANCE AND ENFORCEMENT BRANCH~~

~~FESOP Quarterly Report~~

Source Name: _____ Scepter Inc.
 Source Address: _____ 6467 N. Scepter Road, Bicknell, Indiana 47512
 Mailing Address: _____ 6467 N. Scepter Road, Bicknell, Indiana 47512
 FESOP Permit No.: _____ F 083-12850-00015
 Facility: _____ Diesel-fired Aluminum bale breaker
 Parameter: _____ Usage of diesel fuel
 Limit: _____ (a) The total usage of diesel fuel for the 4.2 MMBtu per hour (600 hp-hr) diesel-fired
 _____ aluminum bale breaker shall not exceed 70,000 gallons per twelve (12)
 _____ consecutive month period, with compliance determined at the end of each
 _____ month.
 _____ (b) Nitrogen oxides (NOx) emissions from the diesel-fired aluminum bale breaker
 _____ combustion unit shall be less twenty five (25) tons per twelve (12)
 _____ consecutive month period, with compliance determined at the end of each
 _____ month.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.
 Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Scepter, Inc.
Source Address: 6467 N. Scepter Road, Bicknell, Indiana 47512
FESOP Permit No.: F083-~~42850~~**36800**-00015

...

Recommendation

The staff recommends to the Commissioner that the FESOP Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on February 2, 2016. Additional information was received on February 9, 2016.

Conclusion

The operation of this secondary aluminum smelting plant shall be subject to the conditions of the attached FESOP Renewal No. F083-36800-00015.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Katrina Gilbank at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-9526 or toll free at 1-800-451-6027 extension 4-9526.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: <http://www.in.gov/idem/5881.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

**Appendix A: Emissions Calculations
Summary**

Page 1 of 12 TSD App A

Company Name: Scepter, Inc.
Address City IN Zip: 6467 N. Scepter Road, Bicknell, IN 47512
FESOP Renewal: F083-36800-00015
Reviewer: Katrina Gilbank

Unlimited Potential to Emit (tons/yr)									
Emission Unit	PM	PM10	PM2.5	SO2	NOx	VOC	CO	Total HAP*	Single HAP (HCl)*
Furnace EU-2*	65.92	39.86	33.11	22.78	13.14	3.07	11.04	3.63	3.30
Furnace EU-3*	65.92	39.86	33.11	22.78	16.43	3.07	13.80	3.63	3.30
Furnace EU-4*	65.92	39.86	33.11	22.78	16.43	3.07	13.80	3.63	3.30
Dross/Salt Cake Handling	5.48	6.57	6.57	negl.	negl.	negl.	negl.	negl.	negl.
Aluminum Shredder	112.63	112.63	112.63	negl.	negl.	negl.	negl.	negl.	negl.
Salt Cake Cooling System	112.63	112.63	112.63	negl.	negl.	negl.	negl.	negl.	negl.
Pouring and Casting	0.66	0.66	0.66	0.88	0.44	6.19	negl.	negl.	negl.
Insignificant Combustion	0.23	0.92	0.92	0.07	12.05	0.66	10.12	0.23	negl.
Eddy Current Separator	0.26	0.10	negl.	negl.	negl.	negl.	negl.	negl.	negl.
Roads Fugitive Emissions	3.59	0.72	0.18	negl.	negl.	negl.	negl.	negl.	negl.
Totals	433.24	353.80	332.92	69.29	58.48	16.05	48.75	11.10	9.89

* HAP values are based on stack test performed after the control devices.

Controlled Emissions (tons/yr)									
Emission Unit	PM	PM10	PM2.5	SO2	NOx	VOC	CO	Total HAP	Single HAP (HCl)
Furnace EU-2*	48.66	48.66	48.66	22.78	13.14	3.07	11.04	3.63	3.30
Furnace EU-3*				22.78	16.43	3.07	13.80	3.63	3.30
Furnace EU-4*				22.78	16.43	3.07	13.80	3.63	3.30
Dross/Salt Cake Handling	5.48	6.57	6.57	negl.	negl.	negl.	negl.	negl.	negl.
Aluminum Shredder	5.63	5.63	5.63	negl.	negl.	negl.	negl.	negl.	negl.
Salt Cake Cooling System	5.63	5.63	5.63	negl.	negl.	negl.	negl.	negl.	negl.
Pouring and Casting	0.66	0.66	0.66	0.88	0.44	6.19	negl.	negl.	negl.
Insignificant Combustion Sources	0.23	0.92	0.92	0.07	12.05	0.66	10.12	0.23	negl.
Eddy Current Separator	0.26	0.10	negl.						
Roads Fugitive Emissions	3.59	0.72	0.18	negl.	negl.	negl.	negl.	negl.	negl.
Totals	70.14	68.88	68.24	69.29	58.48	16.05	48.75	11.10	9.89

Limited Potential to Emit (tons/year)									
Emission Unit	PM	PM10	PM2.5	SO2	NOx	VOC	CO	Total HAP	Single HAP (HCl)
Furnace EU-2*	73.58	73.58	73.58	22.78	13.14	3.07	11.04	<24.0	9.89
Furnace EU-3*				22.78	16.43	3.07	13.80		
Furnace EU-4*				22.78	16.43	3.07	13.80		
Dross/Salt Cake Handling	5.48	6.57	6.57	negl.	negl.	negl.	negl.	negl.	negl.
Aluminum Shredder	1.93	1.93	1.93	negl.	negl.	negl.	negl.	negl.	negl.
Salt Cake Cooling System	5.63	5.63	5.63	negl.	negl.	negl.	negl.	negl.	negl.
Pouring and Casting**	0.88	0.88	0.88	0.88	0.44	6.19	negl.	negl.	negl.
Insignificant Combustion Sources	0.23	0.92	0.92	0.07	12.05	0.66	10.12	0.23	negl.
Eddy Current Separator	0.26	0.10	negl.	negl.	negl.	negl.	negl.	negl.	negl.
Roads Fugitive Emissions	3.59	0.72	0.18	negl.	negl.	negl.	negl.	negl.	negl.
Totals	91.58	90.32	89.68	69.29	58.48	16.05	48.75	<25	<10

**Based on permit limitation of 0.2 lb/hr each PM, PM10, and PM2.5 for pouring/casting process.

**Appendix A: Emissions Calculations
Secondary Aluminum Production
Rotary Furnace EU-2**

Page 2 of 12 TSD App A

Company Name: Scepter, Inc.
Address City IN Zip: 6467 N. Scepter Road, Bicknell, IN 47512
FESOP Renewal: F083-36800-00015
Reviewer: Katrina Gilbank

SCC #3-04-001-03 Smelting Furnace/Rotary										
TYPE OF MATERIAL	Throughput LBS/HR	1 TON/ 2000lbs	TON/HR	Heat Capacity MMBtu/hr	Throughput MMCF/yr					
Aluminum	7000	2000	3.5	20.0	175.2					
	PM¹ lbs/ton Produced	PM10¹ lbs/ton	PM2.5¹ lbs/ton	SOx² lbs/ton	NOx³ lbs/MMCF	VOC¹ lbs/ton	CO³ lbs/MMCF	HCl⁵ lbs/ton	HF⁶ lbs/ton	Dioxins/Furans⁴ lbs/ton
	4.3	2.6	2.16	1.49	150	0.2	126	0.215	N/A	3.00E-08
Potential Emissions lbs/hr	15.05	9.10	7.56	5.20	3.00	0.70	2.52	0.75	0.08	1.05E-07
Potential Emissions lbs/day	361.20	218.40	181.44	124.80	72.00	16.80	60.48	18.06	1.81	2.52E-06
Potential Emissions tons/yr	65.92	39.86	33.11	22.78	13.14	3.07	11.04	3.30	0.33	4.60E-07

Notes:

- 1 - Emission factor is from FIRE version 6.24 (SCC 3-04-001-03).
 - 2 - Emission factor is from January 2002 stack test data (Test data x safety factor of 2)
 - 3 - Emission factor is from AP-42, 5th Ed., Chapter 1.4, Table 1.4-1 (7/98) (A safety factor of 1.5 was used at the request of the permittee).
 - 4 - Emission factor based MACT TEQ limits from 40 CFR 63, Subpart RRR.
 - 5 - Emission factor is from previous permit (083-31962-00015).
 - 6 - Emissions based on 40 CFR 63 RRR approximation calculations (HF, when Group 1 furnace has a control unit, is 10% by weight of total HCl).
- Note: Furnace heat capacities and safety factors confirmed 2016 with source.
Note: PM, PM10, and PM2.5 emission estimates represent the PTE before controls. For after control values, see page 5 of this appendix.

Methodology:

PTE (tons/yr) = throughput (tons/hr) * emission factor (lbs/ton) * 8760hrs/yr * (1ton/2000lbs)
PTE (tons/yr) = throughput (MMCF/yr) * emission factor (lbs/MMCF) * (1ton/2000lbs)

Appendix A: Emissions Calculations
Secondary Aluminum Production
Rotary Furnace EU-3

Page 3 of 12 TSD App A

Company Name: Scepter, Inc.
Address City IN Zip: 6467 N. Scepter Road, Bicknell, IN 47512
FESOP: F083-36800-00015
Reviewer: Katrina Gilbank

SCC #3-04-001-03 Smelting Furnace/Rotary										
TYPE OF MATERIAL	Throughput LBS/HR	1 TON/ 2000lbs	TON/HR	Heat Capacity MMBtu/hr	Throughput MMCF/yr					
Aluminum	7000	2000	3.5	25.0	219					
	PM¹ lbs/ton Produced	PM10¹ lbs/ton	PM2.5¹ lbs/ton	SOx² lbs/ton	NOx³ lbs/MMCF	VOC¹ lbs/ton	CO³ lbs/MMCF	HCl⁵ lbs/ton	HF⁶ lbs/ton	Dioxins/Furans⁴ lbs/ton
	4.3	2.6	2.16	1.49	150	0.2	126	0.215	N/A	3.00E-08
Potential Emissions lbs/hr	15.05	9.10	7.56	5.20	3.75	0.70	3.15	0.75	0.08	1.05E-07
Potential Emissions lbs/day	361.20	218.40	181.44	124.80	90.00	16.80	75.60	18.06	1.81	2.52E-06
Potential Emissions tons/yr	65.92	39.86	33.11	22.78	16.43	3.07	13.80	3.30	0.33	4.60E-07

Notes:

- 1 - Emission factor is from FIRE version 6.24 (SCC 3-04-001-03).
 - 2 - Emission factor is from January 2002 stack test data (Test data x safety factor of 2)
 - 3 - Emission factor is from AP-42, 5th Ed., Chapter 1.4, Table 1.4-1 (7/98) (A safety factor of 1.5 was used at the request of the permittee).
 - 4 - Emission factor based MACT TEQ limits from 40 CFR 63, Subpart RRR.
 - 5 - Emission factor is from January 2011 stack test data (Test data x safety factor of 2). Value is after controls.
 - 6 - Emissions based on 40 CFR 63 RRR approximation calculations (HF, when Group 1 furnace has a control unit, is 10% by weight of total HCl).
- Note: PM, PM10, and PM2.5 emission estimates represent the PTE before controls. For after control values, see page 5 of this appendix.

Methodology:

PTE (tons/yr) = throughput (tons/hr) * emission factor (lbs/ton) * 8760hrs/yr * (1ton/2000lbs)
PTE (tons/yr) = throughput (MMCF/yr) * emission factor (lbs/MMCF) * (1ton/2000lbs)

Appendix A: Emissions Calculations
Secondary Aluminum Production
Rotary Furnace EU-4

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Company Name: Scepter, Inc.
Address City IN Zip: 6467 N. Scepter Road, Bicknell, IN 47512
FESOP: F083-36800-00015
Reviewer: Katrina Gilbank

SCC #3-04-001-03 Smelting Furnace/Rotary										
TYPE OF MATERIAL	Throughput LBS/HR	1 TON/ 2000lbs	TON/HR	Heat Capacity MMBtu/hr	Throughput MMCF/yr					
Aluminum	7000	2000	3.5	25.0	219					
	PM¹ lbs/ton Produced	PM10¹ lbs/ton	PM2.5¹ lbs/ton	SOx² lbs/ton	NOx³ lbs/MMCF	VOC¹ lbs/ton	CO³ lbs/MMCF	HCl⁵ lbs/ton	HF⁶ lbs/ton	Dioxins/Furans⁴ lbs/ton
	4.3	2.6	2.16	1.485714286	150	0.2	126	0.215	N/A	3.00E-08
Potential Emissions lbs/hr	15.05	9.10	7.56	5.20	3.75	0.70	3.15	0.75	0.08	1.05E-07
Potential Emissions lbs/day	361.20	218.40	181.44	124.80	90.00	16.80	75.60	18.06	1.81	2.52E-06
Potential Emissions tons/yr	65.92	39.86	33.11	22.78	16.43	3.07	13.80	3.30	0.33	4.60E-07

Notes:

- 1 - Emission factor is from FIRE version 6.24 (SCC 3-04-001-03).
 - 2 - Emission factor is from January 2002 stack test data (Test data x safety factor of 2)
 - 3 - Emission factor is from AP-42, 5th Ed., Chapter 1.4, Table 1.4-1 (7/98) (A safety factor of 1.5 was used at the request of the permittee).
 - 4 - Emission factor based MACT TEQ limits from 40 CFR 63, Subpart RRR.
 - 5 - Emission factor is from January 2011 stack test data (Test data x safety factor of 2). Value is after controls.
 - 6 - Emissions based on 40 CFR 63 RRR approximation calculations (HF, when Group 1 furnace has a control unit, is 10% by weight of total HCl).
- Note: PM, PM10, and PM2.5 emission estimates represent the PTE before controls. For after control values, see page 5 of this appendix.

Methodology:

PTE (tons/yr) = throughput (tons/hr) * emission factor (lbs/ton) * 8760hrs/yr * (1ton/2000lbs)
PTE (tons/yr) = throughput (MMCF/yr) * emission factor (lbs/MMCF) * (1ton/2000lbs)

**Appendix A: Emissions Calculations
Secondary Aluminum Production
Rotary Furnaces EU-2, EU-3, and EU-4**

Page 5 of 12 TSD App A

Company Name: Scepter, Inc.
Address City IN Zip: 6467 N. Scepter Road, Bicknell, IN 47512
FESOP Renewal: F083-36800-00015
Reviewer: Katrina Gilbank

Controlled Emissions*Baghouse Specifications:*

Air Flow Rate = 43,200 acfm
Outlet Grain Loading = 0.01 gr/acf

Calculations:

PM/PM10/PM2.5* PTE for one 7000lb/hour Furnace = $(0.01 \text{ gr/acf}) * (43,200 \text{ acfm}) * (60 \text{ mins/hr}) * (1\text{lb}/7000\text{gr}) = 3.70 \text{ lbs/hour}$
 $3.70 \text{ lbs/hr} * 8760 \text{ hour/year} * 1\text{ton}/2000\text{lbs} = 16.22 \text{ tons/year}$

For all Furnaces:

PM/PM10/PM2.5 PTE after controls = $3 * 16.2 \text{ tons/year} = 48.7 \text{ tons per year}$

Limited Emissions

Limited Aluminum Throughput = 91,980 tons/year
Limited PM/PM10/PM2.5 Emissions = 1.60 lb/ton
Limited HCl Emissions = 0.215 lb/ton

Calculations:

Limited PM/PM10/PM2.5* for all furnaces = $91,980 \text{ tons/year} * 1.6 \text{ lb/ton} * 1 \text{ ton}/2,000 \text{ lbs} = 73.58 \text{ tons/year}$
Limited HCl for all furnaces = $91,980 \text{ tons/year} * 0.215 \text{ lb/ton} * 1 \text{ ton}/2,000 \text{ lbs} = 9.89 \text{ tons/year}$
Limited HF for all furnaces = 10% by weight of HCl emissions, pursuant to 40 CFR 63 RRR= 0.99 tons/year

Note:

Each furnace is controlled by an ammonia injection system that converts acid gases into ammonia salts, which are collected in a baghouse. Since the control system generates PM, PM10, and PM2.5 emissions, the particulate emissions after controls have been calculated using the baghouse specifications.

Assumed all PM = PM10 = PM2.5

Appendix A: Emission Calculations
Natural Gas Combustion in Insignificant Natural Gas-Fired Heaters

Company Name: Scepter, Inc.
Address City IN Zip: 6467 N. Scepter Road, Bicknell, IN 47512
FESOP Renewal: F083-36800-00015
Reviewer: Katrina Gilbank

Unit Heat Capacity (MMBtu)	Unit Name	Description
20	Misc. combustion	Natural gas combustion
7.5	Portable crucible heaters (5)	Natural gas combustion 1.5MMBtu per heater, 5 heaters tot.

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Fuel Heat Value MMBtu/MMCF
27.50 (Total for all heaters)	240.9	1000

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.23	0.92	0.92	0.07	12.05	0.66	10.12

*PM emission factor is filterable PM only. PM10 and PM2.5 emission factors are filterable and condensable PM10 and PM2.5 combined, respectively.
 **Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Emission Factor in lb/MMcf	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	2.529E-04	1.445E-04	9.034E-03	0.22	4.095E-04

Emission Factor in lb/MMcf	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	6.023E-05	1.325E-04	1.686E-04	4.577E-05	2.529E-04

Combined HAPs: **0.23**
 Highest Single HAP: **0.22** Hexane

Methodology

All emission factors are based on normal firing.
 MMBtu = 1,000,000 Btu
 Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
 Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
 Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
 The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emission Calculations
Eddy Current Separator**

Company Name: Scepter, Inc.
Address City IN Zip: 6467 N. Scepter Road, Bicknell, IN 47512
FESOP Renewal: F083-36800-00015
Reviewer: Katrina Gilbank

Throughput lbs/hr	1 Ton/2000 lbs	Tons/hr	
40000	2000	20	
	PM lbs/ton	PM10 lbs/ton	PM2.5 lbs/ton
Emission Factors	0.003	0.0011	0.0011
Potential Emissions lbs/hr	0.06	0.02	0.02
Potential Emissions lbs/day	1.44	0.53	0.53
Potential Emissions tons/year	0.26	0.10	0.10

Methodolgy:

Potential Emissions (tons/year) = Amount of throughput (lbs/hour) * Emission Factor (lbs/ton) * (8760hrs/y) * (1ton/2000lbs)
 PM and PM10 emission factors from AP-42 Table 11.19.2-2, approximating similarity to uncontrolled crushed stone transfer (SCC #3-05-020-06).
 No emission factor exists for PM2.5. Therefore it is assumed PM10 = PM2.5

**Appendix A: Emissions Calculations
Salt Cake Cooling System**

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Company Name: Scepter, Inc.
Address City IN Zip: 6467 N. Scepter Road, Bicknell, IN 47512
FESOP Renewal: F083-36800-00015
Reviewer: Katrina Gilbank

Aluminum Shredder Specifications

Maximum Throughput = 4.0 tons/hour = 8000 lbs/hr

Baghouse Specifications:

Air Flow Rate = 15,000 acfm
Outlet Grain Loading = 0.01 gr/acf

Calculations:

PM/PM10/PM2.5 PTE after control (lbs/hour) = $(0.01 \text{ gr/acf}) * (15,000 \text{ acfm}) * (60 \text{ mins/hr}) * (1\text{lb}/7000\text{gr}) = 1.29 \text{ lbs/hour}$

PM/PM10/PM2.5 PTE after control (tons/yr) = $1.29 \text{ lbs/hr} * 8760 \text{ hour/year} * 1 \text{ ton} / 2000 \text{ lbs} = 5.63 \text{ tons/year}$

PM/PM10/PM2.5 PTE before controls (tons/yr) = $5.6 \text{ tons/year} / (1 - \text{Baghouse Efficiency}^*) = 112.63 \text{ tons/year}$

Note:

Assumed PM = PM10 = PM2.5

** Control Efficiency is assumed to be a minimum of 95%.

**Appendix A: Emissions Calculations
Secondary Aluminum Production
Aluminum Shredder**

Company Name: Scepter, Inc.
Address City IN Zip: 6467 N. Scepter Road, Bicknell, IN 47512
FESOP Renewal: F083-36800-00015
Reviewer: Katrina Gilbank

Aluminum Shredder Specifications

Maximum Throughput = 4.0 tons/hour

Baghouse Specifications:

Air Flow Rate = 15,000 acfm
 Outlet Grain Loading = 0.01 gr/acf

Calculations:

PM/PM10/PM2.5 PTE after control (lbs/hour) =	$(0.01 \text{ gr/acf}) * (15,000 \text{ acfm}) * (60 \text{ mins/hr}) * (1\text{lb}/7000\text{gr}) =$	1.29	lbs/hour
PM/PM10/PM2.5 PTE after control (tons/yr) =	$1.29 \text{ lbs/hr} * 8760 \text{ hour/year} * 1\text{ton}/2000\text{lbs} =$	5.63	tons/year
PM/PM10/PM2.5 PTE before controls (tons/yr) =	$5.63 \text{ tons/year} / (1 - \text{Baghouse Efficiency}^*) =$	112.63	tons/year
Limited PM/PM10/PM2.5 (tons/yr) =	$4.0 \text{ ton/hr} * 0.11 \text{ lbs PM/PM10/PM2.5/ton} * 8760 \text{ hour/year} * 1 \text{ ton}/2000 \text{ lbs} =$	1.93	tons/year

Note:

Assumed PM = PM10 = PM2.5.

** Control Efficiency is assumed to be a minimum of 95%.

**Appendix A: Emissions Calculations
Dross and Salt Cake Handling**

Company Name: Scepter, Inc.
Address City IN Zip: 6467 N. Scepter Road, Bicknell, IN 47512
FESOP Renewal: F083-36800-00015
Reviewer: Katrina Gilbank

Throughput lbs/hr	1 Ton/2000 lbs		Tons/hr
10000	2000	5	
	PM	PM10	PM2.5
	lbs/ton	lbs/ton	lbs/ton
Emission Factors	0.25	0.30	0.30
Potential Emissions lbs/hr	1.25	1.50	1.50
Potential Emissions lbs/day	30.00	36.00	36.00
Potential Emissions tons/year	5.48	6.57	6.57

Methodolgy:

Potential Emissions (tons/year) = Amount of throughput (lbs/hour) * Emission Factor (lbs/ton) * (8760hrs/y) * 1 ton / 2000 lbs
 PM and PM10 emission factors from stack test data April 2009 for unlimited PTE.
 Assumed PM10 = PM2.5

Appendix A: Emissions Calculations
Secondary Metal Production
Pouring and Casting

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Company Name: Scepter, Inc.
Address City IN Zip: 6467 N. Scepter Road, Bicknell, IN 47512
FESOP Renewal: F083-36800-00015
Reviewer: Katrina Gilbank

Pouring/Casting		Total Aluminum from all Furnaces				
TYPE OF MATERIAL	Throughput		1 TON/ 2000lbs	TON/HR		
	LBS/HR					
Aluminum		20200	2000	10.1		
	PM³	PM10³	SOx¹	NOx¹	VOC²	CO
	lbs/ton metal charged	lbs/ton metal charged	lbs/ton metal charged	lbs/ton metal charged	lbs/ton metal charged	lbs/ton metal charged
	0.015	0.015	0.02	0.01	0.14	-
Potential Emissions lbs/hr	0.2	0.2	0.2	0.1	1.4	-
Potential Emissions lbs/day	3.6	3.6	4.8	2.4	33.9	-
Potential Emissions tons/yr	0.664	0.664	0.885	0.442	6.193	0.000

Notes:

1 - Emission factor is from FIRE version 6.24. (SCC #3-04-001-14)

2 - The AP-42 emission factor for (0.14 lbs per ton of aluminum) overestimates the VOC PTE for this operation because no VOC containing release agents or combustion fuels are used in this process. The source estimates the VOC emission rate as 0.01 lbs/ton of aluminum processed however, IDEM, OAQ has used the EPA emission factor because this results in a more conservative PTE. (SCC #3-04-001-14)

3 - Emission factor from F083-6099-00015, issued December 12, 1996. No emission factor was found in FIRE or AP-42.

Assumed PM10 = PM2.5

Methodology:

PTE (tons/yr) = throughput (tons/hr) * emission factor (lbs/ton) * 8760hrs/yr * (1 ton / 2000 lbs)

**Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads**

Company Name: Scepter, Inc.
Address City IN Zip: 6467 N. Scepter Road, Bicknell, IN 47512
FESOP Renewal: F083-36800-00015
Reviewer: Katrina Gilbank

Paved Roads at Industrial Site

The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Information (provided by source)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Vehicle (entering plant) (one-way trip)	23.0	1.0	23.0	40.0	920.0	660.0	0.1	2.9	1049.4
Vehicle (leaving plant) (one-way trip)	23.0	1.0	23.0	40.0	920.0	660.0	0.1	2.9	1049.4
Totals			46.0		1840.0			5.8	2098.8

Average Vehicle Weight Per Trip = 40.0 tons/trip
 Average Miles Per Trip = 0.13 miles/trip

Unmitigated Emission Factor, Ef = $[k * (sL)^{0.91} * (W)^{1.02}]$ (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	40.0	40.0	40.0	tons = average vehicle weight (provided by source)
sL =	9.7	9.7	9.7	g/m ² = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = $E * [1 - (p/4N)]$ (Equation 2 from AP-42 13.2.1)

Mitigated Emission Factor, Eext = $Ef * [1 - (p/4N)]$
 where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
 N = 365 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	3.745	0.749	0.1838	lb/mile
Mitigated Emission Factor, Eext =	3.424	0.685	0.1681	lb/mile
Dust Control Efficiency =	0%	0%	0%	

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Vehicle (entering plant) (one-way trip)	1.96	0.39	0.10	1.80	0.36	0.09	1.80	0.36	0.09
Vehicle (leaving plant) (one-way trip)	1.96	0.39	0.10	1.80	0.36	0.09	1.80	0.36	0.09
Totals	3.93	0.79	0.19	3.59	0.72	0.18	3.59	0.72	0.18

Methodology

Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
 Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip)] / [5280 ft/mile]
 Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
 Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
 Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
 Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
 Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
 Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations

PM = Particulate Matter
 PM10 = Particulate Matter (<10 um)
 PM2.5 = Particulate Matter (<2.5 um)
 PTE = Potential to Emit



Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

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Michael R. Pence
Governor

Carol S. Comer
Commissioner

April 27, 2016

Mr. Craig Horan
Scepter, Inc.
6476 North Scepter Road
Bicknell, IN 47512

Re: Public Notice
Scepter, Inc.
Permit Level: Federally Enforceable State
Operating Permit (FESOP) Renewal
Permit Number: 083-36800-00015

Dear Mr. Horan:

Enclosed is a copy of your draft Federally Enforceable State Operating Permit (FESOP) Renewal, Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has prepared two versions of the Public Notice Document. The abbreviated version will be published in the newspaper, and the more detailed version will be made available on the IDEM's website and provided to interested parties. Both versions are included for your reference. The OAQ has requested that the Sun Commercial in Vincennes, Indiana publish the abbreviated version of the public notice no later than April 29, 2016. You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper.

OAQ has submitted the draft permit package to the Bicknell-Vigo Township Public Library, 201 West 2nd Street in Bicknell, Indiana. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Katrina Gilbank, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 4-9526 or dial (317) 234-9526.

Sincerely,

Vivian Haun

Vivian Haun
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover letter 2/17/2016



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Michael R. Pence
Governor

Carol S. Comer
Commissioner

ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

April 26, 2016

Sun Commercial
702 Main Street
PO Box 396
Vincennes, IN 47591

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Scepter, Inc., Knox County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than April 29, 2016.

Please send a notarized form, clippings showing the date of publication, and the billing to the Indiana Department of Environmental Management, Accounting, Room N1345, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

To ensure proper payment, please reference account # 100174737.

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call Vivian Haun at 800-451-6027 and ask for extension 3-6878 or dial 317-233-6878.

Sincerely,

Vivian Haun

Vivian Haun
Permit Branch
Office of Air Quality

Permit Level: Federally Enforceable State Operating Permit (FESOP) Renewal
Permit Number: 083-36800-00015

Enclosure

PN Newspaper.dot 2/17/2016



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Michael R. Pence
Governor

Carol S. Comer
Commissioner

April 27, 2016

To: Bicknell-Vigo Township Public Library

From: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information to Display Regarding a Public Notice for an Air Permit**

Applicant Name: Scepter, Inc.
Permit Number: 083-36800-00015

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Request to publish the Notice of 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. **Please make this information readily available until you receive a copy of the final package.**

If you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures
PN Library.dot 2/16/2016



Indiana Department of Environmental Management

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Michael R. Pence
Governor

Carol S. Comer
Commissioner

Notice of Public Comment

April 27, 2016
Scepter, Inc.
083-36800-00015

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has been placed in the Legal Advertising section of your local newspaper. The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana's Air Permitting Program.

Please Note: *If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.*

Enclosure
PN AAA Cover.dot 2/17/2016

Mail Code 61-53

IDEM Staff	VHAUN 4/27/2016 Scepter Incorporated 083-36800-00015 FINAL		Type of Mail: CERTIFICATE OF MAILING ONLY	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Craig Horan Scepter Incorporated 6476 N Scepter Rd Bicknell IN 47512 (Source CAATS)	VIA CERTIFIED MAIL USPS									
2		Bicknell Vigo Twp Public Library 201 W 2nd St Bicknell IN 47512-2299 (Library)										
3		Knox County Health Department 305 S 5th St Vincennes IN 47591 (Health Department)										
4		Mr. Billy Nichols URS Corp 1000 Corporate Centre Drive, Ste. 250 Franklin TN 37067 (Affected Party)										
5		Bicknell City Council and Mayors Office 119 E. 2nd St. Bicknell IN 47512 (Local Official)										
6		Mr. Mark Wilson Evansville Courier & Press P.O. Box 268 Evansville IN 47702-0268 (Affected Party)										
7		John Blair 800 Adams Ave Evansville IN 47713 (Affected Party)										
8		Knox County Commissioners 111 N. 7th Street, #3 Vincennes in 47591 (Local Official)										
9		Mike May AECOM 1000 Corporate Center Drive, Suite 250 Franklin TN 37067 (Consultant)										
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