

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr. Governor

Thomas W. Easterly Commissioner

100 North Senate Avenue Indianapolis, Indiana 46204 (317) 232-8603 (800) 451-6027 www.IN.gov/idem

TO:

Interested Parties / Applicant

DATE:

June 7, 2007

RE:

Alcoa / 157-24634-00001

FROM:

Nisha Sizemore

Chief, Permits Branch Office of Air Quality

Notice of Decision - Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, within eighteen (18) calendar days from the mailing of this notice. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toli-free at 1-800-451-6027, ext. 3-0178.

Enclosures FNPER-AM.dot 03/23/06



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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100 North Senate Avenue MC61-53 IGCN1003 Indianapolis, Indiana 46204-2251 (317) 232-8603 (800) 451-6027 www.IN.gov/idem

Mr. Gene Kroeschen ALCOA, Inc. 3131 East Main Street Lafayette, IN 47905

Re: 157-24634-00001

First Administrative Amendment to Part 70 T157-17676-00001

June 7, 2007

Dear Mr. Kroeschen:

ALCOA, Inc. was issued a Part 70 permit on February 6, 2007 for a secondary aluminum production facility. An application requesting an administrative amendment was received on February 7, 2007. 326 IAC 2-7-11(a)(7) states that an administrative amendment can be used for a change that "revises descriptive information where the revision will not trigger a new applicable requirement or violate a permit term." Pursuant to that rule, the permit is hereby administratively amended as shown in the attached technical support document (TSD).

All other conditions of the permit shall remain unchanged and in effect. Please find enclosed the entire revised permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Robert Henry, at (800) 451-6027, and ask for Robert Henry or extension (4-5175), or dial (317) 234-5175.

Sincerely,

Matthew W. Stuckey, Deputy Branch Chief

Permits Branch
Office of Air Quality

Attachments RH

cc:

File – Tippecanoe County U.S. EPA, Region V

Tippecanoe County Health Department

Air Compliance Section Inspector - Wanda Stanfield

Compliance Data Section

Administrative and Development



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PART 70 OPERATING PERMIT RENEWAL OFFICE OF AIR QUALITY

Alcoa, Inc. – Lafayette Operation 3131 Main Street Lafayette, Indiana 47905

(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. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. 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 2-7 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.

Operation Permit No.: T157-17676-00001	
Original Issued by: Nisha Sizemore, Chief	Issuance Date: February 6, 2007
Permits Branch Office of Air Quality	Expiration Date: February 6, 2012

First Administrative Amendment No.: 157-24634-00001	
Issued by:	Issuance Date: June 7, 2007
Matthew W. Stuckey, Deputy Branch Chief Permits Branch Office of Air Quality	Expiration Date: February 6, 2012

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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.

General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)] **A.1**

The Permittee owns and operates a secondary aluminum production facility.

Source Address:

3131 Main Street, Lafayette, Indiana 47905

Mailing Address:

3131 Main Street, Lafayette, Indiana 47905-2272

General Source Phone Number:

(765) 771-3600

SIC Code:

3341 and 3354 Tippecanoe

County Location:

Attainment for all criteria pollutants

Source Location Status: Source Status:

Part 70 Permit Program

Major Source, under PSD

Area Source, Section 112 of the Clean Air Act

1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]

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

Ingot Department

- one (1) #2-2 natural gas-fired tilting-melting-holding furnace, referred to as emission unit 2, (a) constructed in 1994, with a maximum capacity of 6.0 tons of aluminum per hour, and a maximum heat input capacity of 26 million Btu per hour, with emissions uncontrolled and exhausting to stack 89-8;
- one (1) #2-3 natural gas-fired tilting-melting-holding furnace, referred to as emission unit 3, (b) constructed in 1994, with a maximum capacity of 6.0 tons of aluminum per hour, and a maximum heat input capacity of 26 million Btu per hour, with emissions uncontrolled and exhausting to stack 90-8;
- (c) one (1) #2-4 natural gas-fired tilting-melting-holding furnace, referred to as emission unit 4, constructed in 1991, with a maximum capacity of 9.58 tons of aluminum per hour, and a maximum heat input capacity of 36 million Btu per hour, with emissions uncontrolled and exhausting to stack 88-8;
- (d) one (1) #2-5 natural gas-fired tilting-melting-holding furnace, referred to as emission unit 5, constructed in 1988, with a maximum capacity of 9.58 tons of aluminum per hour, and a maximum heat input capacity of 36 million Btu per hour, with emissions uncontrolled and exhausting to stack 87-8;
- (e) one (1) #2-6 natural gas-fired tilting-melting-holding furnace, referred to as emission unit 6, constructed in 1995, with a maximum capacity of 9.58 tons of aluminum per hour, and a maximum heat input capacity of 36 million Btu per hour, with emissions uncontrolled and exhausting to stack 94-8;

- (f) one (1) #4 natural gas-fired melting furnace, referred to as emission unit 7, reconstructed in 2004, with a maximum capacity of 6.2 tons of aluminum per hour, and a maximum heat input capacity of 26 million Btu per hour, with emissions uncontrolled and exhausting to stack 5-8;
- (g) one (1) #3 natural gas-fired ingot preheater, referred to as emission unit 20, constructed in
 1985, with a maximum heat input capacity of 17.5 million Btu per hour, with emissions uncontrolled and exhausting to stack 29-7;
- (h) one (1) #4 natural gas-fired ingot preheater, referred to as emission unit 21, constructed in 1980, with a maximum heat input capacity of 12.3 million Btu per hour, with emissions uncontrolled and exhausting to stack 30-7;
- one (1) #7 natural gas-fired ingot preheater, referred to as emission unit 23, constructed in 1997, with a maximum heat input capacity of 20.0 million Btu per hour, with emissions uncontrolled and exhausting to stack 24-7;
- (j) one (1) #10 natural gas-fired ingot preheater, referred to as emission unit 24, constructed in 1966, with a maximum heat input capacity of 13.5 million Btu per hour, with emissions uncontrolled and exhausting to stack 24-7;
- (k) one (1) #11 natural gas-fired ingot preheater, referred to as emission unit 25, constructed in 1966, with a maximum heat input capacity of 13.5 million Btu per hour, with emissions uncontrolled and exhausting to stack 23-7;
- one (1) #12 natural gas-fired ingot preheater, referred to as emission unit 26, constructed in 1967, with a maximum heat input capacity of 13.5 million Btu per hour, with emissions uncontrolled and exhausting to stack 22-7;
- (m) one (1) #13 natural gas-fired ingot preheater, referred to as emission unit 27, constructed in 1967, with a maximum heat input capacity of 13.5 million Btu per hour, with emissions uncontrolled and exhausting to stack 21-7:

Extrusion - 1

- (n) one (1) #5 natural gas-fired press reheat granco furnace, referred to as emission unit 35, constructed in 1975, with a maximum heat input capacity of 18.0 million Btu per hour, with emissions uncontrolled and exhausting to stack 56-12;
- (o) one (1) #6 natural gas-fired press reheat granco furnace, referred to as emission unit 36, constructed in 1973, with a maximum heat input capacity of 16.0 million Btu per hour, with emissions uncontrolled and exhausting to stack 54-10;
- (p) one (1) #2 natural gas-fired press reheat granco furnace, referred to as emission unit 37, constructed in 1987, with a maximum heat input capacity of 16.0 million Btu per hour, with emissions uncontrolled:
- (q) one (1) #12 natural gas-fired press reheat granco furnace, referred to as emission unit 38, constructed in 1989, with a maximum heat input capacity of 16.0 million Btu per hour, with emissions uncontrolled;
 - (r) one (1) #8 natural gas-fired press reheat granco furnace, referred to as emission unit 40, constructed in 1992, with a maximum heat input capacity of 16.0 million Btu per hour, with emissions uncontrolled:

Alcoa, Inc. – Lafayette Operation Lafayette, Indiana Permit Reviewer: AB/EVP First Administrative Amendment No.: 157-24634-00001.

Modified by: Robert Henry.

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(s) one (1) #6 natural gas-fired age oven, referred to as emission unit 50, constructed in 1996, with a maximum heat input capacity of 14.0 million Btu per hour, with emissions uncontrolled;

Extrusion - 2

(t) one (1) #1 natural gas-fired horizontal heat treat furnace, referred to as emission unit 70, constructed in 1957, with a maximum heat input capacity of 13.2 million Btu per hour, with emissions uncontrolled and exhausting to stack 68-112;

Tube Mill

(u) one (1) tube mill solvent dip tank system, referred to as emission units 94, 95, and 96, consisting of a 5000 gallon capacity 35 ft dip tank, a 10,000 gallon capacity 50 ft dip tank, a tank farm, and several parts washers, constructed in 1942, with emission uncontrolled;

Plant Miscellaneous

- (v) sand blasting operations, referred to as emission unit 108, constructed in 1960, with emissions controlled by a Pangborn dust collector, and exhausting to stack 75-58;
- (w) sawing activities located in the carpenter shop, referred to as emission unit 102, constructed in 1960, with emissions controlled by a baghouse, referred to as the #2 sawdust collector and exhausting to stack 72-57; and
- one (1) internal combustion engine diesel fuel fired emission unit acting as a diesel air compressor, with a total maximum design capacity of 450 brake horsepower [equivalent to approximately 1.15 million British thermal units per hour (MMBtu/hr)]. Designated as emission unit EUDAC#1 and exhausting through stack DAC#1.
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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

Plant Miscellaneous

(a) sawing activities located in the carpenter shop, referred to as emission unit 101, constructed in 1960, with emissions controlled by a cyclone, referred to as the #1 sawdust collector, and exhausting to stack 73-57;

Extrusion and Shipping

- (b) one (1) Protectsol 512 clear coating applicator, referred to as emission unit 112, constructed in 1997, consisting of a roller conveyor that runs the aluminum pieces through an enclosed spray chamber. In the spray chamber there are nozzles that apply the protective coating to the aluminum pieces. The overspray falls to a collection reservoir and is used. There is a pump in the collection reservoir which will be activated whenever the coating is started;
- (c) two (2) Protectsol 512 clear coating applicators, referred to as emission unit 112, constructed in 1997, consisting of a hand held spray applicator wand and pressurized reservoir. The protective coating is applied to the aluminum pieces as required by hand to minimize overspray.

The Particulation of the control of the configuration.

- (d) one (1) Protectsol 512 clear coating applicator, to be constructed in 1999, consisting of a roller conveyor that runs the aluminum pieces through an enclosed spray chamber. In the spray chamber there are nozzles that apply the protective coating to the aluminum pieces. The overspray falls to a collection reservoir and is used. There is a pump in the collection reservoir which will be activated whenever the coating is started.
- (e) one (1) #4 natural gas-fired heat treat furnace, constructed in 1999, with a maximum capacity of 1,000 pounds of aluminum per hour, 0.125 pounds of NH4BF4 per hour, and a maximum heat input capacity of 3.0 million Btu per hour, with emissions uncontrolled;

Ingot Department

- (f) "622" filter boxes for transferring metal from #41 holding furnace to #11 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour;
- (g) "622" filter boxes for transferring metal from 2-2 tilting-melting-holding furnace to #12 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour;
- (h) "622" filter boxes for transferring metal from 2-2 tilting-melting-holding furnace to #13 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour;
- (i) "622" filter boxes for transferring metal from 2-3 tilting-melting-holding furnace to #13 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour;
- (j) "622" filter boxes for transferring metal from 2-4 tilting-melting-holding furnace to #14 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour;
- (k) "622" filter boxes for transferring metal from 2-5 tilting-melting-holding furnace to #14 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour;
- (I) "622" filter boxes for transferring metal from 2-6 tilting-melting-holding furnace to #15 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour;
- (m) one (1) north skim cooling operation, referred to as emission unit 16, with emissions exhausting to stack 3-8F;
- (n) one (1) south skim cooling operation, referred to as emission unit 17, with emissions exhausting to stack 4-8F;
- (o) one (1) log sawing and lathe operation, referred to as emission unit 31;
- (p) one (1) #41 natural gas-fired holding furnace, referred to as emission unit 8, with a maximum capacity of 6.2 tons of aluminum per hour and a maximum heat input capacity of 10.0 million Btu per hour, with emissions exhausting to stack 6-8;
- (q) eleven (11) Rotoclones, which are mechanical separating devices designed to capture particulate emissions from the sawing, grinding, and working of aluminum pieces. Two rotoclones, each rated at 4000 cfm. Six rotoclones, each rated at 1500 cfm. Two rotoclones, each rated at 15,000 cfm. One rotoclones, rated at 6000 cfm;

Tube Mill

- (r) one (1) natural gas-fired Lochnivar boiler, referred to as emission unit 90, constructed in 1995, with a maximum heat input capacity of 0.4 million Btu per hour;
- (s) one (1) natural gas-fired Cleaver brooks boiler, referred to as emission unit 93, constructed in 1975, with a maximum heat input capacity of 2.6 million Btu per hour:

Plant Miscellaneous

- one (1) natural gas-fired pacific boiler #1, referred to as emission unit 103, constructed in 1940, with a maximum heat input capacity of 2.6 million Btu per hour;
- (u) one (1) natural gas-fired pacific boiler #2, referred to as emission unit 104, constructed in 1940, with a maximum heat input capacity of 2.6 million Btu per hour;
- (v) the box shop sawdust collector, referred to as emission unit 92, with emissions exhausting to stack 72-57;
- (w) one (1) natural gas-fired babbit melting furnace, referred to as emission unit 109, with emissions exhausting to stack 81-58;
- (x) Fifty four (54) natural gas fired units, with a total maximum design capacity of 134.4 million (MM) British thermal units per hour (Btu/hr). Each individual heating unit will have a heat input rate in the range of 0.05 MMBtu/hr up to a maximum of 6.6 MMBtu/hr; and
- (y) Fifty (50) natural gas fired units, each with a maximum heat input rate of 6.6 MMBtu/hr.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 Applicability).

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SECTION B

GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

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 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]

- (a) This permit, T157-17676-00001, is issued for a fixed term of five (5) 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, including any permit shield provided in 326 IAC 2-7-15, 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:

- 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 2-7-7]

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 2-7-5(5)]

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 2-7-5(6)(D)]

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

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(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. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). 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.

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B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by the "responsible official" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) The "responsible official" is defined at 326 IAC 2-7-1(34).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

(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 Branch, Office of Air Quality 100 North Senate Avenue MC61-53 IGCN1003 Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

- (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 2-7-5(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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)][326 IAC 2-7-6(1) and (6)][326 IAC 1-6-3]
 - (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) 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.
 - (b) 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 or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
 - (c) 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.11 Emergency Provisions [326 IAC 2-7-16]

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- (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.
- (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, 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 Section), or

Telephone Number: 317-233-0178 (ask for Compliance Section)

Facsimile Number: 317-233-6865

(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 Branch, Office of Air Quality 100 North Senate Avenue MC61-53 IGCN1003 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 2-7-5(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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (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 2-7-4(c)(9) 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 2-7 and any other applicable rules.
- (g) 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.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]

Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced 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 Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance:
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]

- (a) All terms and conditions of permits established prior to T157-17676-00001 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]

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 2-7-3 and 326 IAC 2-7-4(a).

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue MC61-53 IGCN1003 Indianapolis, Indiana 46204-2251

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. 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.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 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 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (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.

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- (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 2-7-9(a)(3)]
- (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 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(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 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

(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 2-7-4. 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(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue MC61-53 IGCN1003 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 2-7 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 in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.18 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12][40 CFR 72]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

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(b) Any application requesting an amendment or modification of this permit shall be submitted to: Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue MC61-53 IGCN1003 Indianapolis, Indiana 46204-2251

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]
 - (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
 - (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(c), or (e) 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 preconstruction approval required by 326 IAC 2-7-10.5 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 Permits Branch, Office of Air Quality 100 North Senate Avenue MC61-53 IGCN1003 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 2-7-20(b),(c), or (e). 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 2-7-20(b)(1), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
 - (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]

 The Permittee may trade emissions increases and decreases at in 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 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
 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 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) 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.21 Source Modification Requirement [326 IAC 2-7-10.5] [326 IAC 2-2-2] [326 IAC 2-3-2]
 - (a) A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.
 - (b) Any modification at an existing major source is governed by the requirements of 326 IAC 2-2-2 and/or 326 IAC 2-3-2.
- B.22 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

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:

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- (a) Enter upon the Permittee's premises where a Part 70 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 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 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.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 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 Permits Branch, Office of Air Quality 100 North Senate Avenue MC61-53 IGCN1003 Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within 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) Except as provided in 326 IAC 2-7-19(e), 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.

Alcoa, Inc. – Lafayette Operation Lafayette, Indiana Permit Reviewer: AB/EVP First Administrative Amendment No.: 157-24634-00001 Modified by: Robert Henry

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B.25 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][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.

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SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(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 Opacity [326 IAC 5-1]

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%) 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.3 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. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

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

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.5 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). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 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. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

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C.7 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 Asbestos Section, Office of Air Quality 100 North Senate Avenue MC61-52 IGCN1003 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 by the "responsible official" as defined by 326 IAC 2-7-1(34).

(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 Accredited 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 Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

Testing Requirements [326 IAC 2-7-6(1)]

C.8 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue MC61-53 IGCN1003 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 certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (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 certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (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.9 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 2-7-5(1)] [326 IAC 2-7-6(1)]

C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, 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 Branch, Office of Air Quality 100 North Senate Avenue MC61-53 IGCN1003 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.11 Monitoring Methods. [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(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.
- (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 2-7-5] [326 IAC 2-7-6]

C.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on March 18, 1999.

(b) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.14 Risk Management Plan [326 IAC 2-7-5(12)] [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.15 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) Upon detecting an excursion or exceedance, the Permittee shall 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 emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned 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 within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (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;
 - (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 maintain the following records:
 - (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

- C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]
 - (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 take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
 - (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- C.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]
 - Pursuant to 326 IAC 2-6-3(b)(2), starting in 2005 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
 - (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
 - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Quality 100 North Senate Avenue MC61-50 IGCN1003 Indianapolis, Indiana 46204-2251

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The emission statement 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.18 General Record Keeping Requirements[326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2] [326 IAC 2-3]

- (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. 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, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.
- (c) If there is a "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (II)) at an existing emissions unit or at a source with Plant-wide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1 (ee) and/or 326 IAC 2-3-1(z)) and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1 (rr) and/or IAC 2-3-1 (mm)), the Permittee shall comply with following:
 - (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (II)) at an existing emissions unit, document and maintain the following records:
 - (A) A description of the project.
 - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
 - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
 - (i) Baseline actual emissions;
 - (ii) Projected actual emissions;
 - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1(mm)(2)(A)(iii); and
 - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
 - (2) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
 - (3) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [326 IAC 2-3]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue MC61-53 IGCN1003 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) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) 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.
- (f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C- General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (II)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:
 - (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and
 - (2) The emissions differ from the preconstruction projection as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(ii).
- (g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:
 - (1) The name, address, and telephone number of the major stationary source.
 - (2) The annual emissions calculated in accordance with (c)(2) and (3) in Section C-General Record Keeping Requirements.
 - (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).

(4) Any other information that the Permittee deems fit to include in this report,

Reports required in this part shall be submitted to:

Indiana Department of Environmental Management Air Compliance Section, Office of Air Quality 100 North Senate Avenue MC61-53 IGCN1003 Indianapolis, Indiana 46204-2251

(h) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

Stratospheric Ozone Protection

C.20 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 the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Ingot Department

- (a) one (1) #2-2 natural gas-fired tilting-melting-holding furnace, referred to as emission unit 2, constructed in 1994, with a maximum capacity of 6.0 tons of aluminum per hour, and a maximum heat input capacity of 26 million Btu per hour, with emissions uncontrolled and exhausting to stack 89-8;
- (b) one (1) #2-3 natural gas-fired tilting-melting-holding furnace, referred to as emission unit 3, constructed in 1994, with a maximum capacity of 6.0 tons of aluminum per hour, and a maximum heat input capacity of 26 million Btu per hour, with emissions uncontrolled and exhausting to stack 90-8;
- (c) one (1) #2-4 natural gas-fired tilting-melting-holding furnace, referred to as emission unit 4, constructed in 1991, with a maximum capacity of 9.58 tons of aluminum per hour, and a maximum heat input capacity of 36 million Btu per hour, with emissions uncontrolled and exhausting to stack 88-8;
- (d) one (1) #2-5 natural gas-fired tilting-melting-holding furnace, referred to as emission unit 5, constructed in 1988, with a maximum capacity of 9.58 tons of aluminum per hour, and a maximum heat input capacity of 36 million Btu per hour, with emissions uncontrolled and exhausting to stack 87-8;
- (e) one (1) #2-6 natural gas-fired tilting-melting-holding furnace, referred to as emission unit 6, constructed in 1995, with a maximum capacity of 9.58 tons of aluminum per hour, and a maximum heat input capacity of 36 million Btu per hour, with emissions uncontrolled and exhausting to stack 94-8;
- (f) one (1) #4 natural gas-fired melting furnace, referred to as emission unit 7, constructed in 1980 and modified in 2004, with a maximum capacity of 6.2 tons of aluminum per hour, and a maximum heat input capacity of 26 million Btu per hour, with emissions uncontrolled and exhausting to stack 5-8; and
- (g) one (1) #41 natural gas-fired holding furnace, referred to as emission unit 8, with a maximum capacity of 6.2 tons of aluminum per hour and a maximum heat input capacity of 10.0 million Btu per hour, modified in 2004, with emissions exhausting to stack 6-8.

(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 2-7-5(1)]

D.1.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (a) Pursuant to CP 157-2316 issued April 9, 1992, the following conditions shall apply to the tilting-melting-holding furnaces #2-2 and #2-3:
 - (1) The PM emission rate from each of the tilting-melting-holding furnaces #2-2 and #2-3 shall not exceed 1.14 pounds per hour. Compliance with this limit will also satisfy the requirements of 326 IAC 6-3-2 (Particulate Emission Limitations).
 - (2) The melting furnaces #10, #8, and #7 shall not be operated.
- (b) Pursuant to CP 157-4219, issued June 12, 1995, the following conditions shall apply to the tilting-melting-holding furnace #2-6:

- (1) The PM emissions from the tilting-melting-holding furnace #2-6 shall not exceed 1.89 pounds per hour. Compliance with this limit will also satisfy the requirements of 326 IAC 6-3-2 (Particulate Emission Limitations).
- (2) The NOx emissions from the tilting-melting-holding furnace #2-6 shall not exceed 5.0 pounds per hour.
- (3) In order to comply with the requirements of 326 IAC 2-2, the charge shall consist of only alloys, pig, slabs, purchased scrap, or process scrap and chips that are essentially free of contaminants and has demonstrated to be acceptable based on successful performance tests required under Section D.1.7.

Therefore, the requirements of 326 IAC 2-2 (PSD) will not apply.

D.1.2 Particulate [326 IAC 6-3-2]

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

- (a) the allowable particulate emission rate from each of the natural gas-fired tilting-melting-holding furnaces #2-2 and #2-3 shall not exceed 13.62 pounds per hour when operating at a process weight rate of 6.0 tons per hour.
- (b) the allowable particulate emission rate from each of the natural gas-fired melting furnace #4 and #41 holding furnace shall not exceed 13.92 pounds per hour when operating at a process weight rate of 6.2 tons per hour.
- the allowable particulate emission rate from each of the natural gas-fired tilting-melting-holding furnaces #2-4, #2-5 and #2-6 shall not exceed 18.63 pounds per hour when operating at a process weight rate of 9.58 tons per hour.

The pounds per hour limitations were calculated with 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:

 $E = 4.10 P^{0.67}$

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

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D.1.3: Work Practices [Agreed Order A-3659, issued April 15, 1997]

Pursuant to A-3659, issued April 15, 1997, the following conditions shall apply to each of the tilting-melting-holding furnaces #2-2, #2-3, #2-4, #2-5 and #2-6, the #4 melting furnace and the #41 holding furnace:

- (a) The furnaces shall be skimmed after alloying if skim is over approximately one (1) inch thick and covers more than fifty percent (50%) of the bath.
- (b) The furnaces shall be skimmed before a heat stir if the skim is over approximately one (1) inch thick and covers more than fifty percent (50%) of the bath.
- (c) The work practices stated in (a) and (b) above shall be incorporated into the plant standard operating practice manual as environmental air quality requirements.
- (d) The work practices stated in (a) and (b) above shall be reviewed with the respondent's appropriate operating personnel on an annual basis.

D.1.4 Fluxing [Agreed Order A-3121, issued July 1, 1997]

Pursuant to A-3121, issued July 1, 1997, the following conditions shall apply to the tilting-melting-holding furnaces #2-3 and #2-6:

- (a) When it is deemed necessary to add salt flux to furnaces #2-3 and #2-6, only salt flux in the solid briquette form shall be used.
- (b) ALCOA may perform additional stack testing to demonstrate compliance using the granular flux method.
- (c) The OAQ agrees to consider a request from ALCOA to modify agreed order A-3121 to allow the use of salt flux in the granular form in the event that salt flux in the briquette form becomes unavailable.
- (d) ALCOA must demonstrate that compliance with the permit conditions will be maintained using granular flux.
- (e) When granular flux is used, notification shall be made to the OAQ within fourteen (14) working days.

D.1.5 Hazardous Air Pollutants (HAPs) [326 IAC 2-4.1]

The total amount of flux added to the furnaces at the source shall not exceed 175 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

The limits on flux usage in conjunction with the AFB usage limit in Condition D.2.1 shall limit source wide single HAP emissions to less than ten (10) tons per year and the total combination of HAPs to less than twenty five (25) tons per year. Compliance with these limits shall render 326 IAC 2-4.1 not applicable.

D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities.

Compliance Determination Requirements

D.1.7 Testing Requirements [326 IAC 2-7-6(1),(6)]

- (a) Between April 2007 and October 2007, the Permittee shall conduct PM testing for melting furnaces #2-2 and #2-3, utilizing methods as approved by the Commissioner, in order to demonstrate compliance with Condition D.1.1(a)(1). This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.
- (b) Between April 2007 and October 2007, the Permittee shall conduct PM and NOx testing for furnace #2-6, utilizing methods as approved by the Commissioner, in order to demonstrate compliance with Condition D.1.1(b). This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

D.1.8 Raw Materials [326 IAC 2-7-6(1),(6)]

In order to comply with the requirements of Condition D.1.1, the charge shall consist of only alloys, pig, slabs, purchased scrap, or process scrap and chips that are essentially free of contaminants and has demonstrated to be acceptable based on successful performance tests required under Section D.1.7.

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Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.9 Visual Inspections

To ensure compliance with Condition D.1.8, the Permittee shall conduct visual inspections of the materials added to the furnace in accordance with the approved OM&M plan required by 40 CFR 63, Subpart RRR.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.10 Record Keeping Requirements

- (a) To document compliance with Condition D.1.9, the Permittee shall maintain records of visual inspections of the materials added to the furnace consistent with the provisions of the approved Site-Specific Monitoring Plan.
- (b) To document compliance with Condition D.1.5, the Permittee shall maintain monthly records of the flux usage.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

D.1.11 Reporting Requirements

A semi-annual summary of the information to document compliance with Condition D.1.5 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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SECTION D.2

FACILITY CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Ingot Department

- (a) one (1) #3 natural gas-fired ingot preheater, referred to as emission unit 20, constructed in 1985, with a maximum heat input capacity of 17.5 million Btu per hour, with emissions uncontrolled and exhausting to stack 29-7;
- (b) one (1) #4 natural gas-fired ingot preheater, referred to as emission unit 21, constructed in 1980, with a maximum heat input capacity of 12.3 million Btu per hour, with emissions uncontrolled and exhausting to stack 30-7;
- (c) one (1) #7 natural gas-fired ingot preheater, referred to as emission unit 23, constructed in 1997, with a maximum heat input capacity of 20.0 million Btu per hour, with emissions uncontrolled and exhausting to stack 24-7;
- (d) one (1) #10 natural gas-fired ingot preheater, referred to as emission unit 24, constructed in 1966, with a maximum heat input capacity of 13.5 million Btu per hour, with emissions uncontrolled and exhausting to stack 24-7;
- (e) one (1) #11 natural gas-fired ingot preheater, referred to as emission unit 25, constructed in 1966, with a maximum heat input capacity of 13.5 million Btu per hour, with emissions uncontrolled and exhausting to stack 23-7;
- (f) one (1) #12 natural gas-fired ingot preheater, referred to as emission unit 26, constructed in 1967, with a maximum heat input capacity of 13.5 million Btu per hour, with emissions uncontrolled and exhausting to stack 22-7;
- (g) one (1) #13 natural gas-fired ingot preheater, referred to as emission unit 27, constructed in 1967, with a maximum heat input capacity of 13.5 million Btu per hour, with emissions uncontrolled and exhausting to stack 21-7;

Extrusion - 1

- (h) one (1) #5 natural gas-fired press reheat granco furnace, referred to as emission unit 35, constructed in 1975, with a maximum heat input capacity of 18.0 million Btu per hour, with emissions uncontrolled and exhausting to stack 56-12;
- (i) one (1) #6 natural gas-fired press reheat granco furnace, referred to as emission unit 36, constructed in 1973, with a maximum heat input capacity of 16.0 million Btu per hour, with emissions uncontrolled and exhausting to stack 54-10;
- (j) one (1) #2 natural gas-fired press reheat granco furnace, referred to as emission unit 37, constructed in 1987, with a maximum heat input capacity of 16.0 million Btu per hour, with emissions uncontrolled:
- (k) one (1) #12 natural gas-fired press reheat granco furnace, referred to as emission unit 38, constructed in 1989, with a maximum heat input capacity of 16.0 million Btu per hour, with emissions uncontrolled;

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

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SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Extrusion - 1 (cont'd)

- (k) one (1) #8 natural gas-fired press reheat granco furnace, referred to as emission unit 40, constructed in 1992, with a maximum heat input capacity of 16.0 million Btu per hour, with emissions uncontrolled;
- (I) one (1) #6 natural gas-fired age oven, referred to as emission unit 50, constructed in 1996, with a maximum heat input capacity of 14.0 million Btu per hour, with emissions uncontrolled;
- (m) one (1) #4 natural gas-fired heat treat furnace, constructed in 1999, with a maximum capacity of 1,000 pounds of aluminum per hour, 0.125 pounds of NH₄BF₄ per hour, and a maximum heat input capacity of 3.0 million Btu per hour, with emissions uncontrolled;

Extrusion - 2

(n) one (1) #1 natural gas-fired horizontal heat treat furnace, referred to as emission unit 70, constructed in 1957, with a maximum heat input capacity of 13.2 million Btu per hour, with emissions uncontrolled and exhausting to stack 68-112;

Tube Mill

(o) one (1) tube mill solvent dip tank system, referred to as emission units 94, 95, and 96, consisting of a 5000 gallon capacity 35 ft dip tank, a 10,000 gallon capacity 50 ft dip tank, a tank farm, and several parts washers, constructed in 1942, with emission uncontrolled;

(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 2-7-5(1)]

D.2.1 Hazardous Air Pollutants (HAPs) [326 IAC 2-4.1]

The source-wide usage of ammonium fluoroborate (AFB) shall not exceed 12.75 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The limit on AFB in conjunction with the flux usage limit in Condition D.1.5 shall limit source wide single HAP emissions to less than ten (10) tons per year and the total combination of HAPs to less than twenty five (25) tons per year. Compliance with these limits shall render 326 IAC 2-4.1 not applicable.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.2 Record Keeping Requirements

- (a) To document compliance with Condition D.2.1, the Permittee shall maintain monthly records of the AFB usage.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

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D.2.3 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Ingot Department

One (1) internal combustion engine diesel fuel fired emission unit acting as a diesel air compressor, with a total maximum design capacity of 450 brake horsepower [equivalent to approximately 1.15 million British thermal units per hour (MMBtu/hr)]. Identified as emission unit EUDAC#1 and exhausting through stack DAC#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 2-7-5(1)]

D.3.1 Nitrogen Oxides [326 IAC 2-2]

Emission unit EUDAC#1 shall not operate more than 3,575 hours per 12 consecutive month period with compliance determined at the end of each month. This limitation on hours of operation limits NOx emissions to less than 25 tons per 12 consecutive month period. Compliance with this limit shall render 326 IAC 2-2 to applicable.

D.3.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.3.3 Hourly Operation Gauge Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)
 - (a) Whenever a condition in this permit requires the measurement of hours of operation, the instrument employed shall have a scale such that the expected normal reading shall be no less than one hour increments with preferred option to include a tenth of an hour increment.
 - (b) The Preventive Maintenance Plan for the hourly operation gauge shall include calibration using known standards. The frequency of calibration shall be adjusted such that the typical error found at calibration is less than one hour.
 - (c) The Permittee may request the IDEM, OAQ approve the use of a hourly operation gauge that does not meet the above specifications provided the Permittee can demonstrate an alternative gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of hours of operation.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.4 Record Keeping Requirements

- (a) To document compliance with Condition D.3.1, the Permittee shall maintain records in accordance with (1) through (2) below. Records maintained for (1) through (2) shall be taken once per day when the emission unit is to operate during that day. The records shall be complete and sufficient to establish compliance with the hours of operation limit and the NOx emission limit established in Condition D.3.1.
 - Calendar dates covered in the compliance determination period;

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(2) Actual hours of operation since last compliance determination period.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.5 Reporting Requirements

- (a) The diesel air compressor certification shall be submitted to the address listed in Section C General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) A semi-annual summary of the information to document compliance with Condition D.3.1 shall be submitted to the address listed in Section C General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.4

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Insignificant Activities

- (a) Fifty four (54) natural gas fired units, constructed in 2001, with a total maximum design capacity of 134.4 million (MM) British thermal units per hour (Btu/hr). Each individual heating unit will have a heat input rate in the range of 0.05 MMBtu/hr up to a maximum of 6.6 MMBtu/hr.
- (b) Fifty (50) natural gas fired units, constructed in each with a maximum heat input rate of 6.6 MMBtu/hr.

(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 2-7-5(1)]

D.4.1 PSD Minor Limit [326 IAC 2-2]

The total usage of natural gas fuel for the one hundred four (104) natural gas fired units shall be limited to 1,177.30 million cubic feet per year (MMCF/yr). This fuel usage limit is equivalent to limiting NOx emissions, based on a NOx emission factor of 0.1 lb/MMBtu to less than 40 tons per year (with the emission reduction credit from removing Boilers #3 and #6) due to this modification. Therefore, the requirements of 326 IAC 2-2 do not apply.

D.4.2 Maximum heat capacity [326 IAC 2-7-5(15)]

Each individual natural gas fired unit shall not have a maximum heat input rate of greater than 6.6 MMBtu/hr, or else the unit will not be considered insignificant.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.3 Record Keeping Requirements

- (a) To document compliance with Condition D.4.1, the Permittee shall maintain records in accordance with (1) below. Records maintained for (1) below shall be taken monthly and shall be complete and sufficient to establish compliance with the natural gas usage limit established in Condition D.4.1.
 - (1) Calendar dates covered in the compliance determination period;
 - (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

D.4.4 Reporting Requirements

A semi-annual summary of the information to document compliance with Condition D.4.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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SECTION D.5

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Plant Miscellaneous, Insignificant Activities

sand blasting operations, referred to as emission unit 108, constructed in 1960, with a Pangborn dust collector as control, and exhausting to stack 75-58.

(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 2-7-5(1)]

D.5.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the sand blasting operation shall not exceed the allowable PM emission rate 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:

 $E = 4.10 P^{0.67}$

where E = rate of emission in pounds per hour;

and P = process weight rate in tons per hour.

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SECTION D.6

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(a) sawing activities located in the carpenter shop, referred to as emission unit 102, constructed in 1960, with emissions controlled by a baghouse, referred to as the #2 sawdust collector, and exhausting to stack 72-57.

Insignificant Activities

(b) sawing activities located in the carpenter shop, referred to as emission unit 101, constructed in 1960, with emissions controlled by a cyclone, referred to as the #1 sawdust collector, and exhausting to stack 73-57;

(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 2-7-5(1)]

D.6.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the sawing activities located in the carpenter shop shall not exceed the allowable PM emission rate based on 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:

 $E = 4.10 P^{0.67}$

where E =rate of emission in pounds per hour;

and P = process weight rate in tons per hour.

D.6.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

D.6.3 Particulate Control

In order to comply with D.6.1, the baghouse for particulate control shall be in operation and control emissions from the sawing activities referred to as emissions unit 102 at all times that the facility is in operation.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.6.4 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).

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(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 line. 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, dust traces or triboflows.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.5 Record Keeping Requirements

All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

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SECTION D.7

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Insignificant Activities

- (a) "622" filter boxes for transferring metal from #41 holding furnace to #11 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour:
- (b) "622" filter boxes for transferring metal from 2-2 tilting-melting-holding furnace to #12 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour;
- (c) "622" filter boxes for transferring metal from 2-2 tilting-melting-holding furnace to #13 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour:
- (d) "622" filter boxes for transferring metal from 2-3 tilting-melting-holding furnace to #13 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour;
- (e) "622" filter boxes for transferring metal from 2-4 tilting-melting-holding furnace to #14 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour;
- (f) "622" filter boxes for transferring metal from 2-5 tilting-melting-holding furnace to #14 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour;
- (g) "622" filter boxes for transferring metal from 2-6 tilting-melting-holding furnace to #15 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu 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 2-7-5(1)]

D.7.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the "622" filter boxes shall not exceed the allowable PM emission rate 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:

 $E = 4.10 P^{0.67}$

where E = rate of emission in pounds per hour;

and P = process weight rate in tons per hour

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SECTION D.8

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (a) one (1) natural gas-fired Lochnivar boiler, referred to as emission unit 90, constructed in 1995, with a maximum heat input capacity of 0.4 million Btu per hour.
- (b) one (1) natural gas-fired cleaver brooks boiler, referred to as emission unit 93, constructed in 1975, with a maximum heat input capacity of 2.6 million Btu per hour;
- (c) one (1) natural gas-fired pacific boiler #1, referred to as emission unit 103, constructed in 1940, with a maximum heat input capacity of 2.6 million Btu per hour; and
- (d) one (1) natural gas-fired pacific boiler #2, referred to as emission unit 104, constructed in 1940, with a maximum heat input capacity of 2.6 million Btu 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 2-7-5(1)]

D.8.1 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating: Emission limitations for facilities specified in 326 IAC 6-2-1(d)), the PM emissions from the lochnivar boiler shall not exceed 0.6 pound per million Btu heat input (lb/MMBtu).

D.8.2 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-3]

- (a) Pursuant to 326 IAC 6-2-3 (Particulate Emission Limitations for Sources of Indirect Heating) the PM emissions from the cleaver brooks boiler shall be limited to 0.6 pounds per MMBtu heat input.
- (b) Pursuant to 326 IAC 6-2-3 (Particulate Emission Limitations for Sources of Indirect Heating) the PM emissions from the pacific boiler #1 and the pacific boiler #2 shall be limited to 0.8 pounds per MMBtu heat input.

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SECTION D.9

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Insignificant Activities

- (a) one (1) north skim cooling operation, referred to as emission unit 16, with emissions exhausting to stack 3-8F;
- (b) one (1) south skim cooling operation, referred to as emission unit 17, with emissions exhausting to stack 4-8F:
- (c) one (1) log sawing and lathe operation, referred to as emission unit 31;
- (d) one (1) box shop sawdust collector, referred to as emission unit 92, with emissions exhausting to stack 74-57;
- (e) one (1) natural gas-fired babbit melting furnace, referred to as emission unit 109, with emissions exhausting to stack 81-58; and
- eleven (11) Rotoclones, which are mechanical separating devices designed to capture particulate emissions from the sawing, grinding, and working of aluminum pieces. Two rotoclones, each rated at 4000 cfm. Six rotoclones, each rated at 1500 cfm. Two rotoclones, each rated at 15,000 cfm. One rotoclones, rated at 6000 cfm.

(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 2-7-5(1)]

D.9.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from each facility listed above shall not exceed the allowable PM emission rate 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:

 $E = 4.10 P^{0.67}$

where E = rate of emission in pounds per hour;

and P = process weight rate in tons per hour

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SECTION D.10

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Insignificant Activities

Extrusion

one (1) Protectsol 512 clear coating applicator, referred to as emission unit 112, constructed in 1997, consisting of a roller conveyor that runs the aluminum pieces through an enclosed spray chamber. In the spray chamber there are nozzles that apply the protective coating to the aluminum pieces. The overspray falls to a collection reservoir and is used. There is a pump in the collection reservoir which will be activated whenever the coating is started.

one (1) Protectsol 512 clear coating applicator, constructed in 1999, consisting of a roller conveyor that runs the aluminum pieces through an enclosed spray chamber. In the spray chamber there are nozzles that apply the protective coating to the aluminum pieces. The overspray falls to a collection reservoir and is used. There is a pump in the collection reservoir which will be activated whenever the coating is started.

Shipping

two (2) Protectsol 512 clear coating applicators, referred to as emission unit 112, constructed in 1997, consisting of a hand held spray applicator wand and pressurized reservoir. The protective coating is applied to the aluminum pieces as required by hand to minimize overspray.

(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 2-7-5(1)]

D.10.1 Volatile Organic Compounds (VOC) Limitations [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9, the owner or operator shall not allow the discharge into the atmosphere VOC in excess of four and three-tenths (4.3) pounds of VOC per gallon of coating, excluding water, as delivered to the applicator for clear coating.

D.10.2 Volatile Organic Compound (VOC) Limitations, Clean-up Requirements [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9(f), all solvents sprayed from the application equipment during cleanup or color changes shall be directed into containers. Said containers shall be closed as soon as the solvent spraying is complete. In addition, all waste solvent shall be disposed of in such a manner that minimizes evaporation.

Compliance Determination Requirements

D.10.3. Volatile Organic Compounds (VOC)[326 IAC 8-1-2] [326 IAC 8-1-4]

(a) Compliance with the VOC content contained in condition D.10.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

(b) If any coatings applied in a facility during a month are noncompliant as applied pursuant to 326 IAC 8-2-9, then compliance with the VOC content limit in condition D.10.1 shall be determined pursuant to 326 IAC 8-1-2(a)(7), using a volume weighted average of coatings on a daily basis. This volume weighted average shall be determined by the following equation:

 $A = [\sum (c) \times U) / \sum U]$

Where: A is the volume weighted average in pounds VOC per gallon less water as applied:

C is the VOC content of the coating in pounds VOC per gallon less water as applied; and

U is the usage rate of the coating in gallons per day.

Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.10.4 Record Keeping Requirements

- (a) To document compliance with conditions D.10.1 and D.10.3(a), the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limit established in conditions D.10.1 and D.10.3(a).
 - (1) The VOC content of each coating material and solvent used less water.
 - (2) The amount of coating material and solvent used on monthly basis.
 - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
 - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (3) The monthly cleanup solvent usage; and
 - (4) The total VOC usage for each month.
- (b) To document compliance with conditions D.10.1 and D.10.3(b), the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limit established in conditions D.10.1 and D.10.3(b).
 - The VOC content of each coating material and solvent used less water.
 - (2) The amount of coating material and solvent used on daily basis.
 - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
 - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvent.
 - (3) The volume weighted average VOC content of the coatings used for each day;
 - (4) The daily cleanup solvent usage; and

- (5) The total VOC usage for each day.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

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SECTION E.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Ingot Department

- (a) one (1) #2-2 natural gas-fired tilting-melting-holding furnace, referred to as emission unit 2, constructed in 1994, with a maximum capacity of 6.0 tons of aluminum per hour, and a maximum heat input capacity of 26 million Btu per hour, with emissions uncontrolled and exhausting to stack 89-8;
- (b) one (1) #2-3 natural gas-fired tilting-melting-holding furnace, referred to as emission unit 3, constructed in 1994, with a maximum capacity of 6.0 tons of aluminum per hour, and a maximum heat input capacity of 26 million Btu per hour, with emissions uncontrolled and exhausting to stack 90-8;
- (c) one (1) #2-4 natural gas-fired tilting-melting-holding furnace, referred to as emission unit 4, constructed in 1991, with a maximum capacity of 9.58 tons of aluminum per hour, and a maximum heat input capacity of 36 million Btu per hour, with emissions uncontrolled and exhausting to stack 88-8;
- (d) one (1) #2-5 natural gas-fired tilting-melting-holding furnace, referred to as emission unit 5, constructed in 1988, with a maximum capacity of 9.58 tons of aluminum per hour, and a maximum heat input capacity of 36 million Btu per hour, with emissions uncontrolled and exhausting to stack 87-8;
- (e) one (1) #2-6 natural gas-fired tilting-melting-holding furnace, referred to as emission unit 6, constructed in 1995, with a maximum capacity of 9.58 tons of aluminum per hour, and a maximum heat input capacity of 36 million Btu per hour, with emissions uncontrolled and exhausting to stack 94-8; and
- (f) one (1) #4 natural gas-fired melting furnace, referred to as emission unit 7, constructed in 1980 and modified in 2004, with a maximum capacity of 6.2 tons of aluminum per hour, and a maximum heat input capacity of 26 million Btu per hour, with emissions uncontrolled and exhausting to stack 5-8

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.1.1 General Provisions Relating to NESHAP RRR [40 CFR Part 63, Suppart A]

Pursuant to 40 CFR 63.1500, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A — General Provisions, as specified in Appendix A of 40 CFR Part 63, Subpart RRR in accordance with schedule in 40 CFR 63 Subpart RRR.

E.1.2 NESHAP Subpart RRR Requirements [40 CFR Part 63, Subpart RRR]

Pursuant to CFR Part 63, Subpart RRR, the Permittee shall comply with the provisions of 40 CFR Part 63.1500, as specified as follows:

General

§ 63.1500 Applicability.

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

- (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.
- (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.

§ 63.1501 Dates.

- (a) The owner or operator of an existing affected source must comply with the requirements of this subpart by March 24, 2003.
- (c) The owner or operator of any affected source which is constructed or reconstructed 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.

§ 63.1503 Definitions.

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

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

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

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

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

Chips means small, uniformly-sized, unpainted pieces of aluminum scrap, typically below 1 1/4 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.

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

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.

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

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

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

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

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

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

Internal 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.

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

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.

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.

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").

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

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

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

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

Thermal chip dryer means a device that uses heat to evaporate 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).

Emission Standards and Operating Requirements

§ 63.1505 Emission standards for affected sources and emission units.

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

§ 63.1506 Operating requirements.

- (a) Summary. (1) On and after the compliance date established by §63.1501, the owner or operator must operate all new and existing affected sources and control equipment according to the requirements in this section.
- (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.
- (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.
- (n) Group 1 furnace without add-on air pollution control devices. The owner or operator of a group 1 furnace (including a group 1 furnace that is part of a secondary aluminum processing unit) without add-on air pollution control devices must:
 - (1) Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.
 - (2) Operate each furnace in accordance with the work practice/pollution prevention measures documented in the OM&M plan and within the parameter values or ranges established in the OM&M plan.
 - (3) Operate each group 1 melting/holding furnace subject to the emission standards in §63.1505(i)(2) using only clean charge as the feedstock.

Monitoring and Compliance Requirements

§ 63.1510 Monitoring requirements.

(a) Summary. On and after the compliance date established by §63.1501, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section. Monitoring requirements for each type of affected source and emission unit are summarized in Table 3 to this subpart.

- (b) Operation, maintenance, and monitoring (OM&M) plan. The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. The owner or operator of an existing affected source must submit the OM&M plan to the responsible permitting authority 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 responsible permitting authority 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, unless and until the plan is revised in accordance with the following procedures. If the permitting authority 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. Each plan must contain the following information:
 - (1) Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
 - (2) A monitoring schedule for each affected source and emission unit.
 - (3) Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in §63.1505.
 - (4) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
 - (i) Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
 - (ii) Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in subpart A of this part.
 - (5) Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
 - (6) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in paragraph (b)(1) of this section, including:
 - (i) Procedures to determine and record the cause of 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.

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- (8) Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in paragraph (o) of this section for each group 1 furnace not equipped with an add-on air pollution control device.
- (c) Labeling. The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in §63.1506(b) are intact and legible.
- (e) Feed/charge weight. The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or µg/Mg (gr/ton) of feed/charge must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the applicable permitting authority to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.
 - (1) The accuracy of the weight measurement device or procedure must be ±1 percent of the weight being measured. The owner or operator may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.
 - (2) The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.
 - (j) Total reactive flux injection rate. These requirements apply to the owner or operator of a group 1 furnace (with or without add-on air pollution control devices) or in-line fluxer. The owner or operator must:
 - (1) Install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to each affected source or emission unit.
 - (i) The monitoring system must record the weight for each 15-minute block period, during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test.
 - (ii) The accuracy of the weight measurement device must be ±1 percent of the weight of the reactive component of the flux being measured. The owner or operator may apply to the permitting authority for permission to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of ±1 percent impracticable. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards.
 - (iii) The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

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- (2) Calculate and record the gaseous or liquid reactive flux injection rate (kg/Mg or lb/ton) for each operating cycle or time period used in the performance test using the procedure in §63.1512(o).
- (3) Record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of:
 - (i) Gaseous or liquid reactive flux other than chlorine; and
 - (ii) Solid reactive flux.
- (4) Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in §63.1512(o).
- (5) The owner or operator of a group 1 furnace or in-line fluxer performing reactive fluxing may apply to the Administrator for approval of an alternative method for monitoring and recording the total reactive flux addition rate based on monitoring the weight or quantity of reactive flux per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.
- (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 responsible permitting authority, a written site-specific monitoring plan. The site-specific monitoring plan must be submitted to the permitting authority 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 the proposed monitoring parameters for each pollutant. Test data must establish the highest level of PM, HCl, and D/F that will be emitted from the furnace. This may be determined by conducting performance tests and monitoring operating parameters while charging the furnace with feed/charge materials containing the highest anticipated levels of oils and coatings and fluxing at the highest anticipated rate. If the permitting authority 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 to the permitting authority.
 - (i) The owner or operator of an existing affected source must submit the site-specific monitoring plan to the applicable permitting authority for review at least 6 months prior to the compliance date.
 - (ii) The permitting authority will review and approve or disapprove a proposed plan, or request changes to a plan, based on whether the plan contains sufficient provisions to ensure continuing compliance with applicable emission limits and demonstrates, based on documented test results, the relationship between emissions of PM, HCl, and D/F and the proposed monitoring parameters for each pollutant. Test data must establish the highest level of PM, HCl, and D/F that will be emitted from the furnace. Subject to permitting agency approval of the OM&M plan, this may be determined by conducting performance tests and monitoring operating parameters while charging the furnace with feed/charge materials containing the highest anticipated levels of oils and coatings and fluxing at the highest anticipated rate.

- (2) Each site-specific monitoring plan must document each work practice, equipment/design practice, pollution prevention practice, or other measure used to meet the applicable emission standards.
- (3) Each site-specific monitoring plan must include provisions for unit labeling as required in paragraph (c) of this section, feed/charge weight measurement (or production weight measurement) as required in paragraph (e) of this section and flux weight measurement as required in paragraph (j) of this section.
- (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:
 - 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;
 - (6) Recordkeeping requirements to document conformance with plan requirements.
- (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

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(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).

§ 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 requirements, and must obtain approval of the plan pursuant to the procedures, set forth in §63.7(c).
- (b) Initial performance test. Following approval of the site-specific test plan, the owner or operator must demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emission unit, and report the results in the notification of compliance status report as described in §63.1515(b). The owner or operator of any existing affected source 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). The owner or operator of any new affected source for which an initial performance test is required must conduct this initial performance test within 90 days after the date for compliance established by §63.1501(b). 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 owner or operator must conduct each test while the affected source or emission unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.
 - (2) Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours.
 - (3) Each performance test for a batch process must consist of three separate runs; pollutant sampling for each run must be conducted over the entire process operating cycle.
 - (4) Where multiple affected sources or emission units are exhausted through a common stack, pollutant sampling for each run must be conducted over a period of time during which all affected sources or emission units complete at least 1 entire process operating cycle or for 24 hours, whichever is shorter.
 - (5) Initial compliance with an applicable emission limit or standard is demonstrated if the average of three runs conducted during the performance test is less than or equal to the applicable emission limit or standard.
- (c) Test methods. The owner or operator must use the following methods in appendix A to 40 CFR part 60 to determine compliance with the applicable emission limits or standards:
 - (1) Method 1 for sample and velocity traverses.
 - (2) Method 2 for velocity and volumetric flow rate.
 - (3) Method 3 for gas analysis.
 - (4) Method 4 for moisture content of the stack gas.

- (5) Method 5 for the concentration of PM.
- (6) Method 9 for visible emission observations.
- (7) Method 23 for the concentration of D/F.
- (f) Testing of representative emission units. With the prior approval of the permitting authority, an owner or operator may utilize emission rates obtained by testing a particular type of group 1 furnace which is not controlled by any add-on control device, or by testing an in-line flux box which is not controlled by any add-on 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.

§ 63.1512 Performance test/compliance demonstration requirements and procedures.

- (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 D/F at the furnace exhaust outlet.
- (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.
- (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;

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(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.
 - (2) Record the identity, composition, and total weight of each addition of solid reactive flux for the 3 test runs;
 - (4) Divide the weight of total chlorine usage (Wt) for the 3 test runs by the recorded measurement of the total weight of feed for the 3 test runs; and
 - (5) If a solid reactive flux other than magnesium chloride is used, the owner or operator must derive the appropriate proportion factor subject to approval by the applicable permitting authority.

Notifications, Reports, and Records

§ 63.1515 Notifications.

- (a) Initial notifications. The owner or operator must submit initial notifications to the applicable permitting authority as described in paragraph (a)(6) of this section.
 - (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.
- (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(I) of the CAA has not been requested or approved, the owner or operator must provide duplicate notification to the applicable Regional Administrator. If an owner or operator submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report must include:
 - (1) All information required in §63.9(h). The owner or operator must provide a complete performance test report for each affected source and emission unit for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations (including visible emission and opacity tests).
 - (2) The approved site-specific test plan and performance evaluation test results for each continuous monitoring system (including a continuous emission or opacity monitoring system).

- (3) Unit labeling as described in §63.1506(b), including process type or furnace classification and operating requirements.
- (4) The compliant operating parameter value or range established for each affected source or emission unit with supporting documentation and a description of the procedure used to establish the value (e.g., lime injection rate, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature), including the operating cycle or time period used in the performance test.
- (9) The OM&M plan (including site-specific monitoring plan for each group 1 furnace with no addon air pollution control device).
- (10) Startup, shutdown, and malfunction plan, with revisions.

§ 63.1516 Reports.

- (a) Startup, shutdown, and malfunction plan/reports. The owner or operator must develop a written plan as described in §63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by §63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in §63.6(e)(3). In addition to the information required in §63.6(e)(3), the plan must include:
 - (1) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
 - (2) Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.
- (b) Excess emissions/summary report. The owner or operator 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:
 - (iv) An excursion of a compliant process or operating parameter value or range (e.g., lime injection rate or screw feeder setting, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter).
 - (v) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in §63.6(e)(3).
 - (vi) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of this subpart.
 - (vii) A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit.

- (3) The owner or operator must submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.
- (c) Annual compliance certifications. For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:
 - (1) Any period of excess emissions, as defined in paragraph (b)(1) of this section, that occurred during the year were reported as required by this subpart; and
 - (2) All monitoring, recordkeeping, and reporting requirements were met during the year.

§ 63.1517 Records

- (a) As required by §63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart.
 - (1) The owner or operator must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.
 - (2) The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and
 - (3) The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.
- (b) In addition to the general records required by §63.10(b), the owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records of:
 - (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.
 - (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.
 - (13) Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.
 - (15) Records for any approved alternative monitoring or test procedure.

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- (16) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
 - (i) Startup, shutdown, and malfunction plan;

- (ii) OM&M plan; and
- (iii) Site-specific secondary aluminum processing unit emission plan (if applicable).

Table 1 to Subpart RRR--Emission Standards for New and

Existing Affected Sources

Affected source/ Emission unit	Pollutant	Limit	Unit de
New and existing group 1 furnace	D/F	a transfer to the 💆	ug TEO/Mg of feed
New and existing			
secondary aluminum			$\sum_{i=1}^{n} (\mathbf{L}_{i_{p/p}} \times \mathbf{T}_{i})$
processing unit*.d (consists of all	D/F°	.L =	- Company of the Comp
existing group 1			$\sum_{i=1}^{n} (\sigma_i)$
furnaces and existing			
in-line flux boxes at the facility, or all	e de la companya de En la companya de la		
simultaneously		er po filosieno.	
constructed new group			
1 furnaces and new in- line fluxers)			

^{*} D/F limit applies to a unit at a major or area source.

These limits are also used to calculate the limits applicable to secondary aluminum processing units: $L_{\text{ID/P}} = \text{the D/F emission limit for individual emission unit i } [\mu g TEQ/Mg (gr TEQ/ton) of feed]; <math>L_{\text{ED/P}} = \text{the overall D/F emission limit for the secondary aluminum processing unit } [\mu g TEQ/Mg (gr TEQ/ton) of feed]; <math>n = \text{the number of units in the secondary aluminum processing unit.}$

Table 2 to Subpart RRR of Part 63—Summary of Operating Requirements for New and Existing Affected Sources and Emission Units

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.

Alcoa, inc. – Lafayette Operation Lafayette, Indiana Permit Reviewer: AB/EVP

Table 3 to Subpart RRR of Part 63—Summary of Monitoring Requirements for New and Existing Affected Sources and Emission Units

<pre>feed/charge) emission limits (a). Group 1 furnace without add-on controls. F</pre>	Labeling	weight measurement device or other procedure accuracy of ±1% \b/\beta\); calibrate according to manufacturers calibrate according to manufacturers of months. Maintain flux addition operating log; certify every 6 months. Weight measurement device accuracy of +1% \b/\beta\); calibrate according to manufacturers specifications or at least once every six months; record weight and type of reactive flux added or injected for each 15-minute block period while reactive fluxing occurs; calculate and record total reactive flux injection rate for each operating cycle or time period used in performance test. Demonstration of site-specific monitoring procedures to provide data
	Feed material (melting/ holding furnace).	and show correlation of emissions across the range of charge and flux materials and furnace operating parameters. Record type of permissible feed/charge enterial; certify charge materials.

[\]b\ Permitting agency may approve measurement devices of alternative accuracy, for example in cases where flux rates are very low and costs of meters of specified accuracy are prohibitive, or where feed/charge weighing devices of specified accuracy are not practicable due to equipment layout or charging practices.

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Appendix A to Subpart RRR of Part 63—General Provisions Applicability to Subpart RRR

		nstruction/		
	Yes.	ř	Ø 63.5(e)	
		Approval of Construction/		
	•		63	
			:	
•	Yes.		63.5(b)(3)-(6)	
[Reserved].	No		63.5(b)	
	77	Sources Requiremen		
	Yes.	Existing, New,	§ 63.5(b)(1)	
	blic	Reconstruction Applic		
	Yes.	Severability.	S 63.5(a)	
	res.		0	
	Kes.	,	4 (2) (5	
[Reserved]	No	• • • • • • • • • • • • • • • • • • • •	63.4(a)	
	Yes.	Prohibited Activities.	63.4(a)	
\$ 63,1503.	Yes	Units and	63.3	
definitions in				
Additional	Yes	Definitions	\$ 63.2	
	* C C C C C C C C C C C C C C C C C C C	Appricability of		
[Reserved].	NO			
	Yes.		7.6	
[Reserved].	No		(3)	
permits.				
subject from the obligation to obtain Title V operating				
subject to this				
§ 63.1500(e)	Yes	•	§ 63.1(c)(2)	
	red.	Apparcametry Arcer Standard Established.	W 00 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
authority.	7	Decermin	63 4 (4)	
EPA retains approval	Yes	Initial Applicability		
	•		63.1	
[Reserved].	No) (9)	
	Yes.		63.1	
w	No	,	63.1(a)(5).	
• !	Yes.	General Applicability.	63.1(a)	
!	Applies to RRR	Requirement	Citation	
Comment	Applies to	, i	itation	

Appendix A to Subpart RRR of Part 63—General Provisions Applicability to Subpart RRR

		0)	requires plan.	[Reserved].	Except § 63.1511 establishes dates for initial performance tests.	
Yes. Ised Yes. Cabi	Yes. No. Yes. Yes.	Ves.	Yes. Yes. Is.	Yes. Yes. Yes. No. Yes.	Yes. Yes. Yes.	Yes. Yes. Yes. Yes. Yes.
Approval of Construction/ Reconstruction Based on State Review. Compliance with Standards and Maintenance_Applicabi	New and Reconstructed Sources_Dates. Existing Sources Dates	Operation & Yes	Maintenance Requirements. Startup, Shutdown, and Malfunction Plan. Compliance with Emission Standards	Compliance with Yes Compliance with Yes Extension of Compliance. No. Compliance. No. Yes Exemption from Yes Compliance.	Performance Test Requirements- Applicability and Dates. Notification	Testing Facilities Yes Conduct of Tests Yes Alternative Test Yes Method. Data Analysis Yes Waiver of Tests Yes Monitoring Yes Requirements_Applicab ility.
), 5 (f)	3.6 (b) (1) - (5)	3.6(c)(3)-(4) 3.6(c)(5) 3.6(c)(5) 3.6(d)	،6 (e) (3)	3.6(i)(1)-(14)	3.7(a)-(h)	3.7(d) 3.7(f) 3.7(f) 3.7(g) 3.7(h)
(A) (A)	8 63 3 8 63 3 8 63 3	00000 Manana	v v v	N W W W W W W W W W W W W W W W	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	

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Appendix A to Subpart RRR of Part 63—General Provisions Applicability to Subpart RRR.

.9(j) Change in Previous Information	63.9(h)(4)	9(g)	Motification Special Compl Special Compl Requirements. Notification of VE/ Performance T Opacity Test.	SectionSectionNotificationSectionRequirements ApplicabilianceSectionInitial NotificationsSectionRequest for ComplianceSectionExtensionSectionNew Source	.8(f)(6)	63.8 (a) (4)
on. ous	D	tions. f ce Status.	tor liance of Test.		RATA	ring.
Yes.	NoYes. Yes.	Yes. Yes	Yes.	Yes. Yes. Yes. Yes. Yes.	Yes. Yes. No	Yes
	[Reserved].	Except § 63.1515 establishes dates for notification of compliance status			§ 63.1512 requires five 6- minute averages for an aluminum scrap shredder.	s 63.1510(w) includes provisions for monitoring alternatives.

Appendix A to Subpart RRR of Part	Subpart RRR of Part 63—General Provisions Applicability to Subpart RRR	plicability to Subpart RRR	
	Recordkeeping/ Reporting_Applicabili tv.	Yes. bili	
	General Requirements	Yes	§ 63.1517 includes additional requirements.
	Additional CMS Recordkeeping.	Yes.	
(4)		No	[Reserved].
		Yes.	
		¥65.	
63.10(c) (7) = (8)		res. No	[Reserved].
- (13)		Yes.	
• • • • • • • • • • • • • • • • • • • •		Yes.	
	General Reporting	Yes.	
	Requirements. Derformance Test	V. P. G. C.	
	Results.		
	Opacity or VE	Yes.	
63.10 (d) (4) = (5)	Observations. Progress Reports/	Yes.	
	Startup, Shutdown and Malfunction	-	
	Reports.		
63,10(e)(1)-(2)	Additional CMS Reports	Yes.	
	Excess Emissions/CMS Ye Performance Reports.	Yests.	Reporting deadline given in § 63.1516.
63.10(e)(4)	COMS Data Reports	Yes.	
	Recordkeeping/ Reporting Waiver.	Yes.	
63,11(a)-{b}	Control Device	No	Flares not applicable.
	State Authority and Delegations.	Yes.	EPA retains authority for applicability determinations.
	Addresses	Yes.	

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Appendix A to Subpart RRR of Part 63—General Provisions Applicability to Subpart RRR

	Y .	Information/ Confidentiality.	
	Yes.	Availability of	63.15
§ 63.1502).			
by reference in			
Update (incorporated			
and CDFs) and 1989			
Dibenzofurans (CDDs			- 27
of Chlorinated			
Exposure to Mixtures			e.
Associated with			٠.
Estimating Risk			
Procedures for		٠	
and Interim			
collection systems;			
for capture/			
Ventilation Manual			
ACGIH Industrial		Reference.	
Chapte	Yes	Incorporation by	9 63.14

- E.1.3 One Time Deadlines Relating to NESHAP Secondary Aluminum Production Requirements [40 CFR Part 63, Subpart RRR]
- <u>a</u> the performance test [40 CFR 63.7(c)(2)(iv), 40 CFR 63.1515(a)]. The Permittee submitted the Site-Specific Test Plan and Notification of anticipated date of performance test sixty (60) days prior to
- 9 The Permittee conducted initial performance test on April 9, 2003 [40 CFR 63.1511(b)].
- <u>ⓒ</u> The Permittee submitted tests results sixty (60) days after the completion of the test [40 CFR 63.7(g)].
- <u>a</u> The Permittee submitted notice of compliance status on May 23, 2003 [40 CFR 63.1515(b)].

T157-17676-00001

TO THE COMMON INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT -**OFFICE OF AIR QUALITY**

PART 70 OPERATING PERMIT CERTIFICATION

Source Name:

Alcoa, Inc. - Lafayette Operation

Source Address:

Mailing Address:

3131 Main Street, Lafayette, Indiana 47905 3131 Main Street, Lafayette, Indiana 47905-2272

Part 70 Permit No.:

T157-17676-00001

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:
Phone:
Date:

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

COMPLIANCE BRANCH 100 North Senate Avenue MC61-53 IGCN1003 Indianapolis, Indiana 46204 Phone: 317-233-0178

Fax: 317-233-6865

PART 70 OPERATING PERMIT EMERGENCY OCCURRENCE REPORT

Source Name: Source Address: Mailing Address: Part 70 Permit No.:	Alcoa, Inc Lafayette Operation 3131 Main Street, Lafayette, Indiana 3131 Main Street, Lafayette, Indiana T157-17676-00001	
This form consists of	2 pages	Page 1 of 2
The F hours The F	s (1-800-451-6027 or 317-233-0178, a Permittee must submit notice in writing	r Quality (OAQ), within four (4) business ask for Compliance Section); and ag or by facsimile within two (2) working days ollow the other requirements of 326 IAC 2-7-
If any of the following a	re not applicable, mark N/A	
Facility/Equipment/Ope	eration:	
Control Equipment:	·	
Оонног Едиринена.		. :
Permit Condition or O	peration Limitation in Permit:	

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

Describe the cause of the Emergency:

Description of the Emergency:

Date:

Phone:

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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
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:

A certification is not required for this report.

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION**

Part 70 Semi-Annual Report

Source Name:

Alcoa, Inc. - Lafayette Operation

Source Address:

3131 Main Street, Lafayette, Indiana 47905

Mailing Address:

3131 Main Street, Lafayette, Indiana 47905-2272

Part 70 Permit No.:

T157-17676-00001

Facility:

one hundred four (104) natural gas-fired units

Parameter:

natural gas usage

Limit:

natural gas usage not to exceed 1,177.3 MMCF 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
Worth	Natural Gas Usage This Month	Natural Gas Usage Previous 11 Months	Natural Gas Usage 12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this six (6) month period.
☐ Deviation/s occurred in this six (6) month period. Deviation has been reported on:
Submitted by: Title / Position:
Signature:
Date:
Phone:

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

Part 70 Semi-Annual Report

Source Name:

Alcoa, Inc. - Lafayette Operation

Source Address:

3131 Main Street, Lafayette, Indiana 47905

Mailing Address:

3131 Main Street, Lafayette, Indiana 47905-2272

Part 70 Permit No.:

T157-17676-00001

Facility:

Diesel Air Compressor (EUDAC #1)

Parameter:

Hours of Operation

Limit:

3,575 hours per twelve (12) consecutive month period with compliance

determined at the end of each month.

YEAR:

S d a with	Column 1	Column 2	Column 1 + Column 2
Month	Hours of Operation This Month	Hours of Operation Previous 11 Months	Hours of Operation 12 Month Total
Month 1	-		
Month 2			
Month 3			

I No deviation occurred in this six (6) month period
☐ Deviation/s occurred in this six (6) month period. Deviation has been reported on:
Submitted by: Title / Position: Signature:

Date: Phone:

First Administrative Amendment No.: 157-24634-00001 Modified by: Robert Henry

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

Part 70 Semi-Annual Report

Source Name:

Alcoa, Inc. - Lafayette Operation

Source Address:

3131 Main Street, Lafayette, Indiana 47905

Mailing Address:

3131 Main Street, Lafayette, Indiana 47905-2272

Part 70 Permit No.:

T157-17676-00001

Facility: Parameter:

Source-wide Flux Usage

Limit:

Flux - less than 175 tons per twelve (12) consecutive month period with

compliance determined at the end of each month.

YEAR:

Month	Column 1 Flux Usage This Month	Column 2 Flux Usage Previous 11 Months	Column 1 + Column 2 Flux Usage 12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this six (6) month period.
□ Deviation/s occurred in this six (6) month period. Deviation has been reported on:
Submitted by: Title / Position: Signature: Date: Phone:

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY **COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name:

Alcoa, Inc. - Lafayette Operation

Source Address:

3131 Main Street, Lafayette, Indiana 47905

Mailing Address: Part 70 Permit No.: 3131 Main Street, Lafayette, Indiana 47905-2272

Facility:

T157-17676-00001

Parameter:

Source-wide AFB Usage

Limit:

AFB - less than 12.75 tons per twelve (12) consecutive month period with

compliance determined at the end of each month.

YEAR:

	Column 1	Column 2	Column 1 + Column 2
Month	AFB Usage This Month	AFB Usage Previous 11 Months	AFB Usage 12 Month Total
Month 1			
Month 2			
Month 3			

I no deviation occurred in this quarte
☐ Deviation/s occurred in this quarter. Deviation has been reported on:
Submitted by: Title / Position: Signature: Date:
Phone:

First Administrative Amendment No.: 157-24634-00001 Modified by: Robert Henry Page 81 of 82 T157-17676-00001

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name:

Alcoa, Inc. - Lafayette Operation

Source Address:

3131 Main Street, Lafayette, Indiana 47905

Mailing Address:

3131 Main Street, Lafayette, Indiana 47905-2272

Part 70 Permit No.: T157-17676-00001

Months: _____ to ____ Year: _ Page 1 of 2 This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, 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". ☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD. ☐ 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:

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Page 2 of 2 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:

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Administrative Amendment.

Source Description and Location

Source Name:

ALCOA, Inc.

Source Location:

3131 Main Street, Lafayette, Indiana 47905

County:

Tippecanoe.

SIC Code:

3341 and 3354

Operation Permit No.:

T. 157-17676-00001.

Operation Permit Issuance Date:

February 6, 2007

Administrative Amendment No.:

157-24634-00001

Permit Reviewer:

Robert Henry

Existing Approvals

The source was issued Part 70 Operating Permit No. T 157-17676-00001 on February 6, 2007. The source has since received the following approvals:

- (a) First Minor Permit Modification No. 157-20334-00001, issued on June 8, 2005.
- (b) Second Minor Permit Modification No. 157-20893-00001, issued on July 20, 2005.

County Attainment Status

The source is located in Tippecanoe County.

Pollutant	Status	
PM10.	attainment	
PM2.5	attainment	
SO ₂	attainment	
NO ₂	attainment	
8-hour Ozone	attainment	
CO	attainment	
Lead	attainment	

- Volatile organic compounds (VOC) and nitrogen oxides (NOx) are regulated under the (a) 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. Tippecanoe 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.
- Tippecanoe County has been classified as attainment for PM2.5. U.S. EPA has not yet (b) established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions.

- (c) Tippecanoe County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (d) 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 2-2-1(gg)(1).
- (e) Fugitive Emissions
 Since this type of operation is in one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are counted toward the determination of PSD and Emission Offset applicability.

Source Status

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Pollutant	Emissions (tons/year)		
PM	59,38		
PM10	55.70		
SO ₂	4.33		
VOC.	65.23		
CO	404.30		
NO _v	483.95		

- (a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a regulated pollutant is emitted at a rate of 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(gg)(1).
- (b) These emissions are based upon the Title V Permit No. T157-17676-00001, issued on February 6, 2007.

The table below summarizes the potential to emit HAPs for the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

HAPs	Potential To Emit (tons/year)
Mn .	5.49
Cr.	2.55
Ni	0.37
Be	0.04
Pb.	0.03
Hydrogen Fluoride	8.25
Hydrogen Chloride	20.39
Chlorine	0.63
TOTAL	37.75

This existing source is a major source of HAPs, as defined in 40 CFR 63.41, because HAP emissions are greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

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Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2005 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	6
PM10	6
SO ₂	0
VOC	62
CO	14
NO _x	14
HAP - PB	0.03

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by ALCOA, Inc. on February 7, 2007, relating to the addition of one (1) cutoff saw to Extrusion 1 and one (1) band saw and one (1) natural gas-fired die heating oven to Extrusion 2. As well as change the listed capacity for one (1) existing natural gas-fired die heating oven. The following is a list of the proposed new emission units:

Extrusion - 1

(a) One (1) cutoff saw (B&O Model No. B-830), identified as Unit ID #131 (#17 cutoff saw), with an estimated maximum capacity of 1,200 tons/year and constructed in 2007. The unit uses a vacuum chip collector (B&O Model #B-497), rated at 2500 CFM for emission control. This unit does not exhaust to a stack.

Extrusion - 2

- (a) One (1) band saw (W.F. Wells Model B-25-3C), identified as emission unit #132 (Extrusion Unit #2 band saw), with an estimated maximum capacity of 6,000 tons/year, and constructed in 2007. This unit does not exhaust to a stack.
- (b) One (1) natural gas-fired direct heat Granco die heating oven, identified as Unit ID #77-1, with an estimated maximum capacity of 2.5 mmBtu/hr, and constructed in 2007. Emissions from this unit are uncontrolled and do not exhaust to a stack; and

In addition, the Permittee has requested the following change to an existing permitted emission unit:

(c) One (1) existing natural gas-fired direct heat Dreaver die oven, referred to as emission unit #76 in the TSD of the current operating permit (Permit No: T157-17676-00001), will be modified in 2007 by reducing the maximum capacity from 3.0 mmBtu/hr to 2.0 mmBtu/hr. This will be accomplished by removing compartment #2 of a 3 compartment unit from service.

ALCOA, Inc. Lafavette, Indiana Permit Reviewer: Robert Henry

> The installation of Unit ID #131 and Unit ID #132 are considered insignificant activities pursuant to 326 IAC 2-7-1(21)(G)(vi)(BB) and are not specifically regulated. Therefore, they will not be added to the permit. The installation of Unit ID #77-1 is considered an insignificant activity in accordance with 326 IAC 2-7-1(21)(G)(i)(AA)(aa) and is not specifically regulated under 326 IAC 6-3 since it is not a manufacturing process or 326 IAC 6-2-2 since it is a direct heat unit. Therefore, this emission unit will not be added to the permit.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

Permit Level Determination - Part 70

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant. including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency."

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	0.98
PM10	0.98
SO ₂	0.01
VOC	0.06
CO	0.90
NO _x	1.07

HAPs	Potential To Emit (tons/year)
TOTAL HAPs	less than 0.10

This modification is subject to 326 IAC 2-7-11(a) An administrative permit amendment is a Part 70 permit revision that does any of the following: (7) Revises descriptive information where the revision will not trigger a new applicable requirement or violate a permit term. (8) Incorporates: (A) an exempt unit as described in 326 IAC 2-1.1-3; (B) an insignificant activity as defined in 326 IAC 2-7-1(21); or (C) a PAL small emissions unit as defined in 326 IAC 2-2.4-2(m) or 326 IAC 2-3.4-2(I); and that does not otherwise constitute a modification for purposes of section 10.5 or 12 of this rule.

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Permit Level Determination - PSD or Emission Offset

The table below summarizes the potential to emit, reflecting all limits and controls, of the emission units.

	Potential to Emit (tons/year)					
Process/Emission Unit	PM	PM10	SO ₂	voc	co	NO _X
#21 Granco Die Oven	0.08	0.08	0.01	0.06	0.90	1.07
#17 Cut-off Saw	0.00	0.00				
Band Saw	0.87	0.87			***	
Total for Modification	0.96	0.96	0.01	0.06	0.90	1.07
Significant Level Threshold	25	15	25	25	100	25

This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Federal Rule Applicability Determination

There is no change to the applicability of any federal rules due to this modification.

State Rule Applicability Determination

There is no change to the applicability of any state rules due to this modification.

Compliance Determination and Monitoring Requirements

There are no changes to compliance determination and monitoring requirements due to this modification.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. 157-17676-00001. Deleted language appears as strikethroughs and new language appears in **bold**:

- 1) IDEM, OAQ has determined that it is not necessary to list the Responsible Official name or title in Section A.1, General Information, of the permit. However, OAQ will still be evaluating if a change in RO meets the criteria specified in 326 IAC 2-7-1(34). The revised permit condition is as follows:
 - A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

 The Permittee owns and operates a secondary aluminum production facility.

Location and Operations Manager

2) All references to IDEM, OAQ's mailing address have been revised as follows:

Responsible Official:

ALCOA, Inc. Lafayette, Indiana Permit Reviewer: Robert Henry Page 6 of 7 Administrative Amendment No.: 157-24634-00001

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue MC61-53 IGCN1003 Indianapolis, Indiana 46204-2251

And/Or

Indiana Department of Environmental Management Modeling Section, Office of Air Quality 100 North Senate Avenue MC61-50 IGCN1003 Indianapolis, Indiana 46204-2251

And/Or

Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue MC61-52 IGCN1003 Indianapolis, Indiana 46204-2251

And/Or

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue MC61-53 IGCN1003 Indianapolis, Indiana 46204-2251

And/Or

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue MC61-53 IGCN1003 Indianapolis, Indiana 46204-2251

And/Or

Indiana Department of Environmental Management Air Compliance Section, Office of Air Quality 100 North Senate Avenue MC61-53 IGCN1003 Indianapolis, Indiana 46204-2251

- The clean unit and pollution control project provisions of the U.S. EPA's New Source Review Reform Rules were vacated on June 24, 2005 by a United States Court of Appeals for the District of Columbia Circuit decision. This decision also remanded the "reasonable possibility" standard back to U.S. EPA. The OAQ plans to remove the vacated provisions from 326 IAC 2 at the next state rulemaking opportunity. Paragraph (c) of Condition C.18, General Record Keeping Requirements, has been revised to remove references to "reasonable possibility" and the clean unit and pollution control project provisions.
 - C.18 General Record Keeping Requirements[326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2] [326 IAC 2-3]
 - (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. 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, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.
 - (c) If there is a reasonable possibility that a "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (II)) at an existing emissions unit, other than projects at a Clean Unit, which is not part of a "major modification" (as defined in 326 IAC 2-2-1 (ee) and/or 326 IAC 2-3-1 (z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1 (rr) and/or 326 IAC 2-3-1 (mm)), the Permittee shall comply with following: If there is a "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (II)) at an existing emissions unit or at a source with Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1 (ee) and/or 326 IAC 2-3-1(z)) and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1 (rr) and/or IAC 2-3-1 (mm)), the Permittee shall comply with following:

Conclusion and Recommendation

The staff recommend to the Commissioner that this Part 70 Administrative Amendment be approved.

Appendix A: Emissions Calculations Modification Summary

Company Name: Alcoa - Lafayette Operations

Address City IN Zip: 3131 East Main Street, Lafayette, IN 47905

Administrative Amendment No: 157-24634-00001

Plt ID: 157-00001 Reviewer: Robert Henry Date: June 7, 2007

	Uncontrolled	Controlled
<u>Pollutant</u>	<u>tpy</u>	<u>tpy</u>
PM	0.976	0.956
PM-10	0.976	0.956
SO2	0.006	
NOx	1.074	
VOC	0.059	
CO	0.902	
Combined HAPS	0.020	

Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100 Small Industrial Boiler

Company Name: Alcoa - Lafayette Operations

Address City IN Zip: 3131 East Main Street, Lafayette, IN 47905

Administrative Amendment No: 157-24634-00001

Plt ID: 157-00001 Reviewer: Robert Henry Date: June 7, 2007

Emissions Unit: Granco Die Oven Potential Emissions

Heat Input Capacity
MMBtu/hr

Potential Throughput

MMCF/yr

2.5

21.47

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.082	0.082	0.006	1.074	0.059	0.902

^{*}PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

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

(SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

^{**}Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100 HAPs Emissions

Company Name: Alcoa - Lafayette Operations

Address City IN Zip: 3131 East Main Street, Lafayette, IN 47905

Administrative Amendment No: 157-24634-00001

Plt ID: 157-00001 Reviewer: Robert Henry Date: June 7, 2007

Emissions Unit: Granco Die Oven Potential Emissions

Heat Input Capacity Potential Throughput

 MMBtu/hr
 MMCF/yr

 2.50
 21.47

	HAPs - Organics							
Emission Factor in lb/MMcf	Benzene 0.002	Dichlorobenzene 0.001	Formaldehyde 0.075	Hexane 1.80	Toluene 0.003			
Potential Emission in tons/yr	0.000023	0.000013	0.001	0.019	0.000036			

Emission Factor in lb/MMcf	Lead 0.001	Cadmium 0.001	Chromium 0.001	Manganese 0.0004	Nickel 0.002	Total	
Potential Emission in tons/yr	0.000005	0.000012	0.000015	0.000004	0.000023	0.020	

Methodology is the same as Page 1.

The ten highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A:

#17 Saw and Band Saw

Potential Emissions

Company Name: Alcoa Inc. - Lafayette Operations

Address City IN Zip: 3131 East Main Street, Lafayette, IN 47905

Administrative Amendment No: 157-24634-00001

Plt ID: 157-00001

Reviewer: Robert Henry

Date: June 7, 2007

								Emission Factors**		Uncontrolled		*Control	Controlled	
						Cuts								
				Blade	Density of	per	Chips							
	Height	Width	Area	Thickness	Aluminum	year	Generated	PM	PM-10	PM	PM-10	Efficiency For	PM	PM-10
Emission Unit	(inches)	(inches)	(in ²)	(inches)	(lbs/in ³)		(lbs/yr)	(lbs/ton)	(lbs/ton)	(tpy)	(tpy)	Chip Collector	(tpy)	(tpy)
#17 Saw			70.5	0.25	0.1	3600	6345	0.007	0.007	0.02	0.02	90%	0.002	0.002
Band Saw	2.25	36.19		0.105	0.1	12000	10,259.16	0.17	0.17	0.87	0.87			

^{*}Manufacturer Specifications state 90% control for cyclone chip collector with filter bags on #17 Saw Chips Generated is based on H \times W \times Blade Thickness \times Density of Aluminum \times Cuts per year.

^{**}The source tested the saws in order to get these emission factors.