

**PART 70 OPERATING PERMIT  
and ENHANCED NEW SOURCE REVIEW  
OFFICE OF AIR MANAGEMENT**

**Aluminum Company of America - 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.

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 and 326 IAC 2-1-3.2 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.: T157-7101-00001	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date:

## SECTION A SOURCE SUMMARY

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

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

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The Permittee owns and operates a secondary aluminum production facility.

Responsible Official: Charles R. Straface, Location and Operations Manager  
Source Address: 3131 Main Street, Lafayette, Indiana 47905  
Mailing Address: P.O. Box 7500, Lafayette, Indiana 47903-7500  
SIC Code: 3341 and 3354  
County Location: Tippecanoe  
County Status: Attainment for all criteria pollutants  
Source Status: Part 70 Permit Program  
Major Source, under PSD Rules

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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

#### Ingot Department

- (1) the #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;
- (2) the #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;
- (3) the #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;
- (4) the #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;
- (5) the #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;

- (6) the #4 natural gas-fired melting furnace, referred to as emission unit 7, constructed in 1980, 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;
- (7) the #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;
- (8) the #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;
- (9) the #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;
- (10) the #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;
- (11) the #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;
- (12) the #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;
- (13) the #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**

- (14) the #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;
- (15) the #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;
- (16) the #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;
- (17) the #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;
- (18) the #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;

- (19) the #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**

- (20) the #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**

- (21) the 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;

#### **Boilerhouse**

- (22) the #3 natural gas, and distillate oil-fired boiler, referred to as emission units 97 and 98, constructed in 1992 and modified in 1995, with a maximum heat input capacity of 86.0 million Btu per hour, with emissions uncontrolled and exhausting to stack 91-1;
- (23) the #6 natural gas, and distillate oil-fired boiler, referred to as emission units 99 and 100, constructed in 1957 and modified in 1992 and in 1995, with a maximum heat input capacity of 100 million Btu per hour, with emissions uncontrolled and exhausting to stack 64-1;

#### **Plant Miscellaneous**

- (24) sand blasting operations, referred to as emission unit 108, constructed in 1960, with emissions uncontrolled and exhausting to stack 75-58;
- (25) sawing activities located in the carpenter shop, referred to as emission unit 102, constructed in 1960, with emissions controlled by a cyclone, referred to as the #2 sawdust collector and exhausting to stack 72-57.

#### **A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]**

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

#### **Plant Miscellaneous**

- (1) 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**

- (2) three (3) Protectsol 512 clear coating applicators, 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;
- (3) 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.

### **Ingot Department**

- (4) "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;
- (5) "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;
- (6) "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;
- (7) "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;
- (8) "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;
- (9) "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;
- (10) "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;
- (11) the north skim cooling enclosure, referred to as emission unit 16, with emissions exhausting to stack 3-8F;
- (12) the south skim cooling enclosure, referred to as emission unit 17, with emissions exhausting to stack 4-8F;
- (13) log sawing and lathe operation, referred to as emission unit 31;

- (14) the #41 holding furnace, referred to as emission unit 8, with a maximum capacity of 1.2 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;

#### **Tube Mill**

- (15) the Lochnivar boiler, referred to as emission unit 90, constructed in 1995, with a maximum heat input capacity of 0.4 million Btu per hour;
- (16) the 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**

- (17) the 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;
- (18) the 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;
- (19) the box shop sawdust collector exhaust, referred to as emission unit 92, with emissions exhausting to stack 72-57;
- (20) the paint shop exhaust, referred to as emission unit 105, with emissions exhausting to stack 85-57; and
- (21) the babbitt melting furnace, referred to as emission unit 109, with emissions exhausting to stack 81-58.

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

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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); and
- (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).

## **SECTION B GENERAL CONDITIONS**

### **B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]**

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- (a) Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7.
- (b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled "Permit Shield."

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

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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, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

### **B.3 Permit Term [326 IAC 2-7-5(2)]**

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This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

### **B.4 Enforceability [326 IAC 2-7-7(a)]**

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

### **B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]**

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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.6 Severability [326 IAC 2-7-5(5)]**

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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.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]**

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

### **B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]**

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- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that IDEM, OAM, 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.
- (c) Upon request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAM, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, then the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:
  - (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; or
  - (3) Denial of a permit renewal application.
- (b) 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.

B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

- (a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, 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, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.11 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. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

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, OAM, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
- (1) The identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was based on continuous or intermittent data;
  - (4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3);
  - (5) Any insignificant activity that has been added without a permit revision;
  - (6) Such other facts, as specified in Sections D of this permit, as IDEM, OAM, 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.12 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]

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- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM, .

B.13 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (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, OAM, 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 Management,  
Compliance Section), or  
Telephone Number: 317-233-5674 (ask for Compliance Section)  
Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

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) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAM, 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, OAM, by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

- (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

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

**B.14 Permit Shield [326 IAC 2-7-15]**

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- (a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.
- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that:
  - (1) The applicable requirements are included and specifically identified in this permit; or
  - (2) The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.
- (c) 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, including any term or condition from a previously issued construction or operation permit, IDEM, OAM, 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.
- (d) 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.
- (e) 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.
- (f) 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).

- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAM, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAM, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

B.16 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 Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
  - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
  - (2) An emergency as defined in 326 IAC 2-7-1(12); or
  - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
  - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

B.17 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]

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- (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 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)]
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM, determines any of the following:
- (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAM, 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, OAM, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.18 Permit Renewal [326 IAC 2-7-4]

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- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM, 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).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
- (1) A timely renewal application is one that is:
    - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

- (B) 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, OAM, on or before the date it is due. [326 IAC 2-5-3]
- (2) If IDEM, OAM, , upon receiving a timely and complete 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.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]  
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, OAM, , 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, OAM, , any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]  
If IDEM, OAM, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
  
Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule
- (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.20 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)(D)(i) 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.21 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(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) and the following additional conditions:

- (a) For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
- (b) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).

B.22 Operational Flexibility [326 IAC 2-7-20]

- (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 approval required by 326 IAC 2-1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under 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 Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

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 which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAM, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) 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 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 increases and decreases in emissions 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, OAM, 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.23 Construction Permit Requirement [326 IAC 2]**

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Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

**B.24 Inspection and Entry [326 IAC 2-7-6(2)]**

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Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (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) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.  
[326 IAC 2-7-6(6)]
  - (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]
  - (2) The Permittee, and IDEM, OAM, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

B.25 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]  
Pursuant to 326 IAC 2-1-6 and 326 IAC 2-7-11:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the Permittee and the new owner.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11. 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).
- (c) IDEM, OAM, shall reserve the right to issue a new permit.

B.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM the applicable fee is due April 1 of each year.

- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

B.27 Enhanced New Source Review [326 IAC 2]

The requirements of the construction permit rules in 326 IAC 2 are satisfied by this permit for any previously unpermitted facilities and facilities to be constructed within eighteen (18) months after the date of issuance of this permit, as listed in Sections A.2 and A.3.

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

#### C.1 Major Source

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21, this source is a major source.

#### C.2 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

#### C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), 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 overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

#### C.5 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.

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

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

#### C.7 Operation of Equipment [326 IAC 2-7-6(6)]

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.8 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.

C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

(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 Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

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 emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory 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) 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. The requirement that the inspector be accredited is federally enforceable.

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

#### **C.10 Performance Testing [326 IAC 3-6]**

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- (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 methods approved by IDEM, OAM.

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 Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

#### **C.11 Compliance Schedule [326 IAC 2-7-6(3)]**

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The Permittee:

- (a) Has certified that all facilities at this source are in compliance with all applicable requirements; and
- (b) Has submitted a statement that the Permittee will continue to comply with such requirements; and
- (c) Will comply with such applicable requirements that become effective during the term of this permit.

**C.12 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

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Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

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).

**C.13 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]**

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- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

**C.14 Monitoring Methods [326 IAC 3]**

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Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

**Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]**

**C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

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

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

within ninety (90) days after the date of issuance of this permit.

The ERP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAM, 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.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present in a process in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

- (a) Submit:
  - (1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
  - (2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
  - (3) A verification to IDEM, OAM, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.
- (b) Provide annual certification to IDEM, OAM, that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.17 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
  - (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this permit;

- (3) The Compliance Monitoring Requirements in Section D of this permit;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
  - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM, . The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
    - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
    - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
- (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
  - (3) An automatic measurement was taken when the process was not operating; or
  - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]  
[326 IAC 2-7-6]

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- (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 corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (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, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not 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.19 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]

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- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
- (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
  - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (c) The annual 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, OAM, on or before the date it is due.

C.20 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

- (a) With the exception of performance tests conducted in accordance with Section C- Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.21 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information 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 kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. 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 written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and

- (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.22 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (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 Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- (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, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.

- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

### **Stratospheric Ozone Protection**

#### **C.23 Compliance with 40 CFR 82 and 326 IAC 22-1**

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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) the #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; and	
b) the #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;	

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

#### D.1.1 Particulate Matter (PM) [326 IAC 2-2]

Pursuant to CP 157-2316 issued April 9, 1992, the following conditions shall apply:

- (a) 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 (Process Operations).
- (b) The melting furnaces #10, #8, and #7 shall not be operated.

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

#### D.1.2 Work Practices [Agreed Order A-3659, issued April 15, 1997]

Pursuant to A-3659, issued April 15, 1997, the following conditions shall apply:

- (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.1.3 Fluxing [Agreed Order A-3121, issued July 1, 1997]

Pursuant to A-3121, issued July 1, 1997, the following conditions shall apply:

- (a) When it is deemed necessary to add salt flux to furnace #2-3, 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 OAM 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 OAM within fourteen (14) working days.

**D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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

**Compliance Determination Requirements**

**D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)]**

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During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform PM testing for furnaces #2-2 and #2-3 using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.1.1. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

**D.1.6 Raw Materials [326 IAC 2-7-6(1),(6)]**

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In order to comply with the requirements of Condition D.1.1, the charge shall consist of only clean alloys, clean pig, clean slabs, clean purchased scrap, or clean process scrap and chips. The charge shall contain a maximum of twenty percent (20%) material with possible process lubricant coating.

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

**D.1.7 Visual Inspections**

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To ensure compliance with Condition D.1.6, the Permittee shall conduct visual inspections of the materials added to the furnace each time that materials are added to the furnace.

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

**D.1.8 Record Keeping Requirements**

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- (a) To document compliance with Condition D.1.7, the Permittee shall maintain records of daily visible inspections of the materials added to the furnace each time that materials are added to the furnace.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]	Ingot Department
a) the #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; and	
b) the #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	

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

#### D.2.1 Particulate Matter (PM) [326 IAC 6-3-2 (Process Operations)]

Pursuant to 326 IAC 6-3-2 (Process Operations), the PM emissions from each of the natural gas-fired tilting-melting-holding furnaces #2-4 and #2-5 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 limitation was calculated with the following equation:

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

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

#### D.2.2 Work Practices [Agreed Order A-3659, issued April 15, 1997]

Pursuant to A-3659, issued April 15, 1997, the following conditions shall apply:

- (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.2.3 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.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)]**

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The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

### **D.2.5 Raw Materials [326 IAC 2-7-6(1),(6)]**

---

In order to comply with the requirements of Condition D.2.1, the charge shall consist of only clean alloys, clean pig, clean slabs, clean purchased scrap, or clean process scrap and chips. The charge shall contain a maximum of twenty percent (20%) material with possible process lubricant coating.

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

### **D.2.6 Visual Inspections**

---

To ensure compliance with Condition D.2.5, the Permittee shall conduct visual inspections of the materials added to the furnace each time that materials are added to the furnace.

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

### **D.2.7 Record Keeping Requirements**

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- (a) To document compliance with Condition D.2.6, the Permittee shall maintain records of the visual inspections of the materials added to the furnace each time that materials are added to the furnace.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

### SECTION D.3 FACILITY OPERATION CONDITIONS

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

the #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;

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

##### D.3.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

Pursuant to CP 157-4219, issued June 12, 1995, the following conditions shall apply:

- (a) 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 (Process Operations).
- (b) The NO<sub>x</sub> emissions from the tilting-melting-holding furnace #2-6 shall not exceed 5.0 pounds per hour.
- (c) The charge shall consist of only clean alloys, clean pig, clean slabs, clean purchased scrap, or clean process scrap and chips. The charge shall contain a maximum of twenty percent (20%) material with possible process lubricant coating.
- (d) Only chunk style flux shall be used in the furnace.
- (e) The melting furnace #9, holding furnace #61, and holding furnace #92 shall not be operated.

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

##### D.3.2 Work Practices [Agreed Order A-3659, issued April 15, 1997]

Pursuant to A-3659, issued April 15, 1997, the following conditions shall apply:

- (a) The furnace 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 furnace 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.3.3 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.

## **Compliance Determination Requirements**

### **D.3.4 Testing Requirements [326 IAC 2-7-6(1),(6)]**

---

During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform PM and NOx testing for furnace #2-6 using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.3.1 (a), (b), and (c). These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

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

### **D.3.5 Visual Inspections**

---

To ensure compliance with Condition D.3.1(c), the Permittee shall conduct visual inspections of the materials added to the furnace each time that materials are added to the furnace.

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

### **D.3.6 Record Keeping Requirements**

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- (a) To document compliance with Condition D.3.5, the Permittee shall maintain records of the visual inspections of the materials added to the furnace each time that materials are added to the furnace.
- (b) Pursuant to CP157-4219, records shall be kept of the weight of all materials added to the furnace.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.4 FACILITY OPERATION CONDITIONS

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

the #4 natural gas-fired melting furnace, referred to as emission unit 7, constructed in 1980, 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;

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

#### D.4.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

Pursuant to OP 79-06-91-0415, issued May 4, 1988, the charge shall consist of only clean alloys, clean pig, clean slabs, clean purchased scrap, or clean process scrap and chips. The charge shall contain a maximum of twenty percent (20%) material with possible process lubricant coating. Therefore, the requirements of 326 IAC 2-2 (PSD) will not apply.

#### D.4.2 Particulate Matter (PM) [326 IAC 6-3-2 (Process Operations)]

Pursuant to 326 IAC 6-3-2 (Process Operations), the PM emissions from the natural gas-fired melting furnace #4 shall not exceed 13.62 pounds per hour when operating at a process weight rate of 6.0 tons per hour.

The pounds per hour limitation was calculated with the following equation:

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

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

#### D.4.3 Work Practices [Agreed Order A-3659, issued April 15, 1997]

Pursuant to A-3659, issued April 15, 1997, the following conditions shall apply:

- (a) The furnace 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 furnace 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.4.4 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.

## **Compliance Determination Requirements**

### **D.4.5 Testing Requirements [326 IAC 2-7-6(1),(6)]**

---

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.4.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

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

### **D.4.6 Visual Inspections**

---

To ensure compliance with Condition D.4.1, the Permittee shall conduct visual inspections of the materials added to the furnace each time that materials are added to the furnace.

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

### **D.4.7 Record Keeping Requirements**

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- (a) To document compliance with Condition D.4.6, the Permittee shall maintain records of the visual inspections of the materials added to the furnace each time that materials are added to the furnace.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]	Insignificant Activities
<b>Boilerhouse</b>	
a)	the #3 natural gas, and distillate oil-fired boiler, referred to as emission units 97 and 98, constructed in 1992 and modified in 1995, with a maximum heat input capacity of 86.0 million Btu per hour, with emissions uncontrolled and exhausting to stack 91-1; and
b)	the #6 natural gas, and distillate oil-fired boiler, referred to as emission units 99 and 100, constructed in 1957 and modified in 1992 and 1995, with a maximum heat input capacity of 100 million Btu per hour, with emissions uncontrolled and exhausting to stack 64-1.

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

#### D.5.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

Pursuant to CP 157-4078, issued February 10, 1995, the following conditions shall apply:

- (a) Boiler #6 shall not be reconverted to coal-fired use.
- (b) The sulfur content of the fuel oil used in boilers #3 and #6 shall not exceed 0.5 weight percent. Compliance with this condition will also satisfy the requirements of 326 IAC 7-1.1 and 326 IAC 12 (40 CFR Parts 60.40c - 60.48c, Subpart Dc).

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

#### D.5.2 Particulate Matter Limitation (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate emission limitations for sources of indirect heating) and CP157-4078 issued February 10, 1995, the PM emissions from the boilers #3 and #6 shall not exceed 0.28 pound per million Btu of heat input. This limitation is based on the following equation:

$$Pt = 1.09 / (Q^{0.26})$$

Where:

Pt = pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.

Q = total source maximum operating capacity rating in million Btu per hour (MMBTU/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's operation permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

#### D.5.3 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-1] [326 IAC 12-1]

Pursuant to 326 IAC 7-1.1 (SO<sub>2</sub> Emissions Limitations) and 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units):

- (a) The SO<sub>2</sub> emissions from the boiler #3 and boiler #6 shall not exceed five tenths (0.5) pounds per million Btu heat input; or

- (b) The sulfur content of the fuel oil shall not exceed five-tenths percent (0.5%) by weight.  
[40 CFR 60.42c(d)]

Pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur content limit applies at all times, including periods of startup, shutdown, and malfunction.

**D.5.4 Opacity [326 IAC 12-1]**

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Pursuant to 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), the particulate emissions from the boiler #3 and boiler #6 shall not exceed twenty percent (20%) opacity.

**D.5.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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

**Compliance Determination Requirements**

**D.5.6 Testing Requirements [326 IAC 2-7-6(1),(6)]**

---

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM and SO<sub>2</sub> limits specified in Conditions D.5.1, D.5.2, D.5.3, and D.5.4 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

**D.5.7 Sulfur Dioxide Emissions and Sulfur Content**

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Pursuant to 40 CFR 60, Subpart Dc, the Permittee shall demonstrate compliance utilizing one of the following options:

- (a) Providing vendor analysis of fuel delivered, if accompanied by a certification; or
- (b) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
- (1) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
- (2) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

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

**D.5.8 Visible Emissions Notations**

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- (a) When combusting fuel oil daily visible emission notations of the boiler #3 and boiler #6 stack exhausts shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

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

### D.5.9 Record Keeping Requirements

- (a) To document compliance with Condition D.5.3, the Permittee shall maintain records in accordance with (1) through (6) below. Note that pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur limit applies at all times including periods of startup, shutdown, and malfunction.
  - (1) Calendar dates covered in the compliance determination period;
  - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
  - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications;
- (5) The name of the fuel supplier; and
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and copies of all reports required by this permit.

- (b) To document compliance with Condition D.5.8, the Permittee shall maintain records of daily visible emission notations of the boiler #3 and boiler #6 stack exhausts.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

### D.5.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.5.3 in any compliance period when fuel oil was combusted, and the natural gas fired boiler certification, shall be submitted to the address listed in Section C - General Reporting Requirements, 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.

**SECTION D.6 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 emissions uncontrolled and exhausting to stack 75-58	

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

**D.6.1 Particulate Matter (PM) [326 IAC 6-3-2 (Process Operations)]**

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the sand blasting operations shall not exceed allowable PM emission rate based on the following equation:

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

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

**Compliance Determination Requirements**

**D.6.2 Testing Requirements [326 IAC 2-7-6(1),(6)]**

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.6.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

## SECTION D.7 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]	Plant Miscellaneous
sawing activities located in the carpenter shop, referred to as emission units 101 and 102, constructed in 1960, with emissions controlled by two cyclones, referred to as the #1 and #2 sawdust collectors, and exhausting to stacks 73-57 and 72-57.	
Note: Emission unit 101 is insignificant; emission unit 102 is significant.	

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

#### D.7.1 Particulate Matter (PM) [326 IAC 6-3-2 (Process Operations)]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the sawing in the carpenter shop shall not exceed allowable PM emission rate based on the following equation:

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

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

#### D.7.2 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 these facilities.

### Compliance Determination Requirements

#### D.7.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.7.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### D.7.4 Particulate Matter (PM)

The two cyclones for PM control shall be in operation at all times when the sawing process in the carpenter shop is in operation and exhausting to the outside atmosphere.

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

#### D.7.5 Visible Emissions Notations

- (a) Daily visible emission notations of the cyclone stack exhaust for emission unit 102 shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

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

**D.7.6 Record Keeping Requirements**

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- (a) To document compliance with Condition D.7.5, the Permittee shall maintain records of daily visible emission notations of the cyclone stack exhaust for emission unit 102.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.8 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]	Insignificant Activities
<b>Extrusion</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.	
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.	
<b>Shipping</b>	
two (2) Protectsol 512 clear coating applicators, 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.	

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

#### D.8.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), and CP-157-8509, issued on June 17, 1997, the volatile organic compound (VOC) content of coatings applied to the metal shall be limited to 4.3 pounds of VOC per gallon of coating less water.
- (b) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during clean up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

#### D.8.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

The PM from the four (4) Protectsol 512 clear coating applicators shall not exceed the pound per hour emission rate established as E in the following formula:

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

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

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

## Compliance Determination Requirements

### D.8.3 Volatile Organic Compounds (VOC)

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Compliance with the VOC content and usage limitation contained in Condition D.8.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

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

### D.8.4 Record Keeping Requirements

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If all coatings applied in a single facility during a month are compliant coatings as applied pursuant to 326 IAC 8-2-9 and Condition D.8.1(a), then records shall be kept in accordance with parts (a) and (c) of this condition.

If any coatings applied in a facility during a month are noncompliant coatings as applied pursuant to 326 IAC 8-2-9 and Condition D.8.1(a), then records sufficient to demonstrate daily compliance shall be kept in accordance with parts (b) and (c) of this condition for each day that the noncompliant coating(s) were used.

- (a) To document compliance with Conditions D.8.1, the Permittee shall maintain records in accordance with (1) through (2) below. Records maintained for (1) through (2) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.8.1.
- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
- (2) If any compliant coatings, pursuant to 326 IAC 8-2-9 and Condition D.8.1(a), applied in a facility during a month are thinned or are mixed with additives containing volatile organic compounds (VOC) ; then additional records for the affected facility (or facilities) shall be kept sufficient to document that all coatings were compliant as applied. These records shall be kept for the entire calendar month that the thinners or VOC containing additives were used.
- (b) To document compliance with Conditions D.8.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.8.1 on a daily basis for each affected facility.
- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
- (2) A log of the dates of use;

- (3) The calculated daily volume-weighted average VOC content of the coatings used in each affected facility for each day;
  - (4) The cleanup solvent usage for each day;
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.9 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; and
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.

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

#### D.9.1 Particulate Matter (PM) [326 IAC 6-3-2 (Process Operations)]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the "622" filter boxes shall not exceed allowable PM emission rate based on the following equation:

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

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

#### D.9.2 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 these facilities.

## **Compliance Determination Requirements**

### **D.9.3 Testing Requirements [326 IAC 2-7-6(1),(6)]**

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The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.9.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

## SECTION D.10

## FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]	Insignificant Activity
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the Lochnivar boiler, referred to as emission unit 90, constructed in 1995, with a maximum heat input capacity of 0.4 million Btu per hour;

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

#### D.10.1 Particulate Matter Limitation (PM) [326 IAC 6-2-4]

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Pursuant to 326 IAC 6-2-4 (Particulate emission limitations for sources of indirect heating), the PM emissions from the Lochnivar boiler shall not exceed 0.28 pound per million Btu of heat input. This limitation is based on the following equation:

$$Pt = 1.09 / (Q^{0.26})$$

Where:

Pt = pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.

Q = total source maximum operating capacity rating in million Btu per hour (MMBTU/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's operation permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

### Compliance Determination Requirements

#### D.10.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

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The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Conditions D.10.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

**SECTION D.11**

**FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]	Insignificant Activities
a) the 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;	
b) the 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	
c) the 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.	

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

D.11.1 Particulate Matter Limitation (PM) [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 pacific boiler #1, and the pacific boiler #2 shall not exceed 0.8 pound per million Btu of heat input.

(b) Pursuant to the same rule, the PM emissions from the Cleaver brooks boiler shall not exceed 0.6 pound per million Btu of heat input. These limitations are based on the following equation:

$$Pt = \frac{C \times a \times Q}{76.5 \times Q^{0.75} \times N^{0.25}}$$

where C = Maximum ground level concentration with respect to distance from the point source at the "critical" wind speed for level terrain. This shall equal 50 micrograms per cubic meter for a period not to exceed a sixty (60) minute time period.

Pt = Pounds of particulate matter emitted per million Btu heat input (lb/MMBtu).

Q = Total source maximum operating capacity rating in million Btu per hour of heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's operation permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

N = Number of stacks in fuel burning operation.

a = Plume rise factor which is used to make allowance for less than theoretical plume rise. The value 0.67 shall be used for Q less than or equal to 1,000 MMBtu/hr heat input. The value 0.8 shall be used for Q greater than 1,000 MMBtu/hr heat input.

h = Stack height in feet. If a number of stacks of different heights exist, the average stack height to represent "N" stacks shall be calculated by weighing each stack height with its particulate matter emissions rate.

## **Compliance Determination Requirements**

### **D.11.2 Testing Requirements [326 IAC 2-7-6(1),(6)]**

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The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Conditions D.11.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

**SECTION D.12**

**FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]	Insignificant Activities
a) the north skim cooling enclosure, referred to as emission unit 16, with emissions exhausting to stack 3-8F;	
b) the south skim cooling enclosure, referred to as emission unit 17, with emissions exhausting to stack 4-8F;	
c) log sawing and lathe operation, referred to as emission unit 31;	
d) the box shop sawdust collector exhaust, referred to as emission unit 92, with emissions exhausting to stack 74-57;	
e) the paint shop exhaust, referred to as emission unit 105, with emissions exhausting to stack 85-57; and	
f) the babbit melting furnace, referred to as emission unit 109, with emissions exhausting to stack 81-58	

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

D.12.1 Particulate Matter (PM) [326 IAC 6-3-2 (Process Operations)]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from each of the processes listed above shall not exceed allowable PM emission rate based on the following equation:

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

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

**Compliance Determination Requirements**

D.12.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.12.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

## SECTION D.13

## FACILITY OPERATION CONDITIONS

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

the #41 holding furnace, referred to as emission unit 8, with a maximum capacity of 1.2 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

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

#### D.13.1 Work Practices [Agreed Order A-3659, issued April 15, 1997]

Pursuant to A-3659, issued April 15, 1997, the following conditions shall apply:

- (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.

### Compliance Determination Requirements

#### D.13.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Conditions D.13.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

**SECTION D.14**

**FACILITY OPERATION CONDITIONS**

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

**Ingot Department**

- (1) the #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;
- (2) the #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;
- (3) the #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;
- (4) the #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;
- (5) the #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;
- (6) the #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;
- (7) the #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**

- (8) the #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;
- (9) the #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;
- (10) the #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;

- (11) the #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;
- (12) the #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;
- (13) the #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**

- (14) the #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**

- (15) the 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;

There are no specific applicable requirements for these emission units.

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

**PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: Aluminum Company of America - Lafayette Operation  
Source Address: 3131 Main Street, Lafayette, Indiana 47905  
Mailing Address: P.O. Box 7500, Lafayette, Indiana 47903-7500  
Part 70 Permit No.: T157-7101-00001

**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:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) \_\_\_\_\_
- 9 Report (specify) \_\_\_\_\_
- 9 Notification (specify) \_\_\_\_\_
- 9 Other (specify) \_\_\_\_\_

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

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION  
P.O. Box 6015  
100 North Senate Avenue  
Indianapolis, Indiana 46206-6015  
Phone: 317-233-5674  
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT  
EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: Aluminum Company of America - Lafayette Operation  
Source Address: 3131 Main Street, Lafayette, Indiana 47905  
Mailing Address: P.O. Box 7500, Lafayette, Indiana 47903-7500  
Part 70 Permit No.: T157-7101-00001

**This form consists of 2 pages**

**Page 1 of 2**

Check either No. 1 or No.2
<b>9</b> 1. This is an emergency as defined in 326 IAC 2-7-1(12) C The Permittee must notify the Office of Air Management (OAM), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and C The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
<b>9</b> 2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c) C The Permittee must submit notice in writing within ten (10) calendar days

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

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

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

**Page 2 of 2**

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

Form Completed by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

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

**PART 70 OPERATING PERMIT  
NATURAL GAS FIRED BOILER CERTIFICATION**

Source Name: Aluminum Company of America - Lafayette Operation  
Source Address: 3131 Main Street, Lafayette, Indiana 47905  
Mailing Address: P.O. Box 7500, Lafayette, Indiana 47903-7500  
Part 70 Permit No.: T157-7101-00001

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

Report period

Beginning: \_\_\_\_\_

Ending: \_\_\_\_\_

Boiler Affected

Alternate Fuel

Days burning alternate fuel  
From                      To


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

Signature:

Printed Name:

Title/Position:

Date:

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

**Part 70 Quarterly Report**

Source Name: Aluminum Company of America - Lafayette Operation  
 Source Address: 3131 Main Street, Lafayette, Indiana 47905  
 Mailing Address: P.O. Box 7500, Lafayette, Indiana 47903-7500  
 Part 70 Permit No.: T157-7101-00001  
 Facility: boilers #3 and #6  
 Parameter: Sulfur content and heat content of fuel oil used, amount of fuel oil used, and SO<sub>2</sub> emissions  
 Limits: SO<sub>2</sub> emissions of 0.5 lb/MMBTU of heat input and 0.5 weight percent sulfur

Month: \_\_\_\_\_ Year: \_\_\_\_\_

Emission Unit	Month	Sulfur Content (%)	Heat Content	Fuel usage (gal/month)	SO <sub>2</sub> Emissions (lb/MMBTU)
Boiler #3					
Boiler #3					
Boiler #3					
Boiler #6					
Boiler #6					
Boiler #6					

9 No deviation occurred in this month.  
 9 Deviation/s occurred in this month.  
 Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
 Title/Position: \_\_\_\_\_  
 Signature: \_\_\_\_\_  
 Date: \_\_\_\_\_

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

**PART 70 OPERATING PERMIT  
QUARTERLY COMPLIANCE MONITORING REPORT**

Source Name: Aluminum Company of America - Lafayette Operation  
Source Address: 3131 Main Street, Lafayette, Indiana 47905  
Mailing Address: P.O. Box 7500, Lafayette, Indiana 47903-7500  
Part 70 Permit No.: T157-7101-00001

**Months:** \_\_\_\_\_ **to** \_\_\_\_\_ **Year:** \_\_\_\_\_

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

**9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD**

**9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.**

<b>Compliance Monitoring Requirement (e.g. Permit Condition D.1.3)</b>	<b>Number of Deviations</b>	<b>Date of each Deviation</b>

Form Completed By: \_\_\_\_\_  
Title/Position: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

## **Indiana Department of Environmental Management Office of Air Management**

### **Technical Support Document (TSD) for a Part 70 Operating Permit and Enhanced New Source Review (ENSR)**

#### **Source Background and Description**

Source Name:	Aluminum Company of America - Lafayette Operation
Source Location:	3131 Main Street, Lafayette, Indiana 47903
County:	Tippecanoe
SIC Code:	3341 and 3354
Operation Permit No.:	T157-7101-00001
Permit Reviewer:	Nisha Sizemore

The Office of Air Management (OAM) has reviewed a Part 70 permit application from Aluminum Company of America - Lafayette Operation relating to the operation of a secondary aluminum production facility.

#### **Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

##### **Ingot Department**

- (1) the #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;
- (2) the #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;
- (3) the #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;
- (4) the #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 18-8;

- (5) the #4 natural gas-fired melting furnace, referred to as emission unit 7, constructed in 1980, 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;
- (6) the #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;
- (7) the #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;
- (8) the #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;
- (9) the #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;
- (10) the #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;
- (11) the #12 natural gas-fired ingot preheater, referred to as emission unit 26, constructed in 1967, and a maximum heat input capacity of 13.5 million Btu per hour, with emissions uncontrolled and exhausting to stack 22-7;
- (12) the #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**

- (13) the #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;
- (14) the #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;
- (15) the #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;
- (16) the #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;

- (17) the #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;
- (18) the #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**

- (19) the #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 68-12;

#### **Tube Mill**

- (20) the tube mill solvent dip tank system, referred to as emission units 94, 95, and 96, consisting of a 35 ft dip tank, a 50 ft dip tank, a tank farm, and several open top cold cleaner degreasers, constructed in 1942, with emission uncontrolled;

#### **Boilerhouse**

- (21) the #3 natural gas, and distillate oil-fired boiler, referred to as emission units 97 and 98, constructed in 1992 and modified in 1995, with a maximum heat input capacity of 86.0 million Btu per hour, with emissions uncontrolled and exhausting to stack 64-1;
- (22) the #6 natural gas, and distillate oil-fired boiler, referred to as emission units 99 and 100, constructed in 1957 and modified in 1995, with a maximum heat input capacity of 100 million Btu per hour, with emissions uncontrolled and exhausting to stack 64-1;

#### **Plant Miscellaneous**

- (23) sand blasting operations, referred to as emission unit 108, constructed in 1960, with emissions uncontrolled and exhausting to stack 75-58;
- (24) the carpenter shop, referred to as emission units 101 and 102, constructed in 1960, with emissions controlled by two cyclones and exhausting to stacks 73-57 and 72-57.

### **Unpermitted Emission Units and Pollution Control Equipment Requiring ENSR**

The source also consists of the following unpermitted facilities/units:

#### **Ingot Department**

- (1) the #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;

### **New Emission Units and Pollution Control Equipment Requiring ENSR**

There are no new facilities to be reviewed under the ENSR process.

## Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (1) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, including the following:

### Ingot Department

- (a) the #41 holding furnace, referred to as emission unit 8, with a maximum capacity of 1.2 tons of aluminum per hour and a maximum heat input capacity of 10.0 million Btu per hour, with emissions exhausting to stack 17-8;
- (b) the #1 ingot preheater, referred to as emission unit 19, with a maximum heat input capacity of 5.0 million Btu per hour, with emissions exhausting to stack 29-7;
- (c) the #5 ingot preheater, referred to as emission unit 22, with a maximum heat input capacity of 7.4 million Btu per hour, with emissions exhausting to stack 28-7;
- (d) the pig drying oven used to remove moisture from aluminum ingots, referred to as emission unit 28, with a maximum heat input capacity of 4.7 million Btu per hour, with emissions exhausting to stack 21-8;
- (e) the ingot coolant recovery system, referred to as emission unit 29, with emissions exhausting to stack 80-10A;
- (f) the refractory dry out oven, referred to as emission unit 30, with a maximum heat input capacity of 0.8 million Btu per hour;
- (g) "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 0.625 million Btu per hour;
- (h) "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 0.625 million Btu per hour;
- (i) "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 0.625 million Btu per hour;
- (j) "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 0.625 million Btu per hour;
- (k) "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 0.625 million Btu per hour;
- (l) "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 0.625 million Btu per hour;

- (m) "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 0.625 million Btu per hour;

### **Extrusion Unit 1**

- (n) the #1 vertical swindell furnace, referred to as emission unit 32, with a maximum heat input capacity of 1.5 million Btu per hour, with emissions exhausting to stack 60-18;
- (o) the #2 vertical swindell furnace, referred to as emission unit 33, with a maximum heat input capacity of 1.5 million Btu per hour, with emissions exhausting to stack 61-18;
- (p) the #3 vertical swindell furnace, referred to as emission unit 34, with a maximum heat input capacity of 1.5 million Btu per hour, with emissions exhausting to stack 62-18;
- (q) the #1-1A reheat, referred to as emission unit 39, with a maximum heat input capacity of 4.5 million Btu per hour;
- (r) the #10-10A reheat, referred to as emission unit 41, with a maximum heat input capacity of 4.5 million Btu per hour;
- (s) the #11 reheat, referred to as emission unit 42, with a maximum heat input capacity of 2.5 million Btu per hour;
- (t) the #13 reheat, referred to as emission unit 43, with a maximum heat input capacity of 2.5 million Btu per hour;
- (u) the #1 age anneal extrusion, referred to as emission unit 44, with a maximum heat input capacity of 5.0 million Btu per hour, with emissions exhausting to stack 57-12;
- (v) the #3 age anneal extrusion, referred to as emission unit 45, with a maximum heat input capacity of 5.0 million Btu per hour, with emissions exhausting to stack 59-12;
- (w) the #4 age anneal extrusion, referred to as emission unit 46, with a maximum heat input capacity of 5.0 million Btu per hour, with emissions exhausting to stack 59-12;
- (x) the #1 age oven, referred to as emission unit 47, with a maximum heat input capacity of 2.0 million Btu per hour;
- (y) the #2 age oven, referred to as emission unit 48, with a maximum heat input capacity of 2.0 million Btu per hour;
- (z) the #5 age oven, referred to as emission unit 49, with a maximum heat input capacity of 2.0 million Btu per hour;
- (aa) the #6 age oven, referred to as emission unit 50, with a maximum heat input capacity of 14.0 million Btu per hour;

- (bb) the #13 hot box die heating oven, referred to as emission unit 51, with a maximum heat input capacity of 0.325 million Btu per hour;
- (cc) the extrusion etch sample exhaust, referred to as emission unit 52, with a maximum heat input capacity of 1.0 million Btu per hour;
- (dd) one (1) natural gas-fired billet furnace, referred to as furnace #14, with a capacity of 0.88 million Btu per hour, heating only clean billet, with emissions exhausting to stack 95-12;
- (ee) one (1) natural gas-fired billet furnace, referred to as furnace #15, with a capacity of 0.88 million Btu per hour, heating only clean billet, with emissions exhausting to stack 93-12;

### **Die Shop**

- (ff) the die cleaning caustic exhaust, referred to as emission unit 51, with a maximum heat input capacity of 1.0 million Btu per hour;
- (gg) the #3 draw furnace, referred to as emission unit 53, with a maximum heat input capacity of 0.50 million Btu per hour;
- (hh) the #7 draw furnace, referred to as emission unit 54, with a maximum heat input capacity of 1.0 million Btu per hour;
- (ii) the #8 draw furnace, referred to as emission unit 55, with a maximum heat input capacity of 1.0 million Btu per hour;
- (jj) the Lindberg Endo gas furnace #1, referred to as emission unit 56, with a maximum heat input capacity of 0.15 million Btu per hour;
- (kk) the Lindberg Endo gas furnace #2, referred to as emission unit 57, with a maximum heat input capacity of 0.15 million Btu per hour;
- (ll) the #20 weld furnace, referred to as emission unit 58, with a maximum heat input capacity of 1.0 million Btu per hour;
- (mm) the #21 high heat furnace, referred to as emission unit 59, with a maximum heat input capacity of 1.5 million Btu per hour;
- (nn) the #22 high heat Olson furnace, referred to as emission unit 60, with a maximum heat input capacity of 1.5 million Btu per hour;
- (oo) the #23 draw furnace, referred to as emission unit 61, with a maximum heat input capacity of 1.0 million Btu per hour;
- (pp) the #14 Endo gas heat treating furnace, referred to as emission unit 62, with a maximum heat input capacity of 0.15 million Btu per hour;
- (qq) the #43 salt pot, referred to as emission unit 63, with a maximum heat input capacity of 1.0 million Btu per hour;
- (rr) the #42 vertical heat treat endo gas furnace, referred to as emission unit 64, with a maximum heat input capacity of 1.8 million Btu per hour;

- (ss) the #10 lead pot, referred to as emission unit 65, with a maximum heat input capacity of 1.0 million Btu per hour;
- (tt) the #11 engo gas furnace, referred to as emission unit 66, with a maximum heat input capacity of 0.10 million Btu per hour;

## **Extrusion Unit 2**

- (uu) the #21 vertical swindell furnace, referred to as emission unit 48, with a maximum heat input capacity of 4.0 million Btu per hour, with emissions exhausting to stack 66-118;
- (vv) the #22 vertical swindell furnace, referred to as emission unit 49, with a maximum heat input capacity of 2.0 million Btu per hour, with emissions exhausting to stack 67-18;
- (ww) the #23 vertical swindell furnace, referred to as emission unit 50, with a maximum heat input capacity of 8.0 million Btu per hour, with emissions exhausting to stack 71-218;
- (xx) the #2 horizontal heat treat furnace, referred to as emission unit 52, with a maximum heat input capacity of 10.0 million Btu per hour, with emissions exhausting to stack 76-112;
- (yy) the #21 age oven, referred to as emission unit 53, with a maximum heat input capacity of 4.0 million Btu per hour;
- (zz) the #22 age oven, referred to as emission unit 54, with a maximum heat input capacity of 2.0 million Btu per hour;
- (aaa) the #24 age oven, referred to as emission unit 55, with a maximum heat input capacity of 5.0 million Btu per hour;
- (bbb) the #25 age oven, referred to as emission unit 75, with a maximum heat input capacity of 4.0 million Btu per hour;
- (ccc) the #23 anneal furnace, referred to as emission unit 56, with a maximum heat input capacity of 5.0 million Btu per hour, with emissions exhausting to stack 70-11;
- (ddd) the #29-29A reheat furnace, referred to as emission unit 57, with a maximum heat input capacity of 4.5 million Btu per hour;
- (eee) Dreaver die heating oven, referred to as emission unit 76, with a maximum heat input capacity of 3.0 million Btu per hour;
- (fff) Swindell die heating oven #1, referred to as emission unit 75, with a maximum heat input capacity of 1.0 million Btu per hour;
- (ggg) Swindell die heating oven #2, referred to as emission unit 76, with a maximum heat input capacity of 1.0 million Btu per hour;
- (hhh) Rockwell die heating oven #1, referred to as emission unit 77, with a maximum heat input capacity of 6.0 million Btu per hour;

### **Tube Mill**

- (iii) the new age oven #39, with a maximum heat input capacity of 4.0 million Btu per hour;
- (jjj) the #30 tube burdett furnace, referred to as emission unit 78, with a maximum heat input capacity of 6.0 million Btu per hour, with emissions exhausting to stack 37-14;
- (kkk) the #31 swindell vertical heat treat furnace, referred to as emission unit 79, with a maximum heat input capacity of 3.0 million Btu per hour, with emissions exhausting to stack 48-16;
- (lll) the #32 swindell vertical heat treat furnace, referred to as emission unit 80, with a maximum heat input capacity of 2.2 million Btu per hour, with emissions exhausting to stack 49-16;
- (mmm) the #31 tube age anneal furnace, referred to as emission unit 81, with a maximum heat input capacity of 4.5 million Btu per hour, and exhausting to stack 47-16;
- (nnn) the #32 tube age anneal furnace, referred to as emission unit 82, with a maximum heat input capacity of 4.5 million Btu per hour, and exhausting to stack 44-16;
- (ooo) the #33 tube age anneal furnace, referred to as emission unit 83, with a maximum heat input capacity of 4.5 million Btu per hour, and exhausting to stack 46-16;
- (ppp) the #34 tube age anneal furnace, referred to as emission unit 84, with a maximum heat input capacity of 4.5 million Btu per hour, and exhausting to stack 50-16;
- (qqq) the #34 tube age anneal furnace afterburner, referred to as emission unit 85, with a maximum heat input capacity of 5.0 million Btu per hour, and exhausting to stack 50-16;
- (rrr) the #35 tube age anneal furnace, referred to as emission unit 86, with a maximum heat input capacity of 7.0 million Btu per hour, and exhausting to stack 45-16;
- (sss) the #37 tube age anneal furnace, referred to as emission unit 87, with a maximum heat input capacity of 2.2 million Btu per hour;
- (ttt) the #43 tube anneal furnace, referred to as emission unit 88, with a maximum heat input capacity of 2.2 million Btu per hour, and exhausting to stack 40-16;
- (uuu) the #44 tube anneal furnace, referred to as emission unit 89, with a maximum heat input capacity of 4.0 million Btu per hour, and exhausting to stack 41-16;
- (vvv) the Lochnivar boiler, referred to as emission unit 90, constructed in 1995, with a maximum heat input capacity of 0.4 million Btu per hour;

- (www) the wash unit water unit, referred to as emission unit 91, with a maximum heat input capacity of 0.4 million Btu per hour;
- (xxx) the clever brooks boiler, referred to as emission unit 93, constructed in 1975, with a maximum heat input capacity of 2.6 million Btu per hour;

### **Miscellaneous**

- (yyy) the 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
- (zzz) the 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;

### **Ingot Department**

- (2) the north skim cooling enclosure, referred to as emission unit 16, with emissions exhausting to stack 3-8F;
- (3) the south skim cooling enclosure, referred to as emission unit 17, with emissions exhausting to stack 4-8F;
- (4) the skim loadout fugitive emission, referred to as emission unit 18;
- (5) log sawing and lathe operation, referred to as emission unit 31;

### **Extrusion - 2**

- (6) 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.

### **Shipping**

- (7) two (2) Protectsol 512 clear coating applicators, 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.
- (8) the die cleaning caustic exhaust, referred to as emission unit 51;
- (9) the extrusion etch sample exhaust, referred to as emission unit 52;
- (10) the ingot department uncaptured fugitive emissions;

### **Tube Mill**

- (11) the box shop sawdust collector exhaust, referred to as emission unit 92, with emissions exhausting to stack 72-57;

### **Miscellaneous Sources**

- (12) the paint shop exhaust, referred to as emission unit 105, with emissions exhausting to stack 85-57;
- (13) the babbitt melting furnace, referred to as emission unit 109, with emissions exhausting to stack 81-58;
- (14) the forge stack, referred to as emission unit 110, with emissions exhausting to stack 83-58;
- (15) the wastewater treatment plant, referred to as emission unit 111;
- (16) the 500 gallon #2 diesel fuel tank, referred to as emission unit 113;
- (17) the 3000 gallon #2 diesel fuel tank, referred to as emission unit 114;
- (18) the 300,000 gallon #1 & 2 distillate fuel oil tank, referred to as emission unit 115;
- (19) the 6000 gallon unleaded gasoline tank, referred to as emission unit 116;

### **General Categories**

- (20) propane or liquified petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour;
- (21) fuel oil fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight;
- (22) equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hour;
- (23) combustion source flame safety purging on startup;
- (24) a gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons;
- (25) a petroleum fuel, other than gasoline, having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month;
- (26) storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons;
- (27) vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids;
- (28) refractory storage not requiring air pollution control equipment;
- (29) application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings;

- (30) machining where an aqueous cutting coolant continuously floods the machining interface;
- (31) degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6;
- (32) Cleaners and solvents having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C or having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20 degrees C; the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months;
- (33) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment;
- (34) closed loop heating and cooling systems;
- (35) rolling oil recovery systems;
- (36) activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume;
- (37) any operation using aqueous solutions containing less than 1% by weight of VOCs, excluding HAPs;
- (38) forced and induced draft cooling tower system not regulated under a NESHAP;
- (39) quenching operations used with heat treating processes;
- (40) replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment;
- (41) heat exchanger cleaning and repair;
- (42) trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone;
- (43) stockpiled soils from soil remediation activities that are covered and waiting transport for disposal;
- (44) paved and unpaved roads and parking lots with public access;
- (45) asbestos abatement projects regulated by 326 IAC 14-10;
- (46) equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks and fluid handling equipment;
- (47) blowdown for any of the following: sight glass, boiler, compressors, pumps and cooling tower;
- (48) furnaces used for melting metals other than beryllium with a brim full capacity of less than or equal to 450 cubic inches by volume;
- (49) gasoline generators not exceeding 110 horsepower;

- (50) diesel generators not exceeding 1600 horsepower;
- (51) stationary fire pumps;
- (52) grinding and machining operations;
- (53) a laboratory as defined in 326 IAC 2-7-1(21)(D).

### Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (1) OP 79-06-91-0420, issued May 4, 1988;
- (2) OP 79-06-91-0415, issued May 4, 1988;
- (3) OP 79-06-91-0422, issued May 4, 1988;
- (4) OP 79-06-91-0423, issued May 4, 1988;
- (5) OP 79-06-91-0424, issued May 4, 1988;
- (6) OP 79-06-91-0425, issued May 4, 1988;
- (7) OP 79-06-91-0428, issued May 4, 1988;
- (8) OP 79-06-91-0429, issued May 4, 1988;
- (9) OP 79-06-91-0430, issued May 4, 1988;
- (10) Registration issued June 15, 1988;
- (11) Exemption issued September 15, 1988;
- (12) Registration issued December 12, 1989;
- (13) CP 157-2316, issued on April 9, 1992;
- (14) CP 157-2576, issued on February 15, 1994;
- (15) Exemption CP 157-4309, issued on February 8, 1995;
- (16) CP 157-4078, issued on February 10, 1995;
- (17) CP 157-4219, issued on June 12, 1995;
- (18) Exemption CP 157-4856, issued on October 6, 1995;
- (19) Exemption CP 157-6191, issued on August 5, 1996;
- (20) Registration CP 157-6344, issued on August 19, 1996;
- (21) Exemption CP 157-7768, issued on February 4, 1997;

- (22) Registration CP 157-8509, issued on June 17, 1997;
- (23) Registration CP 157-8744, issued on September 10, 1997;
- (24) Exemption CP 157-8815, issued on October 23, 1997; and
- (25) Exemption CP 157-9151, issued on November 24, 1997.

All conditions from previous approvals were incorporated into this Part 70 permit.

### Enforcement Issue

- (a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment Requiring ENSR*.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

There are no enforcement actions pending.

### Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on November 6, 1996. Additional information was received on July 7, 1998.

A notice of completeness letter was mailed to the source on November 21, 1996.

### Emission Calculations

See Appendix A of this document for detailed emissions calculations.

### Potential Emissions

Pursuant to 326 IAC 1-2-55, Potential Emissions are defined as "emissions of any one (1) pollutant which would be emitted from a facility, if that facility were operated without the use of pollution control equipment unless such control equipment is necessary for the facility to produce its normal product or is integral to the normal operation of the facility."

Pollutant	Potential Emissions (tons/year)
PM	90.42
PM-10	81.69
SO <sub>2</sub>	1.80
VOC	511.8
CO	123.62
NO <sub>x</sub>	269.14

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential Emissions (tons/year)
lead	less than 10
manganese	less than 10
chromium	less than 10
nickel	less than 10
beryllium	less than 10
HF	less than 10
HCl	less than 10
chlorine	less than 10
mercury	less than 10
TOTAL	less than 25

The potential emissions (as defined in 326 IAC 1-2-55) of VOC, CO, and NO<sub>x</sub> are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

**Actual Emissions**

The following table shows the actual emissions from the source. This information reflects the 1997 OAM emission data.

Pollutant	Actual Emissions (tons/year)
PM	17.42
PM-10	14.25
SO <sub>2</sub>	0.30
VOC	167.42
CO	23.61
NO <sub>x</sub>	63.12
HAPs	less than 25

**Limited Potential to Emit**

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

Process/facility	Limited Potential to Emit (tons/year)						
	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
2-2 and 2-3 tilting-melting-holding furnace	4.99	4.99	47	11	6.75	0.88	0.0054
2-4 tilting-melting-holding furnace	4.25	4.25	0.02	2.36	6.09	7.50	0.0031
2-5 tilting-melting-holding furnace	2.0	2.0	0.02	3.80	6.09	7.50	0.0031
2-6 tilting-melting-holding furnace	8.28	8.28	39.42	9.2	5.5	21.9	0.0034
#4 melting furnace	3.24	1.94	0.02	4.41	6.09	0.28	0.0033
#3 boiler	105.47	105.47	188.34	0.9	13.5	53.8	0.00
#6 boiler	122.64	122.64	219	1.1	15.6	62.6	0.00
<b>Total Emissions</b>	<b>250.87</b>	<b>239.57</b>	<b>495.82</b>	<b>32.77</b>	<b>59.62</b>	<b>154.46</b>	<b>0.018</b>

**County Attainment Status**

The source is located in Tippecanoe County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Tippecanoe County has been designated as attainment or unclassifiable for ozone.

### **Federal Rule Applicability**

- (a) Boilers #3 and #6 are subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Parts 60.40c - 60.48c, Subpart Dc) because they were modified after June 9, 1989 and each boiler has a heat input capacity greater than 10 million Btu per hour but equal to or less than 100 million Btu per hour.

Pursuant to this rule, the following conditions shall apply:

- (1) The opacity from each of the boilers shall not exceed twenty percent (20%).
- (2) The SO<sub>2</sub> emissions from each of the boilers shall not exceed 0.5 pounds per million Btu of heat input.

The two Pacific boilers and the Cleaver Brooks boiler are not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Parts 60.40c - 60.48c, Subpart Dc) because they were constructed prior to the applicability date of the rule and because they have capacities less than ten million British thermal units per hour. The Lochnivar boiler is not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Parts 60.40c - 60.48c, Subpart Dc) because it has a heat input capacity less than ten million British thermal units per hour.

- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR Part 63, applicable to this source.

The tube mill solvent dip tanks, the degreasers and the CRC dip tank are not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), Subpart T, because the solvents used do not contain any of the following halogenated solvents in concentrations greater than five percent by weight: methylene chloride, 1,1,1-trichloroethane, trichloroethylene, perchloroethylene, carbon tetrachloride, or chloroform.

### **State Rule Applicability - Entire Source**

#### 326 IAC 1-5-2 (Emergency Reduction Plans)

This source is required to submit an Emergency Reduction Plan because it has the potential to emit 100 tons per year or more of VOC. Pursuant to this rule, the following conditions shall apply:

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

within ninety (90) days after the date of issuance of this permit.

The ERP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAM, 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]

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This existing source is a major stationary source because it is one of the 28 listed source categories and at least one attainment regulated pollutant is emitted at a rate of 100 tons per year. This source has never been reviewed under the requirements of PSD.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

- (a) Visible emissions shall not exceed an average of forty percent (40%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,
- (b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

**State Rule Applicability - the #2-2 natural gas-fired tilting-melting-holding furnace, constructed in 1994; and the #2-3 natural gas-fired tilting-melting-holding furnace, constructed in 1994**

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

Pursuant to this rule and CP157-2316 issued April 9, 1992, the following conditions shall apply:

- (1) Pursuant to this rule and CP157-2316 issued April 9, 1992, the PM emissions 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 (Process Operations). Pursuant to 326 IAC 6-3-2 (Process Operations), the PM emissions from each of the natural gas-fired tilting-melting-holding furnaces #2-2 and #2-3 shall not exceed 13.61 pounds per hour when operating at a process weight rate of 6.0 tons per hour each. This limit is greater than the PSD limit, therefore, the PSD limit applies.

The pounds per hour limitation pursuant to 326 IAC 6-3-2 (Process Operations) was calculated with the following equation:

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

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

- (2) The melting furnaces #10 and #8 shall not be operated and melting furnace #7 shall cease operation upon start up of melting furnaces #2-2 and #2-3.

Note: These furnaces are not listed as active units in this permit.

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

Agreed Order A-3659, issued April 15, 1997

Pursuant to Agreed Order A-3659, issued April 15, 1997 the following conditions shall apply:

- (1) The furnaces shall be skimmed after alloying if skim is over approximately one (1) inch thick and covers more than fifty (50) percent of the bath.
- (2) The furnaces shall be skimmed before a heat stir if the skim is over approximately one (1) inch thick and covers more than fifty (50) percent of the bath.
- (3) The work practices stated in (1) and (2) above shall be incorporated into the plant standard operating practice manual as environmental air quality requirements.
- (4) The work practices stated in (1) and (2) above shall be reviewed with the respondent's appropriate operating personnel on an annual basis.

Agreed Order A-3121, issued July 1, 1997

Pursuant to A-3121, issued July 1, 1997 the following conditions shall apply:

- (1) When it is deemed necessary to add salt flux to ingot furnace #2-3, only salt flux in the solid briquette form shall be used.
- (2) ALCOA may perform additional stack testing to demonstrate compliance using the granular flux method.
- (3) The OAM 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.
- (4) ALCOA must demonstrate that compliance with the permit conditions will be maintained using granular flux.
- (5) When granular flux is used, notification shall be made to the OAM within fourteen (14) working days.

326 IAC 8-1-6 (Best Available Control Technology (BACT))

The furnaces #2-2 and #2-3 have potential VOC emissions less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 (BACT) do not apply. No other 326 IAC 8 rules apply.

**State Rule Applicability - the #2-4 natural gas-fired tilting-melting-holding furnace, constructed in 1991; and the #2-5 natural gas-fired tilting-melting-holding furnace, constructed in 1988**

326 IAC 6-3-2 (Process Operations)

Pursuant to this rule, the PM emissions from each of the natural gas-fired tilting-melting-holding furnaces #2-4 and #2-5 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 limitation was calculated with the following equation:

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

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

Based on calculations made, the furnace is in compliance with this requirement.

326 IAC 8-1-6 (Best Available Control Technology (BACT))

The furnaces #2-4 and #2-5 have potential VOC emissions less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 (BACT) do not apply. No other 326 IAC 8 rules apply.

Agreed Order A-3659, issued April 15, 1997

Pursuant to Agreed Order A-3659, issued April 15, 1997 the following conditions shall apply:

- (1) The furnaces shall be skimmed after alloying if skim is over approximately one (1) inch thick and covers more than fifty (50) percent of the bath.
- (2) The furnaces shall be skimmed before a heat stir if the skim is over approximately one (1) inch thick and covers more than fifty (50) percent of the bath.
- (3) The work practices stated in (1) and (2) above shall be incorporated into the plant standard operating practice manual as environmental air quality requirements.
- (4) The work practices stated in (1) and (2) above shall be reviewed with the respondent's appropriate operating personnel on an annual basis.

**State Rule Applicability - the #2-6 natural gas-fired tilting-melting-holding furnace, constructed in 1995**

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

Pursuant to this rule and CP157-4219 issued June 12, 1995, the following conditions shall apply:

- (1) The PM emissions from the tilting-melting-holding furnaces #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 (Process Operations). Pursuant to 326 IAC 6-3-2 (Process Operations), the PM emissions from the natural gas-fired tilting-melting-holding furnaces #2-6 shall not exceed 18.63 pounds per hour when operating at a process weight rate of 9.58 tons per hour each. This limit is greater than the PSD limit, therefore, the PSD limit applies.

The pounds per hour limitation pursuant to 326 IAC 6-3-2 (Process Operations) was calculated with the following equation:

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

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

- (2) The NO<sub>x</sub> emissions from the tilting-melting-holding furnaces #2-6 shall not exceed 5.0 pounds per hour.
- (3) The SO<sub>2</sub> emissions from the tilting-melting-holding furnaces #2-6 shall not exceed 9.0 pounds per hour.
- (4) The charge shall consist of only clean pig, clean slabs, clean purchased scrap, or clean process scrap and chips. The charge shall contain a maximum of twenty percent (20%) material with possible process lubricant coating.
- (5) Only chunk style flux shall be used in the furnace.
- (6) Records shall be kept of the weight of all materials added to the furnace.
- (7) The melting furnaces #9, holding furnace #61, and holding furnace #92 shall cease operation upon start up of melting furnace #2-6.

Note: These furnaces are not listed as active units in this permit.

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

Agreed Order A-3659, issued April 15, 1997

Pursuant to Agreed Order A-3659, issued April 15, 1997 the following conditions shall apply:

- (1) The furnace shall be skimmed after alloying if skim is over approximately one (1) inch thick and covers more than fifty (50) percent of the bath.
- (2) The furnace shall be skimmed before a heat stir if the skim is over approximately one (1) inch thick and covers more than fifty (50) percent of the bath.
- (3) The work practices stated in (1) and (2) above shall be incorporated into the plant standard operating practice manual as environmental air quality requirements.
- (4) The work practices stated in (1) and (2) above shall be reviewed with the respondent's appropriate operating personnel on an annual basis.

**State Rule Applicability - the #4 natural gas-fired melting furnace, constructed in 1980**

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

Pursuant to this rule and OP 79-06-91-0415 issued May 4, 1988, the furnace shall melt only clean pig, clean slab, clean purchased scrap, clean process scrap, or clean chips. Therefore, the requirements of 326 IAC 2-2 (PSD) will not apply.

326 IAC 6-3-2 (Process Operations)

Pursuant to this rule, the PM emissions from the #4 natural gas-fired melting furnace shall not exceed 13.62 pounds per hour when operating at a process weight rate of 6.0 tons per hour.

The pounds per hour limitation was calculated with the following equation:

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

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

Based on calculations made, the furnace is in compliance with this requirement.

326 IAC 8-1-6 (Best Available Control Technology (BACT))

The furnace has potential VOC emissions less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 (BACT) do not apply.

Agreed Order A-3659, issued April 15, 1997

Pursuant to Agreed Order A-3659, issued April 15, 1997 the following conditions shall apply:

- (1) The furnace shall be skimmed after alloying if skim is over approximately one (1) inch thick and covers more than fifty (50) percent of the bath.
- (2) The furnace shall be skimmed before a heat stir if the skim is over approximately one (1) inch thick and covers more than fifty (50) percent of the bath.
- (3) The work practices stated in (1) and (2) above shall be incorporated into the plant standard operating practice manual as environmental air quality requirements.
- (4) The work practices stated in (1) and (2) above shall be reviewed with the respondent's appropriate operating personnel on an annual basis.

**State Rule Applicability - two (2) tube mill solvent dip tanks, constructed in the 1940's; a tank farm, and several open top degreasers, constructed in the 1940's**

326 IAC 8-1-6 (Best Available Control Technology (BACT))

These facilities are not subject to 326 IAC 8-1-6 (BACT) because they were constructed prior to January 1, 1980. No other 326 IAC 8 rules apply.

326 IAC 8-3 (Organic Solvent Degreasing Operations)

These facilities are not subject to 326 IAC 8-3 (Organic Solvent Degreasing Operations) because they were constructed prior to January 1, 1980 and are located in Tippecanoe County.

**State Rule Applicability - natural gas and distillate oil-fired boiler #3, constructed in 1992 and modified in 1995; and natural gas and distillate oil-fired boiler #6, constructed in 1957 and modified in 1995**

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

Pursuant to this rule and CP157-4078 issued February 10, 1995, the following conditions shall apply:

- (1) The natural gas-fired furnaces #7 and #8 shall be removed from service.
- (2) The coal-fired boiler #5 shall remain rendered inoperable.

Note: Boilers #5, #7, and #8 are not listed as active units in this permit.

- (3) Boiler #6 shall not be reconverted to coal-fired use.
- (4) The sulfur content of the fuel oil used in boilers #3 and #6 shall not exceed 0.5 weight percent. Compliance with this condition will also satisfy the requirements of 326 IAC 7-1.1 and 326 IAC 12 (40 CFR Parts 60.40c - 60.48c, Subpart Dc).

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

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)

Pursuant to this rule and CP157-4078 issued February 10, 1995, the PM emissions from the boilers #3 and #6 shall not exceed 0.28 pound per million Btu of heat input. This limitation is based on the following equation:

$$Pt = 1.09 / (Q^{0.26})$$

Where:

Pt = pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.

Q = total source maximum operating capacity rating in million Btu per hour (MMBTU/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's operation permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

Based on calculation made, the boilers are in compliance with this limit.

326 IAC 7-1.1 ( Sulfur Dioxide Emission Limitations)

The boilers #3 and #6 are subject to this rule because when combusting fuel oil, the potential to emit SO<sub>2</sub> is greater than 25 tons per year and 10 pounds per hour. Pursuant to this rule, when combusting number 2 fuel oil, the SO<sub>2</sub> emissions from boiler #3 and #6 shall not exceed 0.5 pound per million Btu of heat input.

326 IAC 7-2-1 (Sulfur Dioxide Compliance Reporting)

Pursuant to this rule and CP157-4078 issued February 10, 1995, a quarterly report shall be submitted including the average sulfur content, heat content, the sulfur dioxide emission rate in pounds per million Btu, and the fuel oil consumptions. Fuel sampling and analysis data shall be collected pursuant to the procedures specified in 326 IAC 3-7-4 for oil combustion.

**State Rule Applicability - sand blasting operations, constructed in 1960**

326 IAC 6-3-2 (Process Operations)

Pursuant to this rule, the PM emissions from the sand blasting operations shall be limited by the following:

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

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

**State Rule Applicability - sawing in the carpenter shop, constructed in 1960**

326 IAC 6-3-2 (Process Operations)

Pursuant to this rule, the PM emissions from the sawing in the carpenter shop shall be limited by the following:

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

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

The cyclones shall be in operation at all times the sawing in the carpenter shop is in operation, in order to comply with this limit.

**State Rule Applicability - three (3) Protectsol 512 clear coating applicators, constructed in 1997**

326 IAC 8-2-9 (Miscellaneous Metal Coating)

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) and Registration CP 157-8509 issued on June 17, 1997, the volatile organic compound (VOC) content of coating delivered to the applicators at the Protectsol 512 clear coating applicators shall be limited to 4.3 pounds of VOCs per gallon of coating less water, for clear coatings.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Based on the MSDS submitted by the source and calculations made, the spray booth is in compliance with this requirement.

326 IAC 6-3-2 (Process Operations)

Pursuant to this rule the PM from the three (3) Protectsol 512 clear coating applicators shall not exceed the pound per hour emission rate established as E in the following formula:

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

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

**State Rule Applicability - the "622" filter boxes for transferring metal from each tilting-melting-holding furnace and #41 holding furnace to it's designated casting pit(s)**

326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) from each individual filter box shall be limited by the following:

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

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

**State Rule Applicability - the Lochnivar boiler, constructed in 1995**

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)

Pursuant to this rule the PM emissions from the Lochnivar boiler shall not exceed 0.28 pound per million Btu of heat input. This limitation is based on the following equation:

$$Pt = 1.09 / (Q^{0.26})$$

Where:

Pt = pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.

Q = total source maximum operating capacity rating in million Btu per hour (MMBTU/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's operation permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

Based on calculation made, the boiler is in compliance with this limit.

**State Rule Applicability - the clever brooks boiler, constructed in 1975; the pacific boiler #1, constructed in 1940; and the pacific boiler #2, constructed in 1940**

326 IAC 6-2-3 (Particulate Emission Limitations for Sources of Indirect Heating)

Pursuant to this rule, the PM emissions from the pacific boiler #1, and the pacific boiler #2 shall not exceed 0.8 pound per million Btu of heat input. Pursuant to this rule, the PM emissions from the clever brooks boiler shall not exceed 0.6 pound per million Btu of heat input. These limitations are based on the following equation:

$$Pt = \frac{C \times a \times h}{76.5 \times Q^{0.75} \times N^{0.25}}$$

where C = Maximum ground level concentration with respect to distance from the point source at the "critical" wind speed for level terrain. This shall equal 50 micrograms per cubic meter for a period not to exceed a sixty (60) minute time period.

Pt = Pounds of particulate matter emitted per million Btu heat input (lb/MMBtu).

- Q = Total source maximum operating capacity rating in million Btu per hour of heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's operation permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.
- N = Number of stacks in fuel burning operation.
- a = Plume rise factor which is used to make allowance for less than theoretical plume rise. The value 0.67 shall be used for Q less than or equal to 1,000 MMBtu/hr heat input. The value 0.8 shall be used for Q greater than 1,000 MMBtu/hr heat input.
- h = Stack height in feet. If a number of stacks of different heights exist, the average stack height to represent "N" stacks shall be calculated by weighing each stack height with its particulate matter emissions rate.

Based on calculations made, the boilers are in compliance with this requirement.

**State Rule Applicability - the north skimming cooling enclosure; the south skimming cooling enclosure; the log sawing and lathe operation; the box shop sawdust collector; and the babbit melting furnace**

326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) from each of the insignificant processes listed above shall be limited by the following:

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

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

**State Rule Applicability - the paint shop**

326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) from the paint shop shall be limited by the following:

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

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

326 IAC 8-2-9 (Miscellaneous Metal Coating)

The requirements 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) do not apply to the paint shop because the potential emissions are less than 25 tons per year and the actual emissions are less than 15 pounds per day.

**State Rule Applicability - #41 holding furnace**

Agreed Order A-3659, issued April 15, 1997

Pursuant to Agreed Order A-3659, issued April 15, 1997 the following conditions shall apply:

- (1) The furnace shall be skimmed after alloying if skim is over approximately one (1) inch thick and covers more than fifty (50) percent of the bath.
- (2) The furnace shall be skimmed before a heat stir if the skim is over approximately one (1) inch thick and covers more than fifty (50) percent of the bath.
- (3) The work practices stated in (1) and (2) above shall be incorporated into the plant standard operating practice manual as environmental air quality requirements.
- (4) The work practices stated in (1) and (2) above shall be reviewed with the respondent's appropriate operating personnel on an annual basis.

**Compliance Requirements**

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

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

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

**Compliance Monitoring - the #2-2 natural gas-fired tilting-melting-holding furnace, constructed in 1994; and the #2-3 natural gas-fired tilting-melting-holding furnace, constructed in 1994**

The furnace has applicable compliance monitoring conditions as specified below:

- (1) Daily visible emissions notations of the furnaces #2-2 and #2-3 stack exhausts shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.
- (2) During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform PM testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.

These compliance monitoring conditions are necessary in order to show compliance with 326 IAC 6-3-2 (Process Operations), 326 IAC 5-1 (Opacity) and in order to show that 326 IAC 2-2 (PSD) is not applicable.

**Compliance Monitoring - the #2-4 natural gas-fired tilting-melting-holding furnace, constructed in 1988 and the #2-5 natural gas-fired tilting-melting-holding furnace, constructed in 1988**

The furnace has applicable compliance monitoring conditions as specified below:

- (1) Daily visible emissions notations of the furnaces #2-4 and #2-5 stack exhausts shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

These compliance monitoring conditions are necessary in order to show compliance with 326 IAC 6-3-2 (Process Operations), 326 IAC 5-1 (Opacity).

**Compliance Monitoring - the #2-6 natural gas-fired tilting-melting-holding furnace, constructed in 1995**

The furnace has applicable compliance monitoring conditions as specified below:

- (1) Daily visible emissions notations of the furnace stack exhaust shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.
- (2) During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform PM, SO<sub>2</sub>, and NO<sub>x</sub> testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.
- (3) Records shall be kept of the weight of materials added to the furnace.

These compliance monitoring conditions are necessary in order to show compliance with 326 IAC 6-3-2 (Process Operations), 326 IAC 5-1 (Opacity) and in order to show that 326 IAC 2-2 (PSD) is not applicable.

**Compliance Monitoring - the #4 natural gas-fired melting furnace, constructed in 1980**

The furnace has applicable compliance monitoring conditions as specified below:

- (1) Daily visible emissions notations of the furnace stack exhaust shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

These compliance monitoring conditions are necessary in order to show compliance with 326 IAC 6-3-2 (Process Operations), 326 IAC 5-1 (Opacity).

**Compliance Monitoring - natural gas and distillate oil-fired boiler #3; and natural gas and distillate oil-fired boiler #6**

The boilers have applicable compliance monitoring conditions as specified below:

- (1) Pursuant to this rule and CP157-4078 issued February 10, 1995, a quarterly report shall be submitted including the average sulfur content, heat content, the sulfur dioxide emission rate in pounds per million Btu, and the fuel oil consumptions. Fuel sampling and analysis data shall be collected pursuant to the procedures specified in 326 IAC 3-7-4 for oil combustion.

- (2) When combusting fuel oil, daily visible emissions notations of the boilers #3 and #6 stack exhausts shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

These monitoring conditions are necessary to ensure compliance with 326 IAC 6-2 and 326 IAC 5-1 and to meet the requirements of 326 IAC 7-2.

#### **Compliance Monitoring - the carpenter shop, controlled by two cyclones**

The cyclone unit 102 controlling the sawing in the carpenter shop has applicable compliance monitoring conditions as specified below:

- (1) Daily visible emissions notations of the cyclone stack exhaust shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### **Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.

#### **Conclusion**

The operation of this secondary aluminum production facility shall be subject to the conditions of the attached proposed Part 70 Permit No. T157-7101-00001.

## Indiana Department of Environmental Management Office of Air Management

### Addendum to the Technical Support Document for Part 70 Operating Permit

**Source Name:** Aluminum Company of America - Lafayette Operation  
**Source Location:** 3131 Main Street, Lafayette, Indiana 47903  
**County:** Tippecanoe  
**SIC Code:** 3341 and 3354  
**Operation Permit No.:** T157-7101-00001  
**Permit Reviewer:** Nisha Sizemore

On August 17, 1998, the Office of Air Management (OAM) had a notice published in the Journal & Courier, Lafayette, Indiana, stating that Aluminum Company of America - Lafayette Operation had applied for a Part 70 Operating Permit to operate a secondary aluminum production facility. The notice also stated that OAM proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review, the OAM has decided to make the following changes to the permit.

- (1) In the proposed permit Condition D.3.1 required that SO<sub>2</sub> emissions from furnace #2-6 not exceed 9.0 pounds per hour. This condition was originally part of construction permit CP 157-4219 issued June 12, 1995. For lack of better data, when calculating potential SO<sub>2</sub> emissions from the furnace, the OAM used an SO<sub>2</sub> emission factor for melting aluminum scrap, even though ALCOA only melts clean aluminum. At the time the condition was placed in the construction permit, it was determined through emissions calculations that the potential SO<sub>2</sub> emissions from the furnace would be greater than the PSD significance levels; therefore an emission limit would be necessary in order to render the requirements of PSD not applicable to the furnace. However, since the issuance of this permit, ALCOA has performed stack testing for SO<sub>2</sub> emissions from the #2-6 furnace. The results of the stack test showed that SO<sub>2</sub> emissions from the furnace were significantly lower than originally estimated and that the emissions could not exceed the PSD significance levels, even if the furnace were operated 8760 hours per year. As a result, the OAM has determined that the SO<sub>2</sub> emission limit for this furnace is not necessary. Therefore, the SO<sub>2</sub> emission limit for the #2-6 furnace and the requirement to stack test the #2-6 furnace for SO<sub>2</sub> emissions have been deleted from the permit. The PM and NO<sub>x</sub> emission limits remain in the permit as does the requirement to stack test the furnace for PM and NO<sub>x</sub> emissions.
- (2) IDEM now believes that the Credible Evidence condition is not necessary and has removed it from the permit. The issues regarding credible evidence can be adequately addressed during a showing of compliance or noncompliance. Indiana's statutes, and the rules adopted under their authority, govern the admissibility of evidence in any proceeding. Indiana law contains no provisions that limit the use of any credible evidence and an explicit statement is not required in the permit.

~~B.28 Credible Evidence [326 IAC 2-7-5(3)][62 Federal Register 8313][326 IAC 2-7-6]~~

~~Notwithstanding the conditions of this permit that state specific methods that may be used to assess compliance or noncompliance with applicable requirements, other credible evidence may be used to demonstrate compliance or non-compliance.~~

- (3) Condition C.3 has been reworded to reflect recent rule changes. Changes to the condition are shown as follows (deletions are shown as strikeouts and additions are shown in bold):

**C.3 Opacity [326 IAC 5-1]**

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

- (a) ~~Visible emissions~~ **Opacity** shall not exceed an average of forty percent (40%) ~~opacity~~ in ~~twenty four (24) consecutive readings~~ **any one (1) six (6) minute averaging period**, as determined in 326 IAC 5-1-4.
- (b) ~~Visible emissions~~ **Opacity** shall not exceed sixty percent (60%) ~~opacity~~ 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 overlapping integrated averages for a continuous opacity monitor** in a six (6) hour period.

On September 21, 1998 Aluminum Company of America - Lafayette Operation (ALCOA) submitted comments on the proposed Part 70 permit. The summary of the comments is as follows:

## Section A

### Comment 1

Please change the responsible official name to Charles R. Straface.

### Response 1

The requested change has been made.

### Comment 2

- (a) The 2-6 natural gas-fired tilting-melting-holding furnace exhausts to stack 94-8, not stack 18-8.
- (b) The #1 natural gas-fired horizontal heat treat furnace exhausts to stack 68-112, not 68-12.
- (c) The #3 natural gas and distillate oil-fired boiler exhausts to stack 91-1.
- (d) The #6 natural gas and distillate oil-fired boiler exhausts to stack 64-1. The description for the #6 boiler should also include that it was modified in 1992, as well as in 1995.
- (e) The carpenter shop sawdust collector #2 (emission unit 102) discharges to stack 72-57. The description should also state that this is controlled by the #2 sawdust collector.
- (f) The carpenter shop sawdust collector #1 (emission unit 101) discharges to stack 73-57. The description should also state that this is controlled by the #1 sawdust collector.
- (g) The heating capacity of all of the "622" filter boxes should be 0.80 million Btu per hour as opposed to the 0.625 million Btu per hour as shown.
- (h) The Lochnivar boiler (emission unit 90) is located in the Tube Mill, not the Ingot Department as shown.
- (i) The Cleaver Brooks Boiler is emission unit 93, not 71 as indicated. Also, the Cleaver Brooks boiler is located in the Tube Mill, not Plant Miscellaneous as shown.
- (j) The pacific boiler #1 is emission unit 103, not 83 as indicated.

- (k) The pacific boiler #2 is emission unit 104, not 84 as indicated.
- (l) The north and south skim cooling enclosures should be listed under the Ingot Department, not Plant Miscellaneous.
- (m) The log sawing and lathe operation should be listed under the Ingot Department, not Plant Miscellaneous.
- (n) The #41 holding furnace exhausts to stack 6-8, not 17-8 as indicated. Also the ingot department is listed twice under the insignificant activities heading. All ingot department sources should be consolidated under one ingot department heading.

## **Response #2**

All of the changes suggested in this comment have been made in both Section A and in the appropriate Sections D of the permit.

## **Section C**

### **Comment #3**

Regarding Condition C.8 titled Stack Height, the language should be changed to address compliance with stack height provisions for all newly constructed stacks. It would be burdensome to expect stack heights that were installed prior to the adoption of 326 IAC 1-7 to be modified after the fact.

### **Response #3**

Condition C.8 titled Stack Height is not meant to state all of the requirements of rule 326 IAC 1-7 (Stack Height Provisions). It only states that 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. These applicability provisions are correctly stated and are taken directly from 326 IAC 1-7-1 (Stack Height Provisions: Applicability). If these applicability requirements are met, the Permittee must refer to the rule to determine what standards the stack must meet. In 326 IAC 1-7-3, the rule goes on to explain the different requirements for stacks which were constructed at different dates. All stacks meeting the applicability requirements of the rule must comply with the rule. Some stacks may be exempt from the requirements based on the date of construction or based on the actual emissions from the stack. In general, if the stacks were previously permitted, then the OAM will assume that the stacks must have satisfied the requirements of 326 IAC 1-7-3(a). The condition is correctly written and no changes have been made to the permit as a result of this comment.

### **Comment #4**

Regarding Condition C.22 titled General Reporting Requirements, ALCOA requests that item (a) be modified to require annual compliance monitoring reporting as opposed to quarterly reporting.

### **Response #4**

The purpose of the compliance monitoring report is so that the OAM can make sure that the source is implementing all of the required compliance monitoring and that there are not excessive deviations from the normal operating conditions of the equipment, such as excessive "abnormal" visible emissions notations. The OAM believes that quarterly compliance monitoring reporting is a reasonable requirement. Also, 326 IAC 2-7-5(3)(C)(i) requires reports of any required monitoring be submitted at least every six (6) months. There have been no changes to the permit as a result of this comment.

## Sections D

### Comment #5

ALCOA requests that Preventive Maintenance Plans not be required for any of the furnaces or boilers listed in Sections D.1 through D.5. Emissions from these units are uncontrolled. Also, for the boilers, the conditions for fuel used, sulfur content, and opacity are related to compliance.

ALCOA requests that Preventive Maintenance Plans not be required for the sawing operations located in the carpenter shop listed in Condition D.7.2. The sawing operations located in the carpenter shop are controlled by two cyclones.

### Response #5

These emission units (boilers and furnaces) and especially the burners need to be maintained to operate in the most efficient manner possible. Improper operations, dirty equipment, and/or malfunctioning equipment can all lead to excess emissions. For these reasons, the OAM believes that a Preventive Maintenance Plan is necessary for the furnaces and the boilers.

The OAM believes that the cyclones controlling the sawing operations must operate properly in order for the sawing operations to comply with the requirements of 326 IAC 6-3-2 (Process Operations). The Preventive Maintenance Plan ensures that sufficient maintenance is performed on the cyclones as necessary so that they will operate properly.

IDEM has worked with members of the Clean Air Act Advisory Council's Permit Committee, Indiana Manufacturing Association, Indiana Chamber of Commerce and individual applicants regarding the Preventive Maintenance Plan, the Compliance Monitoring Plan and the Compliance Response Plan. IDEM has clarified the preventive maintenance requirements by working with sources on draft language over the past two years. The plans are fully supported by rules promulgated by the Air Pollution Control Board. The plans are the mechanism each Permittee will use to verify continuous compliance with its permit and the applicable rules and will form the basis for each Permittee's Annual Compliance Certification. Each Permittee's ability to verify continuous compliance with its air pollution control requirements is a central goal of the Title V and FESOP permit programs.

The regulatory authority for and the essential elements of a compliance monitoring plan were clarified in IDEM's Compliance Monitoring Guidance, in May 1996. IDEM originally placed all the preventive maintenance requirements in the permit section titled "Preventive Maintenance Plan." Under that section the Permittee's Preventive Maintenance Plan(PMP) had to set out requirements for the inspection and maintenance of equipment both on a routine basis and in response to monitoring. Routine maintenance was a set schedule of inspections and maintenance of the equipment. The second was inspection and maintenance in response to monitoring that showed that the equipment was not operating in its normal range. This monitoring would indicate that maintenance was required to prevent the exceedance of an emission limit or other permit requirement. The maintenance plan was to set out the "corrective actions" that the Permittee would take in the event an inspection indicated an "out of specification situation", and also set out the time frame for taking the corrective action. In addition, the PMP had to included a schedule for devising additional corrective actions for out of compliance situations that the source had not predicted in the PMP. All these plans, actions and schedules were part of the Preventive Maintenance Plan, with the purpose of maintaining the Permittee's equipment so that an exceedance of an emission limit or violation of other permit requirements could be prevented.

After issuing the first draft Title V permits on public notice in July of 1997, IDEM received comments from members of the regulated community regarding many of the draft permit terms, including the PMP requirements. One suggestion was that the corrective action and related schedule requirements be removed from the PMP requirement and placed into some other requirement in the permit. This suggestion was based, in some part, on the desire that a Permittee's maintenance staff handle the routine maintenance of the equipment, and a Permittee's environmental compliance and engineering staff handle the compliance monitoring and steps taken in reaction to an indication that the facility required maintenance to prevent an environmental problem.

IDEM carefully considered this suggestion and agreed to separate the "corrective actions" and related schedule requirements from the PMP. These requirements were placed into a separate requirement, which IDEM named the Compliance Response Plan (CRP). In response to another comment, IDEM changed the name of the "corrective actions" to "response steps." That is how the present CRP requirements became separated from the PMP requirement, and acquired their distinctive nomenclature.

Other comments sought clarification on whether the failure to follow the PMP was violation of the permit. The concern was that a Permittee's PMP might call for the Permittee to have, for example, three "widget" replacement parts in inventory. If one widget was taken from inventory for use in maintenance, then the Permittee might be in violation of the PMP, since there were no longer three widgets in inventory, as required by the PMP. Comments also expressed a view that if a maintenance employee was unexpectedly delayed in making the inspection under the PMP's schedule, for example by the employee's sudden illness, another permit violation could occur, even though the equipment was still functioning properly.

IDEM considered the comments and revised the PMP requirement so that if the Permittee fails to follow its PMP, a permit violation will occur only if the lack of proper maintenance causes or contributes to a violation of any limitation on emissions or potential to emit. This was also the second basis for separating the compliance maintenance response steps from the PMP and placing them in the Compliance Response Plan (CRP). Unlike the PMP, the Permittee must conduct the required monitoring and take any response steps as set out in the CRP (unless otherwise excused) or a permit violation will occur.

The Compliance Monitoring Plan is made up of the PMP, the CRP, the compliance monitoring and compliance determination requirements in section D of the permit, and the record keeping and reporting requirements in sections C and D. IDEM decided to list all these requirements under this new name, the Compliance Monitoring Plan (CMP), to distinguish them from the PMP requirements. The section D provisions set out which facilities must comply with the CMP requirement. The authority for the CMP provisions is found at 326 IAC 2-7-5(1), 2-7-5(3), 2-7-5(13), 2-7-6(1), 1-6-3 and 1-6-5.

Most Permittees already have a plan for conducting preventive maintenance for the emission units and control devices. It is simply a good business practice to have identified the specific personnel whose job duties include inspecting, maintaining and repairing the emission units. The emission unit equipment and the emission control equipment may be covered by a written recommendation from the manufacturer set out schedules for the regular inspection and maintenance of the equipment. The Permittee will usually have adopted an inspection and maintenance schedule that works for its particular equipment and process in order to keep equipment downtime to a minimum and achieve environmental compliance. The manufacturer may also have indicated, or the Permittee may know from experience, what replacement parts should be kept on hand. The Permittee may already keep sufficient spare parts on hand so that if a replacement is needed, it can be quickly installed, without a delay in the Permittee's business activities and without an environmental violation. For the most part, the PMP can be created by combining present business practices and equipment manufacturer guidance into one document, the Preventive Maintenance Plan (PMP).

The Permittee has 90 days to prepare, maintain and implement the PMP. IDEM is not going to draft the PMP. Permittees know their processes and equipment extremely well and are in the best position to draft the PMP. IDEM's air inspectors and permit staff will be available to assist the Permittee with any questions about the PMP. IDEM may request a copy of the PMP to review and approve.

The Preventive Maintenance Plan requirement must be included in every applicable Title V permit pursuant to 326 IAC 2-7-5(13) and for each FESOP permit pursuant to 326 IAC 2-8-4(9). Both of those rules refer back to the Preventive Maintenance Plan requirement as described in 326 IAC 1-6-3. This Preventive Maintenance Plan rule sets out the requirements for:

- (1) Identification of the individuals responsible for inspecting, maintaining and repairing the emission control equipment (326 IAC 1-6-3(a)(1)),
- (2) The description of the items or conditions in the facility that will be inspected and the inspection schedule for said items or conditions (326 IAC 1-6-3(a)(2)), and
- (3) The identification and quantification of the replacement parts for the facility which the Permittee will maintain in inventory for quick replacement (326 IAC 1-6-3(a)(2)).

It is clear from the structure of the wording in 326 IAC 1-6-3 that the PMP requirement affects the entirety of the applicable facilities. Only 326 IAC 1-6-3(a)(1) is limited, in that it requires identification of the personnel in charge of only the emission control equipment, and not any other facility equipment. The commissioner may require changes in the maintenance plan to reduce excessive malfunctions in any control device or combustion or process equipment under 326 IAC 1-6-5.

The CRP requirement of response steps and schedule requirements are another example of documenting procedures most Permittees already have developed in the course of good business practices and the prevention of environmental problems. Equipment will often arrive with the manufacturer's trouble shooting guide. It will specify the steps to take when the equipment is not functioning correctly. The steps may involve some initial checking of the system to locate the exact cause, and other steps to place the system back into proper working order. Using the trouble shooting guide and the Permittee's own experience with the equipment, the steps are taken in order and as scheduled until the problem is fixed.

A Permittee will likely already have a procedure to follow when an unforeseen problem situation occurs. The procedure may list the staff to contact in order to select a course of action, or other step, before the equipment problem creates an environmental violation or interrupts the Permittee's business process.

The Compliance Monitoring Plan (CMP) is consistent with IDEM's Compliance Monitoring Guidance released in May of 1996. The guidance discusses corrective action plans setting out the steps to take when compliance monitoring shows an out of range reading (Guidance, page 13). Some of the terminology has changed, as a result of comments from regulated sources, but the requirements in the permit do not conflict with the guidance. There are no changes in the conditions requiring Preventive Maintenance Plans.

#### **Comment #6**

ALCOA requests that the requirement to perform visible emissions notations and the associated record keeping requirements be eliminated as a permit condition for all of the furnaces and the boilers. These emission units have never experienced opacity excursions and have never been cited by IDEM for opacity. ALCOA believes that these requirements are excessive, unnecessary, and unduly places a financial burden for compliance where it is not warranted.

## Response #6

Upon further review the OAM believes that visible emissions notations would not be necessary for the furnaces since they are melting clean aluminum, which doesn't have the dirt and corrosion that causes the particulates like steel and iron. Also this plant specifically uses clean aluminum from their plant or from other manufactures, no ore is used. Instead of requiring visible emissions notations for each of the furnaces, the OAM has added a condition requiring that the furnace charge consist of only clean aluminum and a condition requiring visual inspections of the materials added to the furnace each time the furnaces are charged. Conditions stating these requirements were already included in Section D.3 of the draft permit. Similar conditions will now be included in each Section D for each of the furnaces. These conditions are as follows:

### D.1.6 Raw Materials [326 IAC 2-7-6(1),(6)]

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The charge shall consist of only clean alloys, clean pig, clean slabs, clean purchased scrap, or clean process scrap and chips. The charge shall contain a maximum of twenty percent (20%) material with possible process lubricant coating.

and

### D.1.7 Visual Inspections

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To ensure compliance with Condition D.1.6, the Permittee shall conduct visual inspections of the materials added to the furnace each time that materials are added to the furnace.

The record keeping requirement for documenting the results of the visible emissions notations has been deleted. The source will be required to keep records of the results of the visual inspections of the furnace charge.

### D.1.8 Record Keeping Requirements

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- (a) To document compliance with Condition D.1.7, the Permittee shall maintain records of the visible inspections of the materials added to the furnace each time that materials are added to the furnace.

Condition D.5.8 only requires that visible emission notations be conducted for the boilers whenever the boilers are combusting fuel oil instead of natural gas. The requirement of performing daily visible emission notations when a boilers are burning fuel oil is used to indicate that the source is in compliance with 326 IAC 5-1 and 326 IAC 6, and to indicate to the source whether or not a problem exists in the operation. The requirement is not based on the presence of control equipment. The natural gas certification is used in lieu of daily visible emissions notations, for when the boilers are burning natural gas. No changes have been made to the wording of Condition D.5.8 Visible Emissions Notations or the record keeping requirements related to this condition in D.5.9(b).

## Comment #7

Regarding Condition D.4.1, the language should be changed to be exactly as contained in the permit language for Furnace 2-6 in Condition D.3.1(c) except that the use of clean alloys should also be allowed as part of the charge.

## Response #7

The OAM agrees. The exact wording of the type of raw materials to be added to the furnace used in Condition D.3.1(c) will be used in each Section D for each of the furnaces, with the exception that clean alloys will also be allowed as part of the charge for each furnace. See response #6 for exact wording of the entire condition.

### **Comment #8**

Condition D.5.1(a) requires the furnaces #7 and #8 be removed from service. Condition 5.1(b) requires that boiler #5 remain rendered inoperable. Both furnaces #7 and #8, and boiler #5 have been removed from ALCOA and no longer exist. Therefore, it is not necessary to include these requirements in the permit.

### **Response #8**

If the furnaces and the boiler were still located at the plant but were simply not operated, it would be necessary to have such conditions in order to clarify that ALCOA may not operate these facilities; however, since the furnaces and the boiler no longer even exist, the OAM agrees that these conditions are unnecessary. These requirements have been removed from the permit.

### **Comment #9**

Condition D.5.10 requires a quarterly report of the fuel oil usage, sulfur content and heat content of the fuel oil, and SO<sub>2</sub> emissions from the boilers in order to document compliance with 326 IAC 7-1.1-1 and 40 CFR 60, Subpart Dc. ALCOA requests that this reporting requirement be changed from quarterly to annually. The reason for this request is that the boiler house is operated only during the heating season (October through May) and fuel oil is only sporadically used during this period. Annual reporting will provide IDEM with a more accurate and realistic evaluation of the sulfur dioxide requirements under this permit.

### **Response #9**

The condition requires the reports to be submitted only during any compliance period when fuel oil was combusted. If during a compliance period, fuel oil is not combusted, then only the natural gas fired boiler certification is required to be submitted. Therefore, reporting requirements are minimal during any compliance period when the boilers are not operating or are only combusting natural gas. There have been no changes to the reporting requirements as a result of this comment.

### **Comment #10**

ALCOA requests that the requirement to perform visible emissions notations and the associated record keeping requirements be eliminated as a permit condition for the sawing operations located in the carpenter shop. These emission units have never experienced opacity excursions and have never been cited by IDEM for opacity. ALCOA believes that these requirements are excessive, unnecessary, and unduly places a financial burden for compliance where it is not warranted.

### **Response #10**

The visible emission notations are used to indicate compliance with 326 IAC 5-1 and 326 IAC 6-3-2 (Process Operations), without the requirement to have a person on site trained in opacity measurement. This requirement is designed as a trigger that the source perform some corrective action on the facility if visible emissions are abnormal, to ensure continuous compliance with emission limitations. The OAM does not believe that performing visible emissions notations once per day is excessive, burdensome, or overly time-consuming. If, as stated in the comment, only "normal" visible emissions are ever observed, then time will not need to be spent implementing corrective actions. If abnormal visible emissions are observed, the source has the opportunity to implement corrective action such that an opacity violation can be avoided. There have been no changes to the permit as a result of this comment.

### **Comment #11**

In Condition D.8.4 IDEM is requesting extensive monthly documentation to verify compliance with Condition 8.1 which limits the VOC content of the coatings at 4.3 pounds of VOC per gallon of coating less water. ALCOA requests that this requirement be changed from monthly to annually for the following reasons:

- (1) Emissions from the Protectsol 512 units are insignificant under Title V.
- (2) The VOC content of the Protectsol 512 is fixed at 3.4 pounds per gallon because these are the properties of the product.

Monthly record keeping is overly burdensome and unnecessary. Protectsol 512 compliance reporting should be conducted on an annual basis since there will be no changes.

### **Response #11**

The OAM cannot allow only annual record keeping requirements for these units. The OAM needs to be able to determine compliance at any time, not only at the end of the year. However, the OAM does agree that some of the records required by the condition are unnecessary in such cases where only compliant coatings are used. Therefore, record keeping requirements in Condition D.8.4 have been changed such that if only compliant coatings are used during a month, only minimal records will be required. These are included in part (a) of the condition. If however; any noncompliant coatings are used during a month, more extensive records will be required. Both parts of the condition are necessary parts of the permit, since the OAM cannot anticipate when or if ALCOA may choose to use different coatings or add thinner to the coating used, which would change the VOC content of the coating(s) used. The revised condition is as follows:

#### **D.8.4 Record Keeping Requirements**

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**If all coatings applied in a single facility during a month are compliant coatings as applied pursuant to 326 IAC 8-2-9 and Condition D.8.1(a), then records shall be kept in accordance with parts (a) and (c) of this condition.**

**If any coatings applied in a facility during a month are noncompliant coatings as applied pursuant to 326 IAC 8-2-9 and Condition D.8.1(a), then records sufficient to demonstrate daily compliance shall be kept in accordance with parts (b) and (c) of this condition for each day that the noncompliant coating(s) were used.**

- (a) **To document compliance with Conditions D.8.1, the Permittee shall maintain records in accordance with (1) through (2) below. Records maintained for (1) through (2) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.8.1.**
  - (1) **The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.**

- (2) If any compliant coatings, pursuant to 326 IAC 8-2-9 and Condition D.8.1(a), applied in a facility during a month are thinned or are mixed with additives containing volatile organic compounds (VOC) ; then additional records for the affected facility (or facilities) shall be kept sufficient to document that all coatings were compliant as applied. These records shall be kept for the entire calendar month that the thinners or VOC containing additives were used.**
- ~~(a)~~**(b)** To document compliance with Conditions D.8.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.8.1 on a daily basis for each affected facility.
- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
  - (2) A log of the dates of use;
  - (3) The calculated daily volume-weighted average VOC content of the coatings used in each affected facility for each day;
  - (4) The cleanup solvent usage for each day;
- ~~(b)~~**(c)** All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## General Comments

### Comment #12

In addition to the insignificant sources identified in the Title V permit draft, there are a number of insignificant sources that are identified in the TSD and are not specifically identified or listed in the permit application.

### Response #12

Insignificant activities listed in Section A.3 of the permit are only those that are specifically regulated by state or federal rules. The TSD has a complete list of insignificant activities at the source. Those that were listed in the TSD and not in the permit, do not have specific rules that apply to them. There have been no changes resulting from this comment.

### Comment #13

On some of the forms included with the permit, the source zip code is incorrect. It should be 47905 and the mailing address zip code should be 47903-7500.

### Response #13

These corrections have been made.

**Comment #14**

ALCOA has submitted an application for a new Protectsol coating booth.

**Response #14**

The OAM received the application for the new Protectsol coating booth. Emissions from the new booth would require a registration. Instead of issuing a separate registration, the OAM simply incorporated the new booth into the Title V permit. Section A.3 has been changed to include this new emission unit. Section D.8 of the permit now includes conditions for the new coating booth, as well as the three existing coating booths. A separate registration is not necessary.