

**FEDERALLY ENFORCEABLE STATE  
OPERATING PERMIT (FESOP)  
OFFICE OF AIR MANAGEMENT**

**Bohn Aluminum Corporation  
6378 U.S. Highway 6 West  
Butler, Indiana 46721**

(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 2-8 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.: F033-7938-00016	
Issued by: Paul Dubenetzky, Branch Chief 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 2-8-3(b)]

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The Permittee owns and operates a stationary secondary aluminum foundry and die casting operation plant.

Responsible Official: Leonard J. Roselle  
Source Address: 6378 U.S. Highway 6 West, Butler, Indiana 46721  
Mailing Address: P.O. Box 80, Butler, Indiana 46721  
SIC Code: 3365,3363,3341  
County Location: DeKalb  
County Status: Attainment for all criteria pollutants  
Source Status: Federally Enforceable State Operating Permit (FESOP)  
Minor Source, under PSD  
Minor Source, Section 112 of the Clean Air Act

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

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

- (a) One (1) reverberatory melt furnace identified as A1 with a maximum melt capacity of 0.6 tons of aluminum per hour, equipped with two (2) natural gas fired burners rated at 2.96 million (MM) British thermal units (Btu) per hour total, exhausting through one (1) stack identified as E-1.
- (b) One (1) reverberatory melt furnace identified as A2 with a maximum melt capacity of 0.8 tons of aluminum per hour, equipped with two (2) natural gas fired burners rated at 6.7 MMBtu per hour total, exhausting through one (1) stack identified as E-2.
- (c) One (1) reverberatory melt furnace identified as A3 with a maximum melt capacity of 1.25 tons of aluminum per hour, equipped with two (2) natural gas fired burners rated at 7.52 MMBtu per hour total, exhausting through one (1) stack identified as E-3.
- (d) One (1) reverberatory melt furnace identified as A4 with a maximum melt capacity of 1.25 tons of aluminum per hour, equipped with three (3) natural gas fired burners rated at 10.05 MMBtu per hour total, exhausting through one (1) stack identified as E-4.
- (e) One (1) reverberatory melt furnace identified as A5 with a maximum melt capacity of 1.25 tons of aluminum per hour, equipped with two (2) natural gas fired burners rated at 6.7 MMBtu per hour total, exhausting through one (1) stack identified as E-5.
- (f) One (1) reverberatory melt furnace identified as A6 with a maximum melt capacity of 1.25 tons of aluminum per hour, equipped with three (3) natural gas fired burners rated at 10.05 MMBtu per hour total, exhausting through one (1) stack identified as E-6.

- (g) One (1) reverberatory melt furnace identified as A7 with a maximum melt capacity of 1.0 ton of aluminum per hour, equipped with two (2) natural gas fired burners rated at 5.2 MMBtu per hour total, exhausting through one (1) stack identified as E-7.
- (h) One (1) reverberatory melt furnace identified as A8 with a maximum melt capacity of 0.25 tons of aluminum per hour, equipped with one (1) natural gas fired burner rated at 2.5 MMBtu per hour, exhausting through one (1) stack identified as E-8.
- (i) One (1) reverberatory melt furnace identified as A9 with a maximum melt capacity of 2.5 tons of aluminum per hour, equipped with four (4) natural gas fired burners rated at 10.6 MMBtu per hour total, exhausting through one (1) stack identified as E-9.
- (j) One (1) reverberatory melt furnace identified as A10 with a maximum melt capacity of 2.5 tons of aluminum per hour, equipped with six (6) natural gas fired burners rated at 9.0 MMBtu per hour total, exhausting through one (1) stack identified as E-10.
- (k) One (1) reverberatory melt furnace identified as A11 with a maximum melt capacity of 0.9 tons of aluminum per hour, equipped with six (6) natural gas fired burners rated at 15.9 MMBtu per hour total, exhausting through one (1) stack identified as E-11.
- (l) One (1) metal fluxing process with a maximum throughput of 65 pounds of powdered flux per hour, exhausting through eleven (11) stacks identified as E-1 through E-11.

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

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, as follows:
  - (1) Thirty (30) natural gas-fired crucible holding furnaces, individually identified as HF1 through HF24 and HF28 through HF33, with a total combined maximum heat input rating of 21.9 MMBtu per hour;
  - (2) Four (4) natural gas-fired reverberatory holding furnaces, individually identified as S1, S2, S3, and S4, each with a maximum heat input rating of 5.8 MMBtu per hour; and
  - (3) Two (2) natural gas-fired heat treat furnaces, individually identified as HT1 and HT2, each with a maximum heat input rating of 0.3 MMBTU per hour.
- (b) Combustion source flame safety purging pump.
- (c) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (d) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (e) Noncontact cooling tower systems with forced and induced draft cooling tower system not regulated under a NESHAP.
- (f) Quenching operations used with heat treating processes.

- (g) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (h) Heat exchanger cleaning and repair.
- (i) Process vessel degassing and cleaning to prepare for internal repairs.
- (j) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection trim material recovery device such as a bag filter or cyclone, including two (2) sawing and trimming operations individually identified as C-1 and C-2, with a combined maximum processing capacity of 2.0 tons aluminum per hour, with each operation utilizing one (1) cyclone for particulate matter control and one (1) exhaust stack respectively identified as E12 and E13.
- (k) Paved and unpaved roads and parking lots with public access.
- (l) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (m) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- (n) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38 degrees Celsius).
- (o) A laboratory as defined in 326 IAC 2-7-1(21)(D).
- (p) Aluminum pouring and casting operations rated at 13.55 tons of melted aluminum per hour.
- (q) Ten (10) electric crucible holding furnaces, individually identified as HF34 through HF43.

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

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

#### A.5 Prior Permit Conditions

- (a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.
- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, 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.

## **SECTION B GENERAL CONDITIONS**

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

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

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

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, 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 2-8-4(2)]**

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 2-8-6]**

- (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 2-8-9] [326 IAC 2-8-3(h)]**

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

### **B.6 Severability [326 IAC 2-8-4(4)]**

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

### **B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]**

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

### **B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)]**

- (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, 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.

Such confidentiality claim shall meet the requirements of 40 CFR 2, Subpart B (when submitting to U.S. EPA) and 326 IAC 17 (when submitting to IDEM, OAM).

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

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

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(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; and
  - (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.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(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.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. 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 2-8-4(3); and
  - (5) 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 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).

B.13 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (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.14 Emergency Provisions [326 IAC 2-8-12]**

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- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes 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 No.: 1-800-451-6027 (ask for Office of Air Management, Compliance Section) or,  
Telephone No.: 317-233-5674 (ask for Compliance Section)  
Facsimile No.: 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 2-8-4(3)(C)(ii) and must contain the following:

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

The notification which shall be submitted by the Permittee does not require 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 2-8-3(c)(6) 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 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

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

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), 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.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination**

~~[326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]~~

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)]
- (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 2-8-8(a)]
- (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 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, 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 2-8-8(c)]

**B.17 Permit Renewal [326 IAC 2-8-3(h)]**

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM, and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(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, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
- (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 until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]  
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, 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 needed to process the application.

B.18 Permit Amendment or Modification [326 IAC 2-8-10] [326 IAC 2-8-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11 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 the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-8-11(b)(2)]

Notwithstanding 326 IAC 2-8-11(b)(1)(D)(i) and 326 IAC 2-8-11(c)(1), minor permit modification procedures may be used for modifications of this permit involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches to the extent that such minor permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated by U.S. EPA.

**B.20 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-8-15(b)]**

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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 2-8-15(a) and the following additional condition:

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.21 Operational Flexibility [326 IAC 2-8-15]**

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(a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without 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 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

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

(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 2-8-15(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 2-8-15(c).
- (d) Alternative Operating Scenarios [326 IAC 2-8-15(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 2-8-4(7). 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.22 Construction Permit Requirement [326 IAC 2]

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.23 Inspection and Entry [326 IAC 2-8-5(a)(2)]

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 FESOP 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 2-8-5(a)(4)]
  - (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.24 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-8-10]

Pursuant to 326 IAC 2-1-6 and 2-8-10:

- (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 current 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 2-8-10. 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.25 Annual Fee Payment [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

- (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.

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

#### C.1 Overall Source Limit [326 IAC 2-8]

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

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant from the entire source shall be limited to less than one-hundred (100) tons per three hundred sixty-five (365) consecutive day period. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per three hundred sixty-five (365) consecutive day period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per three hundred sixty-five (365) consecutive day period.

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

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

#### 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 (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 in 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.

#### 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 2-8-5(a)(4)]

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 unit vented to the control equipment is in operation.

C.8 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 2-8-4(3)]**

#### **C.9 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 2-8-4] [326 IAC 2-8-5(a)(1)]**

### **C.10 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(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 the compliance schedule an additional ninety (90) days provided the Permittee notify:

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.11 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, or 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

## **Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]**

### **C.12 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]**

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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.13 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5][326 IAC 1-6]**

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- (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.14 **Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4]**  
**[326 IAC 2-8-5]**

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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 2-8-4(3)]**

C.15 **Monitoring Data Availability [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]**

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

- (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, for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner (or local agency) makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or local agency 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.17 General Reporting Requirements [326 IAC 2-8-4(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.18 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 Descriptions [326 IAC 2-8-4(10)]:

- (a) One (1) reverberatory melt furnace identified as A1 with a maximum melt capacity of 0.6 tons of aluminum per hour, equipped with two (2) natural gas fired burners rated at 2.96 million (MM) British thermal units (Btu) per hour total, exhausting through one (1) stack identified as E-1.
- (b) One (1) reverberatory melt furnace identified as A2 with a maximum melt capacity of 0.8 tons of aluminum per hour, equipped with two (2) natural gas fired burners rated at 6.7 MMBtu per hour total, exhausting through one (1) stack identified as E-2.
- (c) One (1) reverberatory melt furnace identified as A3 with a maximum melt capacity of 1.25 tons of aluminum per hour, equipped with two (2) natural gas fired burners rated at 7.52 MMBtu per hour total, exhausting through one (1) stack identified as E-3.
- (d) One (1) reverberatory melt furnace identified as A4 with a maximum melt capacity of 1.25 tons of aluminum per hour, equipped with three (3) natural gas fired burners rated at 10.05 MMBtu per hour total, exhausting through one (1) stack identified as E-4.
- (e) One (1) reverberatory melt furnace identified as A5 with a maximum melt capacity of 1.25 tons of aluminum per hour, equipped with two (2) natural gas fired burners rated at 6.7 MMBtu per hour total, exhausting through one (1) stack identified as E-5.
- (f) One (1) reverberatory melt furnace identified as A6 with a maximum melt capacity of 1.25 tons of aluminum per hour, equipped with three (3) natural gas fired burners rated at 10.05 MMBtu per hour total, exhausting through one (1) stack identified as E-6.
- (g) One (1) reverberatory melt furnace identified as A7 with a maximum melt capacity of 1.0 ton of aluminum per hour, equipped with two (2) natural gas fired burners rated at 5.2 MMBtu per hour total, exhausting through one (1) stack identified as E-7.
- (h) One (1) reverberatory melt furnace identified as A8 with a maximum melt capacity of 0.25 tons of aluminum per hour, equipped with one (1) natural gas fired burner rated at 2.5 MMBtu per hour, exhausting through one (1) stack identified as E-8.
- (i) One (1) reverberatory melt furnace identified as A9 with a maximum melt capacity of 2.5 tons of aluminum per hour, equipped with four (4) natural gas fired burners rated at 10.6 MMBtu per hour total, exhausting through one (1) stack identified as E-9.
- (j) One (1) reverberatory melt furnace identified as A10 with a maximum melt capacity of 2.5 tons of aluminum per hour, equipped with six (6) natural gas fired burners rated at 9.0 MMBtu per hour total, exhausting through one (1) stack identified as E-10.
- (k) One (1) reverberatory melt furnace identified as A11 with a maximum melt capacity of 0.9 tons of aluminum per hour, equipped with six (6) natural gas fired burners rated at 15.9 MMBtu per hour total, exhausting through one (1) stack identified as E-11.
- (l) One (1) metal fluxing process with a maximum throughput of 65 pounds of powdered flux per hour, exhausting through eleven (11) stacks identified as E-1 through E-11.

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

#### D.1.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

The source shall limit production in reverberatory melt furnaces A1 through A11 and at the metal fluxing process as follows:

- (a) Reverberatory melt furnaces A1 through A11:
  - (1) The total amount of aluminum produced is limited to 56,273 tons per twelve (12) consecutive month period. This production limit is required to limit potential to emit:
    - (i) PM to 84.4 tons per twelve (12) consecutive month period, based on 3.0 pounds of PM emitted per ton of metal produced; and
    - (ii) PM10 to 73.2 tons per twelve (12) consecutive month period, based on 2.6 pounds of PM emitted per ton of metal produced.
  - (2) The total amount of aluminum produced each month shall not exceed the difference between the annual limit minus the sum of actual metal produced during the previous eleven (11) months.
- (b) Metal fluxing process:
  - (1) The total flux used for aluminum refining is limited to 144,424 pounds per twelve (12) consecutive month period. This production limit is required to limit potential to emit PM and PM10 to 4.4 tons per twelve (12) consecutive month period each, based on 0.0614 pounds PM and PM10 emitted per pound of flux used.
  - (2) The total amount of flux used each month shall not exceed the difference between the annual limit minus the sum of actual flux used during the previous eleven (11) months.
- (c) These usage limits are required to limit the source-wide potential to emit PM and PM10 each to less than 100 tons per twelve (12) consecutive month period. Compliance with this condition makes 326 IAC 2-2 and 40 CFR 52.21 not applicable. Compliance with this condition will also satisfy 326 IAC 2-8-4 and, therefore, the Part 70 rules (326 IAC 2-7) do not apply.

#### D.1.2 Hazardous Air Pollutants (HAPs)

Hazardous air pollutants input to the metal fluxing process shall be limited as follows:

- (a) The total hexachloroethane input usage to the fluxing process is limited to 56,237 pounds per twelve (12) consecutive month period. This usage limit is required to limit potential to emit a single HAP (as hydrochloric acid) to less than 10 tons per twelve (12) consecutive month period, based on 0.3343 pounds hydrochloric acid emitted per pound of hexachloroethane used.
- (b) The total amount of hexachloroethane used each month shall not exceed the difference between the annual limit minus the sum of actual hexachloroethane used during the previous eleven (11) months.
- (c) The amount of the combination of HAPs used shall be limited to less than 25 tons per twelve (12) consecutive month period. Compliance with (a) and (b) of this condition shall satisfy this requirement.

Therefore, the requirements of 326 IAC 2-7 do not apply.

#### D.1.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]

- (a) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the facilities shall be limited as follows:

- (1) The facility identified as A1 shall not exceed 2.91 pounds per hour when operating at a process weight rate of 0.6 tons per hour. This is equivalent to 4.85 pounds of PM per ton of metal melted.
  - (2) The facility identified as A2 shall not exceed 3.53 pounds per hour when operating at a process weight rate of 0.8 tons per hour. This is equivalent to 4.41 pounds of PM per ton of metal melted.
  - (3) The facility identified as A3 shall not exceed 4.76 pounds per hour when operating at a process weight rate of 1.25 tons per hour. This is equivalent to 3.81 pounds of PM per ton of metal melted.
  - (4) The facility identified as A4 shall not exceed 4.76 pounds per hour when operating at a process weight rate of 1.25 tons per hour. This is equivalent to 3.81 pounds of PM per ton of metal melted.
  - (5) The facility identified as A5 shall not exceed 4.76 pounds per hour when operating at a process weight rate of 1.25 tons per hour. This is equivalent to 3.81 pounds of PM per ton of metal melted.
  - (6) The facility identified as A6 shall not exceed 4.76 pounds per hour when operating at a process weight rate of 1.25 tons per hour. This is equivalent to 3.81 pounds of PM per ton of metal melted.
  - (7) The facility identified as A7 shall not exceed 4.10 pounds per hour when operating at a process weight rate of 1.00 tons per hour. This is equivalent to 4.10 pounds of PM per ton of metal melted.
  - (8) The facility identified as A8 shall not exceed 1.62 pounds per hour when operating at a process weight rate of 0.25 tons per hour. This is equivalent to 6.48 pounds of PM per ton of metal melted.
  - (9) The facility identified as A9 shall not exceed 7.58 pounds per hour when operating at a process weight rate of 2.50 tons per hour. This is equivalent to 3.03 pounds of PM per ton of metal melted.
  - (10) The facility identified as A10 shall not exceed 7.58 pounds per hour when operating at a process weight rate of 2.50 tons per hour. This is equivalent to 3.03 pounds of PM per ton of metal melted.
  - (11) The facility identified as A11 shall not exceed 3.82 pounds per hour when operating at a process weight rate of 0.90 tons per hour. This is equivalent to 4.24 pounds of PM per ton of metal melted.
  - (12) The metal fluxing process shall not exceed 23.54 pounds per hour when operating at a process weight rate of 13.58 tons per hour. This is equivalent to 1.73 pounds of PM per ton of metal plus flux processed.
- (b) The pounds per hour allowable PM emission rates were calculated with the following 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.1.4 Testing Requirements [326 IAC 2-8-5(a)(1),(4)]

---

- (a) During the period within 24 to 30 months after issuance of this permit, the Permittee shall perform testing on reverberatory furnaces A2, one (1) of furnaces A3 through A6, and one (1) of furnaces A9 and A10 as follows:
- (1) During metal melting the Permittee shall perform PM and PM-10 testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10, or other methods as approved by the Commissioner, to demonstrate compliance with Condition D.1.1(a). PM-10 includes filterable and condensible PM-10.
  - (2) During metal fluxing the Permittee shall perform PM and PM-10 testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10, or other methods as approved by the Commissioner, to demonstrate compliance with Condition D.1.1(b). PM-10 includes filterable and condensible PM-10.
  - (3) During metal fluxing the Permittee shall perform HAP testing for hydrochloric acid utilizing Methods 18 and 26A (40 CFR 60, Appendix A), or other methods as approved by the Commissioner, to demonstrate compliance with Condition D.1.2(a).
- (b) Testing shall be repeated at least once every five years from the date of this valid compliance demonstration.
- (c) 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 2-8-4] [326 IAC 2-8-5(a)(1)]

### D.1.5 Visible Emissions Notations

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- (a) Daily visible emission notations of the reverberatory melt furnaces' exhaust stacks (E-1 through E-11) shall be performed during normal daylight operations when metal melting and fluxing is occurring and 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 2-8-4(3)] [326 IAC 2-8-16]**

### **D.1.6 Record Keeping Requirements**

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- (a) To document compliance with Condition D.1.1 the Permittee shall maintain records in accordance with (1) and (2) below.
  - (1) Calendar dates covered in the compliance determination period; and
  - (2) Actual total aluminum produced and flux used since last compliance determination period and values calculated per limitation.
- (b) To document compliance with Condition D.1.2 the Permittee shall maintain records in accordance with (1) and (2) below.
  - (1) Calendar dates covered in the compliance determination period; and
  - (2) Actual total hexachloroethane input usage since last compliance determination period and value calculated per limitation.
- (c) To document compliance with Condition D.1.5 the Permittee shall maintain records of daily visible emission notations of the reverberatory melt furnace exhaust stacks.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

### **D.1.7 Reporting Requirements**

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A quarterly summary of the information to document compliance with Conditions D.1.1 and D.1.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the calendar quarter being reported.

## SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Descriptions [326 IAC 2-8-4(10)]: The following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (b) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection trim material recovery device such as a bag filter or cyclone, including two (2) sawing and trimming operations individually identified as C-1 and C-2, with a combined maximum processing capacity of 2.0 tons aluminum per hour, with each operation utilizing one (1) cyclone for particulate matter control and one (1) exhaust stack respectively identified as E12 and E13.
- (c) Aluminum pouring and casting operations rated at 13.55 tons of melted aluminum per hour.

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

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

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- (a) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the sawing and trimming operations identified as C-1 and C-2 shall not exceed 7.58 pounds per hour when operating at a process weight rate of 2.50 tons per hour. This is equivalent to 3.03 pounds of PM per ton of metal processed.
- (b) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the pouring and casting operation shall not exceed 23.51 pounds per hour when operating at a process weight rate of 13.55 tons per hour. This is equivalent to 1.74 pounds of PM per ton of metal processed.
- (c) The pounds per hour allowable PM emission rates were 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 Volatile Organic Compounds (VOC)

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Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;

- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

### **Compliance Determination Requirements**

#### **D.2.3 Testing Requirements [326 IAC 2-8-5(a)(1),(4)]**

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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 particulate matter limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

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

There are no applicable compliance monitoring conditions for these facilities.

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

There are no specific record keeping or reporting requirements for these facilities.

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

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

Source Name: Bohn Aluminum Corp.  
Source Address: 6378 U.S. Highway 6 West, Butler, IN 46721  
Mailing Address: 6378 U.S. Highway 6 West, Butler, IN 46721  
FESOP No.: F033-7938-00016

**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: 317-233-6865**

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

Source Name: Bohn Aluminum Corp.  
Source Address: 6378 U.S. Highway 6 West, Butler, IN 46721  
Mailing Address: 6378 U.S. Highway 6 West, Butler, IN 46721  
FESOP No.: F033-7938-00016

**This form consists of 2 pages**

**Page 1 of 2**

Check either No. 1 or No.2
<b>9 1.</b> This is an emergency as defined in 326 IAC 2-7-1(12) CThe 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 CThe 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 2.</b> This is a deviation, reportable per 326 IAC 2-7-5(3)(c) CThe 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**

**FESOP Quarterly Report**

Source Name: Bohn Aluminum Corp.  
Source Address: 6378 U.S. Highway 6 West, Butler, IN 46721  
Mailing Address: 6378 U.S. Highway 6 West, Butler, IN 46721  
FESOP No.: F033-7938-00016  
Facility: Total aluminum produced in reverberatory melt furnaces A1 through A11  
Parameter: PM and PM-10  
Limit: The total amount of aluminum produced is limited to 56,273 tons per twelve (12) consecutive month period. The total amount of aluminum produced each month shall not exceed the difference between the annual limit minus the sum of actual metal produced during the previous eleven (11) months.

YEAR: \_\_\_\_\_

Month	Total Aluminum Produced This Month (Tons)	Total Aluminum Produced Last 12 Months (Tons)

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

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

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

**FESOP Quarterly Report**

Source Name: Bohn Aluminum Corp.  
Source Address: 6378 U.S. Highway 6 West, Butler, IN 46721  
Mailing Address: 6378 U.S. Highway 6 West, Butler, IN 46721  
FESOP No.: F033-7938-00016  
Facility: Total flux used for aluminum refining  
Parameter: PM and PM-10  
Limit: The total flux used for aluminum refining is limited to 144,424 pounds per twelve (12) consecutive month period. The total amount of flux used each month shall not exceed the difference between the annual limit minus the sum of actual metal produced during the previous eleven (11) months.

YEAR: \_\_\_\_\_

Month	Total Flux Used This Month (Tons)	Total Flux Used Last 12 Months (Tons)

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: \_\_\_\_\_

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

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

**FESOP Quarterly Report**

Source Name: Bohn Aluminum Corp.  
Source Address: 6378 U.S. Highway 6 West, Butler, IN 46721  
Mailing Address: 6378 U.S. Highway 6 West, Butler, IN 46721  
FESOP No.: F033-7938-00016  
Facility: Total hexachloroethane input usage to the fluxing process  
Parameter: Hexachloroethane  
Limit: The total hexachloroethane input usage to the fluxing process is limited to 56,237 pounds per twelve (12) consecutive month period. The total amount of hexachloroethane used each month shall not exceed the difference between the annual limit minus the sum of actual hexachloroethane used during the previous eleven (11) months.

YEAR: \_\_\_\_\_

Month	Total Hexachloroethane Input Usage to Flux This Month (Tons)	Total Hexachloroethane Input Usage to Flux Last 12 Months (Tons)

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

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

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

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
 QUARTERLY COMPLIANCE MONITORING REPORT**

Source Name: Bohn Aluminum Corp.  
 Source Address: 6378 U.S. Highway 6 West, Butler, IN 46721  
 Mailing Address: 6378 U.S. Highway 6 West, Butler, IN 46721  
 FESOP No.: F033-7938-00016

**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.**

Compliance Monitoring Requirement (e.g. Permit Condition D.1.5)	Number of Deviations	Date of each Deviations

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 Federally Enforceable State Operating Permit (FESOP)

### Source Background And Description

**Source Name:** Bohn Aluminum Corporation  
**Source Location:** 6378 U.S. Highway 6 West, Butler, Indiana 46721  
**County:** DeKalb  
**SIC Code:** 3365,3363,3341  
**Operation Permit No.:** F033-7938-00016  
**Permit Reviewer:** Michael Hirtler / EVP

The Office of Air Management (OAM) has reviewed a Federally Enforceable State Operating Permit (FESOP) application from Bohn Aluminum Corporation relating to the operation of a secondary aluminum foundry and die casting plant.

### Permitted Emission Units and Pollution Control Equipment

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

- (a) One (1) reverberatory melt furnace identified as A1 with a maximum melt capacity of 0.6 tons of aluminum per hour, equipped with two (2) natural gas fired burners rated at 2.96 million (MM) British thermal units (Btu) per hour total, exhausting through one (1) stack identified as E-1.
- (b) One (1) reverberatory melt furnace identified as A2 with a maximum melt capacity of 0.8 tons of aluminum per hour, equipped with two (2) natural gas fired burners rated at 6.7 MMBtu per hour total, exhausting through one (1) stack identified as E-2.
- (c) One (1) reverberatory melt furnace identified as A3 with a maximum melt capacity of 1.25 tons of aluminum per hour, equipped with two (2) natural gas fired burners rated at 7.52 MMBtu per hour total, exhausting through one (1) stack identified as E-3.
- (d) One (1) reverberatory melt furnace identified as A4 with a maximum melt capacity of 1.25 tons of aluminum per hour, equipped with three (3) natural gas fired burners rated at 10.05 MMBtu per hour total, exhausting through one (1) stack identified as E-4.
- (e) One (1) reverberatory melt furnace identified as A5 with a maximum melt capacity of 1.25 tons of aluminum per hour, equipped with two (2) natural gas fired burners rated at 6.7 MMBtu per hour total, exhausting through one (1) stack identified as E-5.
- (f) One (1) reverberatory melt furnace identified as A6 with a maximum melt capacity of 1.25 tons of aluminum per hour, equipped with three (3) natural gas fired burners rated at 10.05 MMBtu per hour total, exhausting through one (1) stack identified as E-6.

- (g) One (1) reverberatory melt furnace identified as A7 with a maximum melt capacity of 1.0 ton of aluminum per hour, equipped with two (2) natural gas fired burners rated at 5.2 MMBtu per hour total, exhausting through one (1) stack identified as E-7.
- (h) One (1) reverberatory melt furnace identified as A8 with a maximum melt capacity of 0.25 tons of aluminum per hour, equipped with one (1) natural gas fired burner rated at 2.5 MMBtu per hour, exhausting through one (1) stack identified as E-8.
- (i) One (1) reverberatory melt furnace identified as A9 with a maximum melt capacity of 2.5 tons of aluminum per hour, equipped with four (4) natural gas fired burners rated at 10.6 MMBtu per hour total, exhausting through one (1) stack identified as E-9.
- (j) One (1) reverberatory melt furnace identified as A10 with a maximum melt capacity of 2.5 tons of aluminum per hour, equipped with six (6) natural gas fired burners rated at 9.0 MMBtu per hour total, exhausting through one (1) stack identified as E-10.
- (k) One (1) reverberatory melt furnace identified as A11 with a maximum melt capacity of 0.9 tons of aluminum per hour, equipped with six (6) natural gas fired burners rated at 15.9 MMBtu per hour total, exhausting through one (1) stack identified as E-11.
- (l) Two (2) sawing and trimming operations individually identified as C-1 and C-2, with a combined maximum processing capacity of 2.0 tons aluminum castings per hour, with each operation utilizing one (1) cyclone for particulate matter control and one (1) exhaust stack respectively identified as E12 and E13 (note: these two permitted operations are also considered as insignificant activities).
- (m) One (1) metal fluxing process with a maximum throughput of 65 pounds of powdered flux per hour, exhausting through eleven (11) stacks identified as E-1 through E-11.

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

There are no unpermitted facilities operating at this source during this review process.

### **Emission Units and Pollution Control Equipment Under Enhanced New Source Review (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):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, as follows:
  - (1) Thirty (30) natural gas-fired crucible holding furnaces, individually identified as HF1 through HF24 and HF28 through HF33, with a total combined maximum heat input rating of 21.9 MMBtu per hour;
  - (2) Four (4) natural gas-fired reverberatory holding furnaces, individually identified as S1, S2, S3, and S4, each with a maximum heat input rating of 5.8 MMBtu per hour; and

- (3) Two (2) natural gas-fired heat treat furnaces, individually identified as HT1 and HT2, each with a maximum heat input rating of 0.3 MMBTU per hour.
- (b) Combustion source flame safety purging pump.
- (c) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (d) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (e) Noncontact cooling tower systems with forced and induced draft cooling tower system not regulated under a NESHAP.
- (f) Quenching operations used with heat treating processes.
- (g) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (h) Heat exchanger cleaning and repair.
- (i) Process vessel degassing and cleaning to prepare for internal repairs.
- (j) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection trim material recovery device such as a bag filter or cyclone, including two (2) sawing and trimming operations individually identified as C-1 and C-2, with a combined maximum processing capacity of 2.0 tons aluminum per hour, with each operation utilizing one (1) cyclone for particulate matter control and one (1) exhaust stack respectively identified as E12 and E13.
- (k) Paved and unpaved roads and parking lots with public access.
- (l) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (m) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- (n) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38 degrees Celsius).
- (o) A laboratory as defined in 326 IAC 2-7-1(21)(D).
- (p) Aluminum pouring and casting operations rated at 13.55 tons of melted aluminum per hour.
- (q) Ten (10) electric crucible holding furnaces, individually identified as HF34 through HF43.

## Existing Approvals

This source has been operating under the following approvals:

- (a) Registered Construction and Operation Status CP 033-3827-00016, issued on July 27, 1994.
- (b) Registered Construction and Operation Status CP 033-3019-00016, issued on August 6, 1993.
- (c) Operation Permit OP 17-05-92-0109, issued on May 19, 1989.

Equipment removed from source covered under Operation Permit OP 17-05-92-0109, issued May 18, 1989:

- (a) Hot dross processor rated at 2 tons per hour with particulate emissions controlled by baghouse.
- (b) Sand blaster with particulate emissions controlled by a baghouse.
- (c) Lost Foam casting process, the sand handling facilities and the sand cooler/classifier with particulate emissions controlled by a cyclone.
- (d) Gritblaster with baghouse collector.

FESOPs consolidate all applicable air pollution control requirements into one permit, inclusive of applicable operating conditions contained in any approval listed above. This FESOP includes provisions that ensure that compliance with these requirements can be determined.

## Enforcement Issue

There are no Enforcement actions pending.

## Recommendation

The staff recommends to the Commissioner that the FESOP 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 FESOP application for the purposes of this review was received on December 16, 1996. Additional information was received on November 17, 1997.

## Emissions Calculations

See Appendix A: Emissions Calculations for detailed calculations (five (5) pages).

## 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	244.2
PM-10	220.4
SO <sub>2</sub>	1.5
VOC	17.5
CO	11.3
NO <sub>x</sub>	54.5

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

See attached spreadsheets for detailed calculations (five (5) pages, Appendix A).

HAP	Potential Emissions (tons/year)
hydrochloric acid	48.7
hydrofluoric acid	2.5
hexachloroethane	0.1
TOTAL	51.3

See attached spreadsheets for detailed calculations (five (5) pages, Appendix A).

- (a) The potential emissions (as defined in the Indiana Rule) of PM/PM-10 are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential emissions (as defined in the Indiana Rule) of any single HAP are equal to or greater than ten (10) tons per year and the potential emissions (as defined in the Indiana Rule) of a combination HAPs are greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) This source, otherwise required to obtain a Title V permit, has agreed to accept a permit with federally enforceable limits that restrict its PTE to below the Title V emission levels. Therefore, this source will be issued a Federally Enforceable State Operating Permit (FESOP), pursuant to 326 IAC 2-8.
- (d) Fugitive Emissions  
Since this type of operation is one of the 28 listed source categories under 326 IAC 2-2, the fugitive particulate matter emissions are counted toward determination of PSD applicability.

## Limited Potential To Emit

- (a) The source has accepted a federally enforceable limit on potential to emit PM of less than 100 tons in any consecutive twelve (12) month period, consisting of:

- (i) 84.4 tons per year for limited aluminum production;
- (ii) 4.4 tons per year for limited flux usage;
- (iii) 6.4 tons per year for source-wide natural gas usage; and
- (iv) 3.7 tons per year for the remaining activities.

Total PM = 99 tons per year.

- (b) PM-10 emissions are limited to less than 100 tons in any consecutive 12 month period and are controlled at 87.8 tons per year, consisting of approximately 10.2 tons per year for the insignificant activities.
- (c) The source has accepted a limit on potential to emit of less than 10 tons in any consecutive twelve (12) month period for any single HAP and less than 25 tons in any consecutive 12 month period for any combination of HAPs.
- (d) The table below summarizes what the potential to emit is after issuance of the permit. The total potential to emit may not be equal to the limit stated in (a) through (c) because:
  - (1) There may be other applicable rules that contain limits that will keep the total potential to emit below the limit stated in (a) through (c); and
  - (2) A facility's maximum design capacity may keep the potential to emit below the limit stated in (a) through (c).

Process/Facility	Limited Potential to Emit (tons/year)							
	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	Single HAP	Total HAPs
Metal Melting	84.4	73.2	0.0	0.0	0.0	0.0	0.0	0.0
Metal Fluxing	4.4	4.4	0.0	1.5	0.0	0.0	9.4	10.2
Source-wide Natural Gas Combustion*	6.4	6.4	0.3	3.1	11.3	54.0	0.0	0.0
Pouring/Casting*	2.2	2.2	0.5	3.3	0.0	0.2	0.0	0.0
Saw/Trim Metal Castings*	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Emissions</b>	<b>99.0</b>	<b>87.8</b>	<b>0.8</b>	<b>7.9</b>	<b>11.3</b>	<b>54.2</b>	<b>9.4</b>	<b>10.2</b>

\* Insignificant activity.

### County Attainment Status

The source is located in DeKalb County.

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

- (a) Volatile organic compounds (VOC) and oxides of nitrogen 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. DeKalb County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) DeKalb County has been classified as attainment or unclassifiable for PM, PM-10, SO<sub>2</sub>, NO<sub>2</sub>, CO and lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions  
Since this type of operation is one of the 28 listed source categories under 326 IAC 2-2, the fugitive particulate matter emissions are counted toward determination of PSD applicability.

### Federal Rule Applicability

- (a) This source is not subject to the requirements of the New Source Performance Standard (NSPS), 326 IAC 12, (40 CFR 60.19, Subpart S, Primary Aluminum Reduction), because the source does not perform primary aluminum reduction as defined in 40 CFR 60.193. This source is a secondary aluminum foundry plant, therefore the requirements under 326 IAC 12, (40 CFR 60.19, Subpart S) do not apply.
- (b) There are currently no National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63, applicable to this source.

### State Rule Applicability - Entire Source

326 IAC 2-2 and 40 CFR 52.21 (Prevention of Significant Deterioration, PSD)

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) this secondary aluminum foundry and die casting operation is one of the 28 listed major source categories (secondary metal production). The following production limits shall limit source-wide PM and PM-10 emissions to the minor source threshold of less than 100 tons per year established for sources using a consecutive twelve (12) month compliance averaging time:

- (a) The total amount of aluminum produced at the source is limited to 56,273 tons per twelve (12) consecutive month period.

- (b) The total flux used for aluminum refining is limited to 144,424 pounds per twelve (12) consecutive month period.

Compliance with these production limits shall render the requirements under 326 IAC 2-2, and 40 CFR 52.21, not applicable to this source.

326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting), because it will limit annual PM10 emissions to less than the one hundred (100) tons per year rule applicability threshold for DeKalb County.

326 IAC 2-8-4 (FESOP)

Pursuant to this rule, the following limitations apply:

- (a) Aluminum production:
  - (1) The total amount of aluminum produced is limited to 56,273 tons per twelve (12) consecutive month period. This production limit is required to limit potential to emit:
    - (i) PM to 84.4 tons per twelve (12) consecutive month period, based on 3.0 pounds of PM emitted per ton of metal produced; and
    - (ii) PM10 to 73.2 tons per twelve (12) consecutive month period, based on 2.6 pounds of PM emitted per ton of metal produced.
  - (2) The total amount of aluminum produced each month shall not exceed the difference between the annual limit minus the sum of actual metal produced during the previous eleven (11) months.
- (b) Metal fluxing process:
  - (1) Flux usage:
    - (i) The total flux used for aluminum refining is limited to 144,424 pounds per twelve (12) consecutive month period. This production limit is required to limit potential to emit PM and PM10 to 4.4 tons per twelve (12) consecutive month period each, based on 0.0614 pounds PM and PM10 emitted per pound of flux used.
    - (ii) The total amount of flux used each month shall not exceed the difference between the annual limit minus the sum of actual flux used during the previous eleven (11) months.
  - (2) Hexachloroethane usage:
    - (i) The total hexachloroethane input usage to the fluxing process is limited to 56,237 pounds per twelve (12) consecutive month period. This usage limit is required to limit potential to emit a single HAP (as hydrochloric acid) to less than 10 tons per twelve (12) consecutive month period, based on 0.3343 pounds hydrochloric acid emitted per pound of hexachloroethane used.

- (ii) The total amount of hexachloroethane used each month shall not exceed the difference between the annual limit minus the sum of actual hexachloroethane used during the previous eleven (11) months.
  - (iii) Compliance with (2)(i) and (2)(ii) limit shall also limit combined HAP emissions to less than 25 tons per twelve (12) consecutive month period.
- (c) Compliance with (a) and (b) above shall:
- (1) Limit the source-wide potential to emit PM and PM10 each to less than 100 tons per twelve (12) consecutive month period. Compliance with these conditions satisfy 326 IAC 2-8-4 and, therefore, the Part 70 rules (326 IAC 2-7) do not apply. Compliance with these conditions will also make 326 IAC 2-2 and 40 CFR 52.21 (PSD) not applicable.
  - (2) Limit potential to emit a single HAP (as hydrochloric acid) to less than 10 tons per twelve (12) consecutive month period, based on 0.3343 pounds hydrochloric acid emitted per pound of hexachloroethane used, and the combination of HAPs to less than 25 tons per twelve (12) consecutive month period . Compliance with these conditions satisfy 326 IAC 2-8-4 and, therefore, the Part 70 rules (326 IAC 2-7) do not apply.

Detailed calculations are found in Appendix A (five (5) pages).

#### 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 - Individual Facilities**

##### 326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2 (Process Operations), particulate matter (PM) from reverberatory melting smelting, fluxing, pouring & casting, and sawing & trimming of die cast aluminum 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:

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

Each process operation will comply with the allowable emission limit of 326 IAC 6-3-2 as follows:

Process/Facility	326 IAC 6-3-2 Allowable Limit (pounds/hour)	Potential Controlled Emission Rate (pounds/hour)
Reverberatory melt furnace (A1)	2.91	2.58
Reverberatory melt furnace (A2)	3.53	3.44
Reverberatory melt furnace (A3)	4.76	4.75
Reverberatory melt furnace (A4)	4.76	4.75
Reverberatory melt furnace (A5)	4.76	4.75
Reverberatory melt furnace (A6)	4.76	4.75
Reverberatory melt furnace (A7)	4.10	4.10
Reverberatory melt furnace (A8)	1.62	1.08
Reverberatory melt furnace (A9)	7.58	7.50
Reverberatory melt furnace (A10)	7.58	7.50
Reverberatory melt furnace (A11)	3.82	3.78
Metal fluxing operation	23.54	3.99
Metal sawing/trimming operation	7.58	1.04
Metal pouring/casting operation	23.51	0.34

See page 4 of 5, TSD Appendix A, for allowable emission and compliance calculations from each process operation.

Source-wide particulate matter (PM) emissions shall be limited to less than 100 tons per twelve (12) consecutive month period such that the requirements of 326 IAC 2-2 (PSD) do not apply. While the individual allowable and potential PM emission rates shown above, when added together and extrapolated over a full year of source operation (i.e., 8,760 hours), suggest a source-wide emission rate in excess of 100 tons, compliance with the 56,273 ton and 144,424 ton per twelve (12) consecutive month period production limits for metal melting and flux usage, respectively, will result in compliance with the source-wide PM (and PM10) limit of less than 100 tons per twelve (12) consecutive month period (see page 3 of 5, TSD Appendix A). Therefore, the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-7 (Part 70) do not apply to the source.

**326 IAC 6-4 (Fugitive Dust Emissions)**

This source is subject to 326 IAC 6-4 for fugitive dust emissions. Pursuant to 326 IAC 6-4, fugitive dust shall not be visible crossing the boundary or property line of a source. Observances of visible emissions crossing property lines may be refuted by factual data expressed in 326 IAC 6-4-2(1), (2) or (3).

**326 IAC 8-1-6 (New Facilities; General VOC Reduction Requirements)**

This rule applies to facilities located anywhere in the state that were constructed on or after January 1, 1980, which have a PTE VOC at 25 tons per year or more, and which are not otherwise regulated by another provision of Article 8. No facility at this source has a PTE VOC at 25 tons per year or more. Therefore, 326 IAC 8-1-6 is not applicable to this source.

### 326 IAC 8-3-2 (Cold Cleaner Operation)

Cold cleaner degreasers (as an insignificant activity) installed at the source after January 1, 1980 are subject to the requirements of 326 IAC 8-3-2. The source will comply with these requirements as follows:

- (a) Equip the cleaner(s) with a cover;
- (b) Equip the cleaner(s) with a facility for draining cleaned parts;
- (c) Close the degreaser cover(s) whenever parts are not being handled in the cleaner(s);
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

### 326 IAC 8-6 (Organic Solvent Emission Limitations)

This rule applies to sources commencing operation after October 7, 1974 and prior to January 1, 1980, located anywhere in the state, with potential solvent VOC emissions of 100 tons per year or more, and not regulated by any other provision of Article 8. This source does not have potential solvent VOC emissions at, or in excess of 100 tons per year; therefore, this rule does not apply.

No other Article 8 rules apply to this source.

## Compliance Requirements

Permits issued under 326 IAC 2-8 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 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in permit Section D 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 in permit Section D. 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:

1. The reverberatory melt furnaces A1 through A11 and the metal fluxing process have applicable compliance monitoring conditions as specified below:

- (a) Production and usage limitations:
- (1) Aluminum production:
- (A) The total amount of aluminum produced is limited to 56,273 tons per twelve (12) consecutive month period. This production limit is required to limit potential to emit:
- (i) PM to 84.4 tons per twelve (12) consecutive month period, based on 3.0 pounds of PM emitted per ton of metal produced; and
- (ii) PM10 to 73.2 tons per twelve (12) consecutive month period, based on 2.6 pounds of PM emitted per ton of metal produced.
- (B) The total amount of aluminum produced each month shall not exceed the difference between the annual limit minus the sum of actual metal produced during the previous eleven (11) months.
- (2) Metal fluxing process:
- (A) Flux:
- (i) The total flux used for aluminum refining is limited to 144,424 pounds per twelve (12) consecutive month period. This production limit is required to limit potential to emit PM and PM10 to 4.4 tons per twelve (12) consecutive month period each, based on 0.0614 pounds PM and PM10 emitted per pound of flux used.
- (ii) The total amount of flux used each month shall not exceed the difference between the annual limit minus the sum of actual flux used during the previous eleven (11) months.
- (B) Hexachloroethane:
- (i) The total hexachloroethane input usage to the fluxing process is limited to 56,237 pounds per twelve (12) consecutive month period. This usage limit is required to limit potential to emit a single HAP (as hydrochloric acid) to less than 10 tons per twelve (12) consecutive month period, based on 0.3343 pounds hydrochloric acid emitted per pound of hexachloroethane used.
- (ii) The total amount of hexachloroethane used each month shall not exceed the difference between the annual limit minus the sum of actual hexachloroethane used during the previous eleven (11) months.
- (iii) The amount of the combination of HAPs used shall be limited to less than 25 tons per twelve (12) consecutive month period. Compliance with (B)(i) and (B)(ii) of this condition shall satisfy this requirement.

- (3) Quarterly reports shall be submitted to OAM Compliance Section. These reports shall include the amount of aluminum produced, flux used, and hexachloroethane input to the flux, during each year, rolled on a monthly basis.
- (b) Testing Requirements:
- (1) During the period within 24 to 30 months after issuance of this permit, the Permittee shall perform testing on reverberatory furnaces A2, one (1) of furnaces A3 through A6, and one (1) of furnaces A9 and A10 as follows:
    - (i) During metal melting the Permittee shall perform PM and PM-10 testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10, or other methods as approved by the Commissioner, to demonstrate compliance with Condition D.1.1(a). PM-10 includes filterable and condensible PM-10.
    - (ii) During metal fluxing the Permittee shall perform PM and PM-10 testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10, or other methods as approved by the Commissioner, to demonstrate compliance with Condition D.1.1(b). PM-10 includes filterable and condensible PM-10.
    - (iii) During metal fluxing the Permittee shall perform HAP testing for hydrochloric acid utilizing Methods 18 and 26A (40 CFR 60, Appendix A), or other methods as approved by the Commissioner, to demonstrate compliance with Condition D.1.2(a).
  - (2) Testing shall be repeated at least once every five years from the date of this valid compliance demonstration.
- (c) Visible Emissions Notations
- (1) Daily visible emission notations of the reverberatory melt furnaces' exhaust stacks (E-1 through E-11) shall be performed during normal daylight operations when metal melting and fluxing is occurring. A trained employee shall record whether emissions are normal or abnormal.
  - (2) 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.
  - (3) 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.
  - (4) 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.

- (5) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.
- (d) Compliance with these conditions will satisfy 326 IAC 2-8-4. Therefore, the Part 70 rules (326 IAC 2-7), and 326 IAC 2-2 and 40 CFR 52.21 (PSD), are not applicable to this source. Also, compliance with these conditions will ensure compliance with 326 IAC 5 (Visibility) and 326 IAC 6-3 (Process Operations).

### **Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants 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) FESOP Application Form GSD-08.

- (a) This source has accepted federally enforceable air toxic emission limits of 9.4 tons per year for any single HAP and 24 tons per year for any combination of HAPs.
- (b) See attached calculations for detailed air toxic calculations (five (5) pages, Appendix A).

### **Conclusion**

The operation of this secondary aluminum foundry and die casting plant will be subject to the conditions of the attached proposed FESOP No. F033-7938-00016.

## Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document  
for a Federally Enforceable State Operating Permit (FESOP)

**Source Name:** Bohn Aluminum Corporation  
**Source Location:** 6378 U.S. Highway 6 West, Butler, Indiana 46721  
**County:** DeKalb  
**SIC Code:** 3365,3363,3341  
**Operation Permit No.:** F033-7938-00016  
**Permit Reviewer:** Michael Hirtler / EVP

On June 11, 1998, the Office of Air Management (OAM) had a notice published in the Auburn Evening Star, Auburn, Indiana, stating that Bohn Aluminum Corporation had applied for a FESOP to operate a secondary aluminum foundry and die casting plant. 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 revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified to reflect these changes.

1. Section A (Source Summary) has been revised to clarify that the description of the source in conditions A.1 through A.3 is informational only and does not constitute separately enforceable conditions. The descriptive information in other permit conditions is enforceable.

### SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) ~~and presented in the permit application.~~ **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.**

2. Condition A.5 (Prior Permit Conditions Superseded) has been revised to address U.S. EPA's stated objection regarding supersession language.

#### ~~A.5 Prior Permit Conditions Superseded [326 IAC 2]~~

~~The terms and conditions of this permit incorporate all the current applicable requirements for all emission units located at this source, and supersede all terms and conditions in all registrations and permits, including construction permits, issued prior to the date of issuance of this permit. All terms and conditions in such registrations and permits are no longer in effect.~~

- (a) **This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.**

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, 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.**

## SECTION B

1. Condition B.8 (Duty to Supplement and Provide Information) part (c) of the condition has been changed as follows:

B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)]

- (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, For information claimed to be confidential, the Permittee shall 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, the Permittee shall must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.**

2. Condition B.12 (Annual Compliance Certification) part (c) of the condition has been changed to the following:

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (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 the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
  - (5) Such other facts as specified in Sections D of this permit, IDEM, OAM, may require to determine the compliance status of the source.

3. Condition B.13 (Preventive Maintenance Plan) has been changed as follows:

B.13 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (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 units and associated~~ 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.
4. Condition B.15 (Deviations from Permit Requirements and Conditions) has been changed as follows:

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), 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.**

- ~~(b)~~ **(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).**
- ~~(c)~~ **(d)** Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

5. Condition B.17 (Permit Renewal) part (a) of the condition has been changed as follows:

**B.17 Permit Renewal [326 IAC 2-8-3(h)]**

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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 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) **and 326 IAC 2-7-1(40).**

6. Conditions B.18 (Administrative Permit Amendment), B.19 (Minor Permit Modification), and B.20 (Significant Permit Modification) have all been combined into one condition numbered B.18 (Permit Amendment or Modification) as shown below. Conditions B.19 and B.20 are deleted and the remainder of Section B is renumbered accordingly. The new B.18 condition will read as follows:

**B.18 Permit Amendment or Modification [326 IAC 2-8-10] [326 IAC 2-8-11]**

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- (a) **The Permittee must comply with the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11 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 the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]**

7. Condition B.25 (now B.23) (Inspection and Entry) has been changed to add the following language to (e):

**B.253** Inspection and Entry [326 IAC 2-8-5(a)(2)]

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- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements. [326 IAC 2-8-5(a)(4)]
- (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]**

8. Condition B.26 (now B.24) (Transfer of Ownership or Operation) part (b) of the condition has been changed as follows:

**B.264** Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-8-10]

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- (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-8-10. **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).**

9. Condition B.27 (now B.25) (Annual Fee Payment) has been changed as follows:

**B.275** Annual Fee Payment [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

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- (a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing, ~~or in a time period consistent with the fee schedule established in 326 IAC 2-8-16.~~ **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) ~~If the Permittee does not receive a bill from IDEM, OAM, thirty (30) calendar days before the due date,~~ 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. ~~The applicable fee is due April 1 of each year.~~

## SECTION C

1. Condition C.1 (Overall Source Limit) has been changed to add "not" to the end of part (b).
  - (b) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does **not** exceed the above specified limits.

2. Condition C.7 (Operation of Equipment) has been revised to clarify the requirement as follows:

### 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 unit vented to the control equipment is in operation. ~~as described in Section D of this permit.~~

3. Conditions C.8 (Asbestos Abatement Projects-Accreditation) and C.12 (Asbestos Abatement Projects) have been combined into one condition numbered C.8 (Asbestos Abatement Project) as shown below. Condition C.12 is deleted and the remainder of Section C is renumbered accordingly. The new C.8 condition will read as follows:

### C.8 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.**

4. Condition C.9 (Performance Testing) is revised to correct a rule citation, add a notification requirement, and clarify that any submittal under this condition does not require a certification by a responsible official:

**C.9 Performance Testing ~~[326 IAC 3-2.1]~~ [326 IAC 3-6]**

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- (a) All testing shall be performed according to the provisions of 326 IAC ~~3-2.1~~ **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 before 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).**

5. C.10 (Compliance Monitoring) has been changed as follows.

C.10 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

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 the compliance schedule an additional ninety (90) days provided the Permittee shall** notify:

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** ~~no more than ninety (90) days after receipt of this permit, with full justification of the reasons for the inability to meet this date. and a schedule which it expects to meet. If a denial of the request is not received before the monitoring is fully implemented, the schedule shall be deemed approved.~~

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).

6. Condition C.11 (Monitoring Methods) has been changed as follows:

C.11 Monitoring Methods [326 IAC 3]

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.

7. Condition C.12 (Asbestos Abatement Projects) has been deleted. It is now C.8 (Asbestos Abatement Projects) and it has been revised there.

8. Condition C.13 (now C.12) (Risk Management Plan) has been changed as follows:

C.132 Risk Management Plan [326 IAC 2-8-4] [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).**

9. Condition C.14 (now C.13) (Compliance Monitoring Plan-Failure to Take Corrective Action), is changed at the title as follows:

**C.143** Compliance Monitoring Plan - Failure to Take ~~Corrective Action~~ **Response Steps** [326 IAC 2-8-4(3)]**[326 IAC 2-8-5][326 IAC 1-6]**

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10. Condition C.15 (now C.14) (Actions Related to Noncompliance Demonstrated by a Stack Test), add the following rule cites to the title.

**C.154** Actions Related to Noncompliance Demonstrated by a Stack Test **[326 IAC 2-8-4]**  
**[326 IAC 2-8-5]**

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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).**

11. Condition C.17 (now C.16) (General Record Keeping Requirements) has been changed as follows:

**C.176** General Record Keeping Requirements ~~[326 IAC 2-8-4(3)(B)]~~**[326 IAC 2-8-5]**

- (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** ~~within one (1) hour upon verbal request~~ of an IDEM, OAM, representative, for a minimum of three (3) years. ~~They~~ **The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request providing they are made available within thirty (30) days after written request. If the Commissioner (or local agency) makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or local agency within a reasonable time.**

12. Condition C.18 (now C.17) (General Reporting Requirements) has been changed as follows:

**C.177** General Reporting Requirements ~~[326 IAC 2-8-4(3)(C)]~~

- (a) To affirm that the source has met all the **compliance monitoring** requirements stated in this permit the source shall submit a ~~Quality~~ **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. ~~A reportable 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.~~

- (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).**

## Section D

1. Section D (Facility Operation Conditions) has been changed to add the following language to the facility description box in all D sections. A portion of Section D.1 is presented as an example.

### SECTION D.1 FACILITY OPERATION CONDITIONS

**Facility Description [326 IAC 2-8-4(10)]:**

- (a) One (1) reverberatory melt furnace identified as A1 with a maximum melt capacity of 0.6 tons of aluminum per hour, equipped with two (2) natural gas fired burners rated at 2.96 million (MM) British thermal units (Btu) per hour total, exhausting through one (1) stack identified as E-1.

2. Condition D.1.3(a) (Particulate Matter) is revised to allow for more practical enforcement of the stated short term particulate matter (PM) limits.

#### D.1.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]

- (a) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the facilities shall be limited as follows:
  - (1) The facility identified as A1 shall not exceed 2.91 pounds per hour when operating at a process weight rate of 0.6 tons per hour. This is equivalent to 4.85 pounds of PM per ton of metal melted. ~~Compliance with Condition D.1.1(a)(1)(i) shall satisfy this requirement.~~
  - (2) The facility identified as A2 shall not exceed 3.53 pounds per hour when operating at a process weight rate of 0.8 tons per hour. This is equivalent to 4.41 pounds of PM per ton of metal melted. ~~Compliance with Condition D.1.1(a)(1)(i) shall satisfy this requirement.~~
  - (3) The facility identified as A3 shall not exceed 4.76 pounds per hour when operating at a process weight rate of 1.25 tons per hour. This is equivalent to 3.81 pounds of PM per ton of metal melted. ~~Compliance with Condition D.1.1(a)(1)(i) shall satisfy this requirement.~~
  - (4) The facility identified as A4 shall not exceed 4.76 pounds per hour when operating at a process weight rate of 1.25 tons per hour. This is equivalent to 3.81 pounds of PM per ton of metal melted. ~~Compliance with Condition D.1.1(a)(1)(i) shall satisfy this requirement.~~
  - (5) The facility identified as A5 shall not exceed 4.76 pounds per hour when operating at a process weight rate of 1.25 tons per hour. This is equivalent to 3.81 pounds of PM per ton of metal melted. ~~Compliance with Condition D.1.1(a)(1)(i) shall satisfy this requirement.~~
  - (6) The facility identified as A6 shall not exceed 4.76 pounds per hour when operating at a process weight rate of 1.25 tons per hour. This is equivalent to 3.81 pounds of PM per ton of metal melted. ~~Compliance with Condition D.1.1(a)(1)(i) shall satisfy this requirement.~~

- (7) The facility identified as A7 shall not exceed 4.10 pounds per hour when operating at a process weight rate of 1.00 tons per hour. This is equivalent to 4.10 pounds of PM per ton of metal melted. ~~Compliance with Condition D.1.1(a)(1)(i) shall satisfy this requirement.~~
- (8) The facility identified as A8 shall not exceed 1.62 pounds per hour when operating at a process weight rate of 0.25 tons per hour. This is equivalent to 6.48 pounds of PM per ton of metal melted. ~~Compliance with Condition D.1.1(a)(1)(i) shall satisfy this requirement.~~
- (9) The facility identified as A9 shall not exceed 7.58 pounds per hour when operating at a process weight rate of 2.50 tons per hour. This is equivalent to 3.03 pounds of PM per ton of metal melted. ~~Compliance with Condition D.1.1(a)(1)(i) shall satisfy this requirement.~~
- (10) The facility identified as A10 shall not exceed 7.58 pounds per hour when operating at a process weight rate of 2.50 tons per hour. This is equivalent to 3.03 pounds of PM per ton of metal melted. ~~Compliance with Condition D.1.1(a)(1)(i) shall satisfy this requirement.~~
- (11) The facility identified as A11 shall not exceed 3.82 pounds per hour when operating at a process weight rate of 0.90 tons per hour. This is equivalent to 4.24 pounds of PM per ton of metal melted. ~~Compliance with Condition D.1.1(a)(1)(i) shall satisfy this requirement.~~
- (12) The metal fluxing process shall not exceed 23.54 pounds per hour when operating at a process weight rate of 13.58 tons per hour. This is equivalent to 1.73 pounds of PM per ton of metal plus flux processed. ~~Compliance with Condition D.1.1(b)(1) shall satisfy this requirement.~~

3. Condition D.1.4 (Testing Requirements) has been changed to add (c) and to update the rule citation as follows.

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

**(c) In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.**

4. Condition D.1.5(a) (Visible Emission Notations) has been changed as follows.

D.1.5 Visible Emissions Notations

- (a) Daily visible emission notations of the reverberatory melt furnaces' exhaust stacks (E-1 through E-11) shall be performed during normal daylight operations when metal melting and fluxing is occurring **and when exhausting to the atmosphere**. A trained employee shall record whether emissions are normal or abnormal.

5. Condition D.2.3 (Preventive Maintenance Plan) has been deleted since the affected facilities, which are insignificant activities, do not meet the following OAM guidance criteria that requires preparation of such a plan:

- (a) the unit emits particulate matter, sulfur dioxide, or volatile organic compounds; and

- (b) the unit has existing applicable requirements; and
- (c) the unit is subject to a NSPS or NESHAP (for these units current requirements will satisfy as a compliance monitoring plan); or
- (d) the unit has a control device and the allowable emissions exceed 10 pounds per hour; or
- (e) the unit does not have a control device and has actual emissions exceeding 25 tons per year.

~~D.2.3 Preventive Maintenance Plan [326 IAC 2-8-3(c)(6)]~~

~~A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for sawing and trimming facilities C-1 and C-2 and their control devices.~~

6. Condition D.2.4 (Testing Requirements) (now D.2.3) has been changed to update the rule citation and revise the language as follows:

~~D.2.43 Testing Requirements [326 IAC 2-8-5(a)(1),(4)]~~

~~Testing of The Permittee is not required to test these facilities is not required 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 particulate matter limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing. This does not preclude testing requirements on this facility under 326 IAC 2-8-4 and 326 IAC 2-8-5.~~

**Forms**

1. The Certification Form is revised to delete "Emergency/Deviation Occurrence Reporting Form" from the form. This change is shown on the following page.
2. The Quarterly Compliance Report is now called the Quarterly Compliance Monitoring Report. The column marked "No Deviations" is deleted and the form language is revised as shown on the following pages.
3. The Emergency/ Deviation Occurrence Reporting Form is revised to delete "Attach a signed certification to complete this report" from the bottom of the second page. This change is shown in the following pages.

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

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

Source Name: Bohn Aluminum Corp.  
Source Address: 6378 U.S. Highway 6 West, Butler, IN 46721  
Mailing Address: 6378 U.S. Highway 6 West, Butler, IN 46721  
FESOP No.: F033-7938-00016

**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 Emergency/Deviation Occurrence Reporting Form~~
- 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:

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: \_\_\_\_\_

~~Attach a signed certification to complete this report.~~

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

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
 QUARTERLY COMPLIANCE *MONITORING* REPORT**

Source Name: Bohn Aluminum Corp.  
 Source Address: 6378 U.S. Highway 6 West, Butler, IN 46721  
 Mailing Address: 6378 U.S. Highway 6 West, Butler, IN 46721  
 FESOP No.: F033-7938-00016

**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 ~~zero in the column marked "No Deviations"~~ 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. LIST EACH COMPLIANCE MONITORING REQUIREMENT EXISTING FOR THIS SOURCE:~~

<b>Compliance Monitoring Requirement</b> (e.g. Permit Condition D.1.5)	<b>Number of Deviations</b>	<b>Date of each Deviations</b>	<del>— No —</del> <del>— Deviations —</del>

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

Attach a signed certification to complete this report.

**Appendix A: Emissions Summary (Page 1 of 5)**

**Company Name:** Bohn Aluminum Corporation  
**Address City IN Zip:** 6378 U.S. Highway 6 West, Butler, IN 46721  
**FESOP No.:** 033-7938  
**Plant ID:** 033-00016  
**Reviewer:** Michael Hirtler  
**Date:** March 3, 1998

**Potential Uncontrolled Emissions (tons/year)**

**Emissions Generating Activity**

Pollutant	Metal Melting	Fluxing	Pouring/Casting	Saw/Trim Metal	Combustion	Total
PM	214.50	17.48	4.56	37.67	6.42	280.63
PM-10	154.30	17.48	4.56	37.67	6.42	220.43
SO2	0.00	0.00	1.19	0.00	0.32	1.51
NOx	0.00	0.00	0.59	0.00	53.95	54.54
VOC	0.00	6.06	8.31	0.00	3.13	17.50
CO	0.00	0.00	0.00	0.00	11.33	11.33
Single HAP	0.00	48.69	0.00	0.00	0.00	48.69
Total HAPs	0.00	51.31	0.00	0.00	0.00	51.31

Total Potential Uncontrolled Emissions based on rated capacity assuming operations at 8,760 hours per year.

**Potential Controlled/ Limited Emissions (tons/year)**

**Emissions Generating Activity**

Pollutant	Metal Melting	Fluxing	Pouring/Casting	Saw/Trim Metal	Combustion	Total
PM	84.40	4.43	2.23	1.51	6.42	98.99
PM-10	60.70	4.43	2.23	1.51	6.42	75.29
SO2	0.00	0.00	0.47	0.00	0.32	0.79
NOx	0.00	0.00	0.23	0.00	53.95	54.18
VOC	0.00	1.54	3.27	0.00	3.13	7.94
CO	0.00	0.00	0.00	0.00	11.33	11.33
Single HAP	0.00	9.40	0.00	0.00	0.00	9.40
Total HAPs	0.00	10.24	0.00	0.00	0.00	10.24

Total Controlled/Limited Emissions based on rated capacity assuming limited operations, after controls.

Appendix A: Secondary Metal Production - Aluminum

Company Name: Bohn Aluminum Corporation  
 Address City IN Zip: 6378 U.S. Highway 6 West, Butler, IN 46721  
 FESOP No.: 033-7938  
 Plant ID: 033-00016  
 Reviewer: Michael Hirtler  
 Date: May 12, 1998

POTENTIAL UNCONTROLLED EMISSION RATES

Smelting Furnace/Reverberatory

TYPE OF MATERIAL	Total Potential	Total Potential
	Metal Production Rate 13.55 tons metal/hour	Metal Production Rate 118,698.00 tons metal/year

Aluminum

Emissions Unit	Maximum Furnace Melt Rate tons/hour	Emission Factor		Potential Uncontrolled Emission Rate (lb/hr)		Potential Uncontrolled Emission Rate (tons/yr)	
		PM lbs/ton metal produced	PM 10 lbs/ton metal produced	PM lb/hour	PM 10 lb/hour	PM tons/yr	PM 10 tons/yr
Reverberatory Furnace A1	0.60	3.0	2.6	1.8	1.6	7.9	6.8
Reverberatory Furnace A2	0.80	3.0	2.6	2.4	2.1	10.5	9.1
Reverberatory Furnace A3	1.25	3.0	2.6	3.8	3.3	16.4	14.2
Reverberatory Furnace A4	1.25	3.0	2.6	3.8	3.3	16.4	14.2
Reverberatory Furnace A5	1.25	3.0	2.6	3.8	3.3	16.4	14.2
Reverberatory Furnace A6	1.25	3.0	2.6	3.8	3.3	16.4	14.2
Reverberatory Furnace A7	1.00	3.0	2.6	3.0	2.6	13.1	11.4
Reverberatory Furnace A8	0.25	3.0	2.6	0.8	0.7	3.3	2.8
Reverberatory Furnace A9	2.50	3.0	2.6	7.5	6.5	32.9	28.5
Reverberatory Furnace A10	2.50	3.0	2.6	7.5	6.5	32.9	28.5
Reverberatory Furnace A11	0.90	3.0	2.6	2.7	2.3	11.8	10.2
<b>Total Potential Uncontrolled Emissions (tons/year):</b>						178.0	154.3

Fluxing

TYPE OF MATERIAL	Potential Throughput of HMC-4 Flux Material	Potential Throughput of WF HB2 Flux Material	Potential Throughput of HMC-4 Flux Material	Potential Throughput of WF HB2 Flux Material
	25 lb/hour	40 lb/hour	219,000 lb/year	350,400 lb/year

	Emission Factors as Derived from Stack Testing						Potential Uncontrolled Emission Rates (tons/year)					
	PM lbs/lb flux	PM10 lbs/lb flux	VOC lbs/lb flux	Hydrogen Fluoride (HF) lbs/lb flux	Hydrogen Chloride (HCl) lbs/lb flux	Hexachloroethane lbs/lb flux	PM tons/year	PM10 tons/year	VOC tons/year	HF tons/year	HCl tons/year	Hexachloroethane tons/year
HMC-4 Fluxing Material	0.0614	0.0614	0.0213	0.0000	0.3109	0.0007	6.72	6.72	2.33	0.00	34.04	0.08
WF HB2 Fluxing Material	0.0614	0.0614	0.0213	0.0143	0.0836	0.0002	10.76	10.76	3.73	2.51	14.65	0.04
<b>Total Potential Uncontrolled Emissions (tons/year):</b>							17.48	17.48	6.06	2.51	48.69	0.11

Pouring/Casting

TYPE OF MATERIAL	Total Potential	Total Potential
	Furnace Melt Rate 13.55 tons metal/hour	Metal Production Rate 118,698.00 tons metal/year

Aluminum

	Emission Factors					Potential Uncontrolled Emission Rate (tons/year)				
	PM lbs/day	PM10 lbs/day	SOx lbs/ton metal produced	NOx lbs/ton metal produced	VOC lbs/ton metal produced	PM tons/year	PM10 tons/year	SOx tons/year	NOx tons/year	VOC tons/year
Aluminum Castings	25	25	0.02	0.01	0.14	4.56	4.56	1.19	0.59	8.31

Sawing & Trimming of Aluminum Die Casted Parts

TYPE OF MATERIAL	Parts Throughput
	2.5 tons/hour

Aluminum

	Emission Factor		Potential Uncontrolled Emission Rate (tons/yr)	
	PM lb/ton metal parts	PM10 lb/ton metal parts	PM tons/year	PM10 tons/year
Die Casted Parts	3.44	3.44	37.67	37.67

METHODOLOGY

Reverberatory furnace's PM emission factor reflects that factor which has been determined to be necessary for all furnaces to comply with the PM emission limits of 326 IAC 6-3-2. The PM10 emission factor was taken from AP-42, 5th Ed., Suppl. B Table 12.8-3. The applicant has provided agreement with the use of the PM emission factor, and compliance stack testing will be required as a condition of this FESOP such that compliance with the limits of 326 IAC 6-3-2 will be verified. Emission factors for metal fluxing operations taken from May 1996 stack test report as presented in FESOP application. PM and PM10 emission factors for pouring/casting operations reflect daily upper limit threshold for 'insignificant activity,' which was specified in the FESOP application for this activity. Other pollutant factors taken from AIRS document, SCC 3-04-001-14. Emission factors for sawing & trimming of casted parts are based on actual 1995 cyclone collection of 29,700 pounds PM, 96% collection efficiency, and 9,000 tons of production, as presented in FESOP application.

Company Name: Bohn Aluminum Corporation  
 Address City IN Zip: 6378 U.S. Highway 6 West, Butler, IN 46721  
 FESOP No.: 033-7938  
 Plant ID: 033-00016  
 Reviewer: Michael Hirtler  
 Date: May 12, 1998

POTENTIAL CONTROLLED/LIMITED EMISSION RATES

Smelting Furnace/Reverberatory

TYPE OF MATERIAL	Maximum Furnace Melt Rate tons/hour	Emission Factor		Potential Controlled/Limited Emission Rate (tons/yr)	
		PM lbs/ton metal produced	PM 10 lbs/ton metal produced	PM tons/year	PM 10 tons/year
Aluminum					
Reverberatory Furnace A1	0.60	3.0	2.6		
Reverberatory Furnace A2	0.80	3.0	2.6		
Reverberatory Furnace A3	1.25	3.0	2.6		
Reverberatory Furnace A4	1.25	3.0	2.6		
Reverberatory Furnace A5	1.25	3.0	2.6		
Reverberatory Furnace A6	1.25	3.0	2.6		
Reverberatory Furnace A7	1.00	3.0	2.6		
Reverberatory Furnace A8	0.25	3.0	2.6		
Reverberatory Furnace A9	2.50	3.0	2.6		
Reverberatory Furnace A10	2.50	3.0	2.6		
Reverberatory Furnace A11	0.90	3.0	2.6		
<b>Total Potential Controlled/Limited Emissions (tons/year):</b>				84.4	73.2

Note: Total limited metal production rate is based on a 12-month rolling average. For purposes of limiting source-wide PM & PM10 emissions below the PSD & Part 70 major source threshold of 100 ton/yr, the production limit for metal melting is determined as follows: 99 tons PM/yr - 14.6 (PM from other activities) = 84.4 ton/yr. Next, total (all furnaces) metal production is limited such that PM emissions do not exceed 84.4 tons/year. The potential metal production rate is therefore adjusted by the ratio 84.4/178 (i.e., limited PM emission rate/uncontrolled PM emission rate) to obtain the limited metal production rate. Compliance with this production limit will also result in compliance with 326 IAC 2-8 (FESOP) for PM10; therefore, 326 IAC 2-7 (Part 70) will not apply.

Fluxing

TYPE OF MATERIAL	Potential Throughput of HMC-4 Flux Material		Potential Throughput of WF HB2 Flux Material		Limited Throughput of HMC-4 Flux Material		Limited Throughput of WF HB2 Flux Material	
	lb/hour	lb/year	lb/hour	lb/year	lb/year	lb/year	lb/year	lb/year
Flux	25		40		29,592		114,832	

  

TYPE OF MATERIAL	Emission Factors as Derived from Stack Testing						Potential Controlled/Limited Emission Rates (tons/year)					
	PM lbs/lb flux	PM10 lbs/lb flux	VOC lbs/lb flux	Hydrogen Fluoride (HF) lbs/lb flux	Hydrogen Chloride (HCl) lbs/lb flux	Hexachloroethane lbs/lb flux	PM tons/year	PM10 tons/year	VOC tons/year	HF tons/year	HCl tons/year	Hexachloroethane tons/year
HMC-4 Fluxing Material	0.0614	0.0614	0.0213	0.0000	0.3109	0.0007	0.91	0.91	0.32	0.00	4.60	0.01
WF HB2 Fluxing Material	0.0614	0.0614	0.0213	0.0143	0.0836	0.0002	3.53	3.53	1.22	0.82	4.80	0.01
<b>Total Potential Controlled/Limited Emissions (tons/year):</b>							4.43	4.43	1.54	0.82	9.40	0.02

Pouring/Casting

TYPE OF MATERIAL	Total Potential Furnace Melt Rate		Total Limited Metal Production Rate	
	tons metal/hour	tons metal/year	tons metal/year	tons metal/year
Aluminum	13.55		56,272.98	

  

TYPE OF MATERIAL	Emission Factors					Potential Controlled/Limited Emission Rate (tons/year)				
	PM lbs/day	PM10 lbs/day	SOx lbs/ton metal produced	NOx lbs/ton metal produced	VOC lbs/ton metal produced	PM tons/year	PM10 tons/year	SOx tons/year	NOx tons/year	VOC tons/year
Aluminum Castings	25	25	0.02	0.01	0.14	2.23	2.23	0.56	0.28	3.94

Sawing & Trimming of Aluminum Die Casted Parts

TYPE OF MATERIAL	Parts Throughput	Control System
	tons/hour	Efficiency (%)
Aluminum	2.5	96%

  

TYPE OF MATERIAL	Emission Factor		Potential Controlled Emission Rate (tons/yr)	
	PM lb/ton metal parts	PM10 lb/ton metal parts	PM tons/year	PM10 tons/year
Die Casted Parts	3.44	3.44	1.51	1.51

METHODOLOGY

Reverberatory furnace's PM emission factor reflects that factor which has been determined to be necessary for all furnaces to comply with the PM emission limits of 326 IAC 6-3-2. The PM10 emission factor was taken from AP-42, 5th Ed., Suppl. B Table 12.8-3. The applicant has provided agreement with the use of the PM emission factor, and compliance stack testing will be required as a condition of this FESOP such that compliance with the limits of 326 IAC 6-3-2 will be verified. Emission factors for metal fluxing operations taken from May 1996 stack test report as presented in FESOP application. PM and PM10 emission factors for pouring/casting operations reflect daily upper limit threshold for "insignificant activity," which was specified in the FESOP application for this activity. Other pollutant factors taken from AIRS document, SCC 3-04-001-14. Emission factors for sawing & trimming of casted parts are based on actual 1995 cyclone collection of 29,700 pounds PM, 96% collection efficiency, and 9,000 tons of production, as presented in FESOP application.

Appendix A: Secondary Metal Production - Aluminum

Company Name: Bohn Aluminum Corporation  
 Address City IN Zip: 6378 U.S. Highway 6 West, Butler, IN 46721  
 FESOP No.: 033-7938  
 Plant ID: 033-00016  
 Reviewer: Michael Hirtler  
 Date: May 12, 1998

PARTICULATE MATTER COMPLIANCE CALCULATIONS FOR PROCESS OPERATIONS

The following process operations are subject to the particulate matter emission limitations pursuant to 326 IAC 6-3-2: reverberatory metal smelting, fluxing, pouring & casting, and sawing & trimming of die cast parts.

Pursuant to 326 IAC 6-3-2, the allowable particulate matter emission rate, E (expressed in lb/hr) is determined as follows:

$E = 4.10 P^{0.67}$  for process weight rates (P, expressed in tons/hour) up to 30 tons; or (Equation 1)

$E = 55.0 P^{0.11} - 40$  for process weight rates (P, expressed in tons/hour) in excess of 30 tons. (Equation 2)

Reverberatory Metal Smelting

Emissions Unit	326 IAC 6-3-2 Process Weight Rate tons/hour	Particulate Matter Emission Rate (lb/hr)		
		Potential lb/hr	Allowable lb/hr	
Reverberatory Furnace A1	0.60	1.8	2.9	(will comply)
Reverberatory Furnace A2	0.80	2.4	3.5	(will comply)
Reverberatory Furnace A3	1.25	3.8	4.8	(will comply)
Reverberatory Furnace A4	1.25	3.8	4.8	(will comply)
Reverberatory Furnace A5	1.25	3.8	4.8	(will comply)
Reverberatory Furnace A6	1.25	3.8	4.8	(will comply)
Reverberatory Furnace A7	1.00	3.0	4.1	(will comply)
Reverberatory Furnace A8	0.25	0.8	1.6	(will comply)
Reverberatory Furnace A9	2.50	7.5	7.6	(will comply)
Reverberatory Furnace A10	2.50	7.5	7.6	(will comply)
Reverberatory Furnace A11	0.90	2.7	3.8	(will comply)

Note: Allowable particulate matter emission rates (lb/hr) based on use of Equation 1. Process weight rates reflect the maximum hourly furnace metal melt rate.

Fluxing

Emissions Unit	326 IAC 6-3-2 Process Weight Rate tons/hour	Particulate Matter Emission Rate (lb/hr)		
		Potential lb/hr	Allowable lb/hr	
Fluxing Process	13.58	3.99	23.54	(will comply)

Note: Allowable particulate matter emission rates (lb/hr) based on use of Equation 1. Process weight rate reflects the maximum amount of metal melted plus flux used per hour.

Pouring/Casting

Emissions Unit	326 IAC 6-3-2 Process Weight Rate tons/hour	Particulate Matter Emission Rate (lb/hr)		
		Potential lb/hr	Allowable lb/hr	
Aluminum Castings	13.55	1.04	23.51	(will comply)

Note: Allowable particulate matter emission rates (lb/hr) based on use of Equation 1. Process weight rate reflects the maximum amount of metal melted (assumed as cast) per hour.

Sawing & Trimming of Aluminum Die Cast Parts

Emissions Unit	326 IAC 6-3-2 Process Weight Rate tons/hour	Particulate Matter Emission Rate (lb/hr)		
		Potential lb/hr	Allowable lb/hr	
Die Cast Parts	2.5	0.344	7.58	(will comply)

Note: Allowable particulate matter emission rates (lb/hr) based on use of Equation 1. Process weight rate reflects the total potential weight of parts sent to trimming/sawing per hour.

**Appendix A: Emission Calculations  
Natural Gas Combustion**

**Company Name: Bohn Aluminum Corporation**  
**Address City IN Zip: 6378 U.S. Highway 6 West, Butler, IN 46721**  
**FESOP No.: 033-7938**  
**Plant ID: 033-00016**  
**Reviewer: Michael Hirtler**  
**Date: March 3, 1998**

Combustion Unit Type	Total Capacity MMBtu/hr	Potential Thruput MMCF/yr	Emission Factor in lb/MMCF						Potential Emission Rate in tons/year					
			PM	PM10	SO2	NOx	VOC	CO	PM	PM10	SO2	NOx	VOC	CO
Reverb. Furnace A1 (2 Burners)	2.96	25.93	11.9	11.9	0.6	100.0	5.8	21.0	0.15	0.15	0.01	1.30	0.08	0.27
Reverb. Furnace A2 (2 Burners)	6.70	58.69	11.9	11.9	0.6	100.0	5.8	21.0	0.35	0.35	0.02	2.93	0.17	0.62
Reverb. Furnace A3 (2 Burners)	7.52	65.88	11.9	11.9	0.6	100.0	5.8	21.0	0.39	0.39	0.02	3.29	0.19	0.69
Reverb. Furnace A4 (3 Burners)	10.05	88.04	11.9	11.9	0.6	100.0	5.8	21.0	0.52	0.52	0.03	4.40	0.26	0.92
Reverb. Furnace A5 (2 Burners)	6.70	58.69	11.9	11.9	0.6	100.0	5.8	21.0	0.35	0.35	0.02	2.93	0.17	0.62
Reverb. Furnace A6 (3 Burners)	10.05	88.04	11.9	11.9	0.6	100.0	5.8	21.0	0.52	0.52	0.03	4.40	0.26	0.92
Reverb. Furnace A7 (2 Burners)	5.20	45.55	11.9	11.9	0.6	100.0	5.8	21.0	0.27	0.27	0.01	2.28	0.13	0.48
Reverb. Furnace A8 (1 Burner)	2.50	21.90	11.9	11.9	0.6	100.0	5.8	21.0	0.27	0.27	0.01	2.28	0.13	0.48
Reverb. Furnace A9 (4 Burners)	10.60	92.86	11.9	11.9	0.6	100.0	5.8	21.0	0.55	0.55	0.03	4.64	0.27	0.97
Reverb. Furnace A10 (6 Burners)	9.00	78.84	11.9	11.9	0.6	100.0	5.8	21.0	0.47	0.47	0.02	3.94	0.23	0.83
Reverb. Furnace A11 (6 Burners)	15.90	139.28	11.9	11.9	0.6	100.0	5.8	21.0	0.83	0.83	0.04	6.96	0.40	1.46
Crucible Holding Furnace 1 (1 Burner)	0.50	4.38	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Crucible Holding Furnace 2 (1 Burner)	0.50	4.38	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Crucible Holding Furnace 3 (1 Burner)	5.80	50.81	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Crucible Holding Furnace 4 (1 Burner)	0.50	4.38	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Crucible Holding Furnace 5 (1 Burner)	0.50	4.38	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Crucible Holding Furnace 6 (2 Burners)	1.00	8.76	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Crucible Holding Furnace 7 (2 Burners)	1.00	8.76	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Crucible Holding Furnace 8 (1 Burner)	0.50	4.38	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Crucible Holding Furnace 9 (1 Burner)	0.50	4.38	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Crucible Holding Furnace 10 (1 Burner)	0.50	4.38	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Crucible Holding Furnace 11 (2 Burners)	1.00	8.76	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Crucible Holding Furnace 12 (1 Burner)	0.50	4.38	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Crucible Holding Furnace 13 (1 Burner)	0.30	2.63	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Crucible Holding Furnace 14 (1 Burner)	0.30	2.63	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Crucible Holding Furnace 15 (2 Burners)	1.00	8.76	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Crucible Holding Furnace 16 (2 Burners)	1.00	8.76	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Crucible Holding Furnace 17 (1 Burner)	0.30	2.63	11.9	11.9	0.6	100.0	5.8	21.0	0.02	0.02	0.00	0.13	0.01	0.03
Crucible Holding Furnace 18 (1 Burner)	0.30	2.63	11.9	11.9	0.6	100.0	5.8	21.0	0.02	0.02	0.00	0.13	0.01	0.03
Crucible Holding Furnace 19 (1 Burner)	0.30	2.63	11.9	11.9	0.6	100.0	5.8	21.0	0.02	0.02	0.00	0.13	0.01	0.03
Crucible Holding Furnace 20 (1 Burner)	0.50	4.38	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Crucible Holding Furnace 21 (1 Burner)	0.50	4.38	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Crucible Holding Furnace 22 (2 Burners)	1.00	8.76	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Crucible Holding Furnace 23 (1 Burner)	0.50	4.38	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Crucible Holding Furnace 24 (1 Burner)	0.50	4.38	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Crucible Holding Furnace 28 (1 Burner)	0.30	2.63	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Crucible Holding Furnace 29 (1 Burner)	0.30	2.63	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Crucible Holding Furnace 30 (1 Burner)	0.50	4.38	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Crucible Holding Furnace 31 (1 Burner)	0.50	4.38	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Crucible Holding Furnace 32 (1 Burner)	0.50	4.38	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Crucible Holding Furnace 33 (1 Burner)	0.50	4.38	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Reverb. Holding Furnace S1 (1 Burner)	5.80	50.81	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Reverb. Holding Furnace S2 (1 Burner)	5.80	50.81	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Reverb. Holding Furnace S3 (1 Burner)	5.80	50.81	11.9	11.9	0.6	100.0	5.8	21.0	0.03	0.03	0.00	0.22	0.01	0.05
Reverb. Holding Furnace S4 (1 Burner)	5.80	50.81	11.9	11.9	0.6	100.0	5.8	21.0	0.30	0.30	0.02	2.54	0.15	0.53
Heat Treat Furnace 4 (1 Burner)	0.30	2.63	11.9	11.9	0.6	100.0	5.8	21.0	0.30	0.30	0.02	2.54	0.15	0.53
Heat Treat Furnace 5 (1 Burner)	0.30	2.63	11.9	11.9	0.6	100.0	5.8	21.0	0.30	0.30	0.02	2.54	0.15	0.53
<b>Total Uncontrolled Potential Emissions (tons per year)</b>	<b>132.88</b>	<b>1164.03</b>							<b>6.42</b>	<b>6.42</b>	<b>0.32</b>	<b>53.95</b>	<b>3.13</b>	<b>11.33</b>

**Methodology**

MMBtu = 1,000,000 Btu  
MMCF = 1,000,000 Cubic Feet of Gas  
Potential Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu  
Total Uncontrolled Potential Emission (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton  
Emission factors from AP 42, Supplement B of 5th Edition, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3 for commercial (>= 0.3 & < 10.0 MMBtu/hr) combustion units.