INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: April 2, 2008

RE: Fort Wayne Foundry Corp. – Lima Road Div. / 003-18740-00007

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision: Approval – Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204.

For an **initial Title V Operating Permit**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **thirty (30)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(b).

For a **Title V Operating Permit renewal**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **fifteen (15)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(a).

The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

(1) the name and address of the person making the request;

Recycled Paper An Equal Opportunity Employer *Please Recycle*

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

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of an initial Title V operating permit, permit renewal, or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impractible to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency
401 M Street
Washington, D.C. 20406

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

Enclosures
FNTVOP.dot 3/27/08

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

PART 70 OPERATING PERMIT RENEWAL
OFFICE OF AIR QUALITY

Fort Wayne Foundry Corp. – Lima Road Division
4910 Lima Road
Fort Wayne, Indiana 46808

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

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T003-18740-00007	
Issued by: Original signed by Tripurari Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date:April 2, 2008 Expiration Date:April 2, 2013

TABLE OF CONTENTS

A SOURCE SUMMARY 5
A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)][326 IAC 2-7-1(22)]
A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]
A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]
A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

B GENERAL CONDITIONS 7
B.1 Definitions [326 IAC 2-7-1]
B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5] [326 IAC 2-7-4(a)(1)(D)] [IC 13-15-3-6(a)]
B.3 Term of Conditions [326 IAC 2-1.1-9.5]
B.4 Enforceability [326 IAC 2-7-7]
B.5 Severability [326 IAC 2-7-5(5)]
B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]
B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]
B.8 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]
B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]
B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3)and (13)][326 IAC 2-7-6(1)and(6)] [326 IAC 1-6-3]
B.11 Emergency Provisions [326 IAC 2-7-16]
B.12 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]
B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5] [326 IAC 2-7-10.5]
B.14 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]
B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]
B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]
B.17 Permit Renewal [326 IAC 2-7-3] [326 IAC 2-7-4] [326 IAC 2-7-8(e)]
B.18 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]
B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]
B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]
B.21 Source Modification Requirement [326 IAC 2-7-10.5] [326 IAC 2-2-2] [326 IAC 2-3-2]
B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]
B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]
B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]
B.25 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

C SOURCE OPERATION CONDITIONS 18

Emission Limitations and Standards [326 IAC 2-7-5(1)]
C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]
C.2 Opacity [326 IAC 5-1]
C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]
C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]
C.5 Fugitive Dust Emissions [326 IAC 6-4]
C.6 Stack Height [326 IAC 1-7]
C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

Testing Requirements [326 IAC 2-7-6(1)]
C.8 Performance Testing [326 IAC 3-6]

Compliance Requirements [326 IAC 2-1.1-11]
C.9 Compliance Requirements [326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]
C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
C.11 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]
C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]
C.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
C.14 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]
C.15 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]
C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]
C.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]
C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2] [326 IAC 2-3]
C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [326 IAC 2-3]

Stratospheric Ozone Protection
C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

D.1 FACILITY OPERATION CONDITIONS – Scrap and Charge Handling, and Reverberatory Furnaces RF-1 and RF-2 ……27

Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.1.1 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]
D.1.2 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]
D.1.3 Particulate [326 IAC 6-3-2]
D.1.4 Secondary Aluminum NESHAP [40 CFR 63, Subpart RRR]
D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
D.1.6 Visible Emissions Notations

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]
D.1.7 Record Keeping Requirements

D.2 FACILITY OPERATION CONDITIONS - Pouring Operation P-1 and P-2, Cooling Lines (C-1 and C-2), Shakeout Knockout Zones (SK-1 and SK-2) and Sand Handling Operation……...29

Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.2.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]
D.2.2 Particulate [326 IAC 6-3-2]
D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements
D.2.4 Particulate Control
D.2.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
D.2.6 Visible Emissions Notations [40 CFR Part 64]

D.2.7 Parametric Monitoring [40 CFR Part 64]
D.2.8 Broken or Failed Bag Detection [40 CFR Part 64]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]
D.2.9 Record Keeping Requirements

D.3 FACILITY OPERATION CONDITIONS – Core Making Systems……33

Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.3.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]
D.3.2 Particulate [326 IAC 6-3-2]
D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

D.4 FACILITY OPERATION CONDITIONS – Degreasers……34

Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.4.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]
D.4.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

D.5 FACILITY OPERATION CONDITIONS - Grinding and Machining Operations..... ……..36

Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.5.1 Particulate [326 IAC 6-3-2]

Certification…..... 37
Emergency Occurrence Report 38
Quarterly Deviation and Compliance Monitoring Report 40

SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary aluminum foundry.

Source Address:	4910 Lima Road, Fort Wayne, Indiana 46808
Mailing Address:	4910 Lima Road, Fort Wayne, Indiana 46808
General Source Phone Number:	(260) 483-0382
SIC Code:	3365
County Location:	Allen
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules Major Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

(a) the scrap and charge handling process, constructed in 1985, with a maximum charge rate of 8 tons of aluminum ingots and scrap per hour, with emissions uncontrolled;

(b) the aluminum melting process, consisting of two (2) natural gas-fired reverberatory furnace systems, identified as RF-1 and RF-2, constructed in 1986 and 1985 respectively, each with a maximum charge rate of 4 tons per hour of aluminum ingots and scrap and each with a maximum production rate of 2.5 tons of melted aluminum per hour, both uncontrolled, and exhausting through stacks D1 and D2, respectively;

(c) one (1) pouring system, identified as P-1, constructed in 1979, with a maximum capacity of 2.5 tons of melted aluminum per hour and 27.5 tons of sand per hour, with emissions uncontrolled, and exhausting inside the building;

(d) one (1) pouring system, identified as P-2, constructed in 1978, with a maximum capacity of 2.5 tons of melted aluminum per hour and 27.5 tons of sand per hour, with emissions uncontrolled, and exhausting inside the building;

(e) one (1) castings cooling system, identified as C-1, constructed in 1979, with a maximum capacity of 2.5 tons of aluminum castings per hour and 27.5 tons of sand per hour, with emissions controlled by baghouse CD-1, and exhausting through stack CD-1;

(f) one (1) castings cooling system, identified as C-2, constructed in 1978, with a maximum capacity of 2.5 tons of aluminum castings per hour and 27.5 tons of sand per hour, with emissions controlled by baghouse CD-1, and exhausting through stack CD-1;

(g) one (1) shakeout knockout zone, identified as SK-1, constructed in 1979, with a maximum capacity of 27.5 tons of sand per hour and 2.5 tons of aluminum per hour, with emissions

controlled by baghouse CD-1, and exhausting through stack CD-1;

(h) one (1) shakeout knockout zone, identified as SK-2, constructed in 1978, with a maximum capacity of 27.5 tons of sand per hour and 2.5 tons of aluminum per hour, with emissions controlled by baghouse CD-1, and exhausting through stack CD-1;

(i) one (1) sand handling system, identified as SH-1, constructed in 1978, with a maximum capacity of 50 tons of sand per hour, controlled by baghouse CD-1, and exhausting through stack CD-1;

(j) three (3) core making systems, identified as ISO-1 through ISO-3, constructed in 1978, 1981, and 1982, respectively, each with a maximum capacity of 1 ton of sand per hour, using a phenolic urethane cold box core making process, using a maximum of 2.0 pounds of TEA catalyst per ton of sand cores, all uncontrolled and exhausting through stack I-1; and

(k) three (3) core making systems, identified as ISO-4, ISO-5 and ISO-7, constructed in 1988, 1993, and 1999, respectively, each with a maximum capacity of 1 ton of sand per hour, using a phenolic urethane cold box core making process, using a maximum of 2.0 pounds of TEA catalyst per ton of sand cores, all uncontrolled and exhausting through stack I-1.

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

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

(a) Degreasing operations that do not exceed 10 tons VOC per year, 3 pounds VOC per hour, or 15 pounds VOC per day and is not subject to 326 IAC 20-6 including one (1) parts washer, constructed in 1991; [326 IAC 8-3-2] [326 IAC 8-3-5]

(b) The following equipment related to manufacturing activities not resulting in the emission of HAPs; brazing equipment, cutting torches, soldering equipment, welding equipment; [326 IAC 6-3-2]

(c) Grinding and machining operations, constructed 1988, 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; [326 IAC 6-3-2]

(d) Grinding and machining operations, constructed 1988, uncontrolled consisting of blasting operations, finishing operations, belt grinders, saws, conveyors, cutting machines and trim presses, each with the potential to emit less than 5 tons PM-10 per year or 25 pounds PM-10 per day. [326 IAC 6-3-2]

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

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

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

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

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

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

(a) This permit, T003-18740-00007, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability [326 IAC 2-7-7]

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

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

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

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

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

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

(a) The Permittee shall furnish to IDEM, OAQ , within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by the "responsible official" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) The "responsible official" is defined at 326 IAC 2-7-1(34).

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

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

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

and

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

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

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

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)][326 IAC 2-7-6(1) and (6)][326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

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

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.11 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865

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

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

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

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

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

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

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

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]

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

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

(a) All terms and conditions of permits established prior to T003-18740-00007 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised under 326 IAC 2-7-10.5, or

(3) deleted under 326 IAC 2-7-10.5.

(b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

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

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

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

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

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

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

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

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

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

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

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

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

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

(b) A timely renewal application is one that is:

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

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

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

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

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

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

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

(a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

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

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(c), or (e) without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

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

and

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

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

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b),(c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

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

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

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

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.21 Source Modification Requirement [326 IAC 2-7-10.5] [326 IAC 2-2-2] [326 IAC 2-3-2]

(a) A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

(b) Any modification at an existing major source is governed by the requirements of 326 IAC 2-2-2 and/or 326 IAC 2-3-2.

B.22 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

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

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

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

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

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

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.25 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

C.2 Opacity [326 IAC 5-1]

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

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

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

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

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

C.5 Fugitive Dust Emissions [326 IAC 6-4]

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

C.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

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

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

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

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

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

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

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

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

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

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

C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

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

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

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

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

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

C.14 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

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

C.15 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned to normal without operator action (such as

through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records;

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) Pursuant to 326 IAC 2-6-3(b)(2), starting in 2005 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

(1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

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

(b) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

C.18 General Record Keeping Requirements[326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2] [326 IAC 2-3]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

(c) If there is a reasonable possibility (as defined in 40 CFR 51.165 (a)(6)(vi)(A), 40 CFR 51.165 (a)(6)(vi)(B), 40 CFR 51.166 (r)(6)(vi)(a), and/or 40 CFR 51.166 (r)(6)(vi)(b)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

(1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, document and maintain the following records:

(A) A description of the project.

(B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.

(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:

(i) Baseline actual emissions;

(ii) Projected actual emissions;

(iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1 (mm)(2)(A)(iii); and

(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

(d) If there is a reasonable possibility (as defined in 40 CFR 51.165 (a)(6)(vi)(A) and/or 40 CFR 51.166 (r)(6)(vi)(a)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

(1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and

(2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

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

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

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

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

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do

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

(e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

(f) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C- General Record Keeping Requirements for any “project” (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:

(1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and

(2) The emissions differ from the preconstruction projection as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(ii).

(g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:

(1) The name, address, and telephone number of the major stationary source.

(2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.

(3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).

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

Reports required in this part shall be submitted to:

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

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

Stratospheric Ozone Protection

C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

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

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY CONDITIONS

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

(a) the scrap and charge handling process, constructed in 1985, with a maximum charge rate of 8 tons of aluminum ingots and scrap per hour, with emissions uncontrolled;

(b) the aluminum melting process, consisting of two (2) natural gas-fired reverberatory furnace systems, identified as RF-1 and RF-2, constructed in 1986 and 1985 respectively, each with a maximum charge rate of 4 tons per hour of aluminum ingots and scrap and each with a maximum production rate of 2.5 tons of melted aluminum per hour, both uncontrolled, and exhausting through stacks D1 and D2, respectively;

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

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

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

Pursuant to T003-7528-00007 issued December 28, 1999, the following conditions shall apply to the natural gas-fired reverberatory furnace RF-1:

(a) The PM emission rate from the natural gas-fired reverberatory furnace RF-1 shall be limited to less than 5.48 pounds per hour.

Compliance with this limit will limit PM emissions from the reverberatory furnace RF-1 to less than 25 tons per year, respectively and render 326 IAC 2-2 not applicable to 1986 modification.

D.1.2 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]

Pursuant to T003-7528-00007 issued December 28, 1999 and revised by this permit, the following conditions shall apply to the natural gas-fired reverberatory furnace RF-2:

(a) The PM emission rate from the natural gas-fired reverberatory furnace RF-2 shall be limited to less than 3.50 pounds per hour.

(b) The PM emission rate from the scrap and charge handling process shall be limited to less than 2.20 pounds per hour.

Compliance with these limits will limit total combined PM emissions from the reverberatory furnace RF-2, and the scrap and charge handling process to less than 25 tons per year and render 326 IAC 2-2 not applicable to 1985 modification.

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

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

(a) the particulate emission rate from the scrap and charge handling process shall not exceed 16.5 pounds per hour when operating at a process weight rate of 8.0 tons per hour.

(b) the particulate emission rate from each of the natural gas-fired reverberatory furnaces RF-1 and RF-2 shall not exceed 10.4 pounds per hour when each is operating at a process weight rate of 4.0 tons per hour.

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

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

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

D.1.4 Secondary Aluminum NESHAP [40 CFR 63, Subpart RRR]

Each of the two (2) natural gas-fired reverberatory furnaces (RF-1 and RF-2) shall only melt clean charge, customer returns, or internal scrap as defined under 40 CFR 63.1503. Therefore, the requirements of 40 CFR 63, Subpart RRR do not apply.

D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

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

D.1.6 Visible Emissions Notations

(a) Daily visible emission notations of the natural gas-fired reverberatory furnaces RF-1 and RF-2 stack exhausts shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.1.7 Record Keeping Requirements

(a) To document compliance with Condition D.1.6, the Permittee shall maintain records of the daily visible emission notations of the natural gas-fired reverberatory furnaces RF-1 and RF-2 stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

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

SECTION D.2 FACILITY OPERATION CONDITIONS

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

(a) one (1) pouring system, identified as P-1, constructed in 1979, with a maximum capacity of 2.5 tons of melted aluminum per hour and 27.5 tons of sand per hour, with emissions uncontrolled, and exhausting inside the building;

(b) one (1) pouring system, identified as P-2, constructed in 1978, with a maximum capacity of 2.5 tons of melted aluminum per hour and 27.5 tons of sand per hour, with emissions uncontrolled, and exhausting inside the building;

(c) one (1) castings cooling system, identified as C-1, constructed in 1979, with a maximum capacity of 2.5 tons of aluminum castings per hour and 27.5 tons of sand per hour, with emissions controlled by baghouse CD-1, and exhausting through stack CD-1;

(d) one (1) castings cooling system, identified as C-2, constructed in 1978, with a maximum capacity of 2.5 tons of aluminum castings per hour and 27.5 tons of sand per hour, with emissions controlled by baghouse CD-1, and exhausting through stack CD-1;

(e) one (1) shakeout knockout zone, identified as SK-1, constructed in 1979, with a maximum capacity of 27.5 tons of sand per hour and 2.5 tons of aluminum per hour, with emissions controlled by baghouse CD-1, and exhausting through stack CD-1;

(f) one (1) shakeout knockout zone, identified as SK-2, constructed in 1978, with a maximum capacity of 27.5 tons of sand per hour and 2.5 tons of aluminum per hour, with emissions controlled by baghouse CD-1, and exhausting through stack CD-1;

(g) one (1) sand handling system, identified as SH-1, constructed in 1978, with a maximum capacity of 50 tons of sand per hour, controlled by baghouse CD-1, and exhausting through stack CD-1;

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

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

D.2.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

Pursuant to this permit T003-18740-00007, the following conditions shall apply:

(a) The PM emission rate from the pouring operation P-1 shall be limited to less than 10.5 pounds per hour.

(b) The PM emission rate from the pouring operation P-2 shall be limited to less than 10.5 pounds per hour.

(c) The PM emission rate from the baghouse which is identified as CD-1 and controls PM emissions from the cooling systems C-1 and C-2, shakeout knockout zones SK-1 and SK-2, and the sand handling operation SH-1, shall be less than 28 pounds per hour.

Compliance with these limits, in conjunction with the limits in Condition D.3.1, shall limit PM emissions from the units constructed in 1978 and 1979 to less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) will not apply to the 1978 and 1979 construction.

D.2.2 Particulate [326 IAC 6-3-2]

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

(a) the allowable particulate emission rate from each of the pouring operation P-1 and P-2, the cooling systems C-1 and C-2 and the shakeout systems SK-1 and SK-2 shall not exceed 40 pounds per hour when each is operating at a process weight rate of 30 tons per hour.

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

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

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

(b) the allowable particulate emission rate from the sand handling system SH-1 shall not exceed 44.6 pounds per hour when operating at a process weight rate of 50 tons per hour.

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

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

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.2.4 Particulate Control

(a) The baghouse for particulate control shall be in operation and control emissions from the cooling lines (C-1 and C-2), shakeout knockout zones (SK-1 and SK-2), and sandhandling operation (SH-1) at all times that the cooling lines (C-1 and C-2), shakeout knockout zones (SK-1 and SK-2), and sandhandling operation (SH-1) are in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

D.2.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

Before September 2010, the Permittee shall conduct PM testing for the baghouse which is identified as CD-1 and controls PM emissions from the cooling systems C-1 and C-2, shakeout knockout zones SK-1 and SK-2, and the sand handling operation SH-1, utilizing methods as approved by the Commissioner, in order to demonstrate compliance with Conditions D.2.1(c). This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

D.2.6 Visible Emissions Notations [40 CFR Part 64]

(a) Daily visible emission notations of baghouse CD-1 stack exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

Compliance with the above monitoring conditions shall also satisfy the requirements of 40 CFR 64, Compliance Assurance Monitoring for the sand handling operation (SH-1).

D.2.7 Parametric Monitoring [40 CFR Part 64]

The Permittee shall record the pressure drop across the baghouse used in conjunction with the cooling line (C-2) and sandhandling operation (SH-1), at least once per day when the processes are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

Compliance with the above monitoring conditions shall also satisfy the requirements of 40 CFR 64, Compliance Assurance Monitoring for the sand handling operation (SH-1).

D.2.8 Broken or Failed Bag Detection [40 CFR Part 64]

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature,

flow rate, air infiltration, leaks, dust traces or triboflows.

Compliance with the above monitoring conditions shall also satisfy the requirements of 40 CFR 64, Compliance Assurance Monitoring for the sand handling operation (SH-1).

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

D.2.9 Record Keeping Requirements

(a) To document compliance with Condition D.2.6, the Permittee shall maintain records of the daily visible emission notations of baghouse CD-1 stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) To document compliance with Condition D.2.7, the Permittee shall maintain a daily record of the pressure drop across the baghouse controlling the process. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

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

SECTION D.3 FACILITY OPERATION CONDITIONS

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

(a) three (3) core making systems, identified as ISO-1 through ISO-3, constructed in 1978, 1981, and 1982, respectively, each with a maximum capacity of 1 ton of sand per hour, using a phenolic urethane cold box core making process, using a maximum of 2.0 pounds of TEA catalyst per ton of sand cores, all uncontrolled and exhausting through stack I-1; and

(b) three (3) core making systems, identified as ISO-4, ISO-5 and ISO-7, constructed in 1988, 1993, and 1999, respectively, each with a maximum capacity of 1 ton of sand per hour, using a phenolic urethane cold box core making process, using a maximum of 2.0 pounds of TEA catalyst per ton of sand cores, all uncontrolled and exhausting through stack I-1.

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

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

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

Pursuant to T003-7528-00007 issued December 28, 1999, the following conditions shall apply:

(a) The PM emission rate from the core machine (ISO-1) shall be limited to less than 2.76 pounds per hour.

Compliance with this limit, in conjunction with the limits in Condition D.2.1, shall limit PM emissions from the units installed in 1978 and 1979 to less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) will not apply to 1978 and 1979 construction.

D.3.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) the allowable particulate emission rate from each of the core making process ISO-1 through ISO-5 and ISO-7 shall not exceed 4.1 pounds per hour when operating at a process weight rate of 1.0 tons per hour.

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

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

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

D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

SECTION D.4 FACILITY OPERATION CONDITIONS

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

Degreasing operations that do not exceed 10 tons VOC per year, 3 pounds VOC per hour, or 15 pounds VOC per day and is not subject to 326 IAC 20-6 including one (1) parts washer, constructed in 1991; [326 IAC 8-3-2] [326 IAC 8-3-5]

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

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

D.4.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the Permittee shall:

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide a permanent, conspicuous label summarizing the operation requirements;

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

D.4.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at

thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^{O}C) (one hundred twenty degrees Fahrenheit (120°F)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

SECTION D.5 FACILITY OPERATION CONDITIONS

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

(a) Grinding and machining operations, constructed 1988, 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; [326 IAC 6-3-2]

(b) Grinding and machining operations, constructed 1988, uncontrolled consisting of blasting operations, finishing operations, belt grinders, saws, conveyors, cutting machines and trim presses, each with the potential to emit less than 5 tons PM-10 per year or 25 pounds PM-10 per day. [326 IAC 6-3-2]

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

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

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the grinding and machining operations shall not exceed the allowable PM emission rate based on the following equation:

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

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

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Fort Wayne Foundry Corp. - Lima Road Division
Source Address: 4910 Lima Road, Fort Wayne, Indiana 46808
Mailing Address: 4910 Lima Road, Fort Wayne, Indiana 46808
Part 70 Permit No.: T003-18740-00007

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

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify)

☐ Report (specify)

☐ Notification (specify)

☐ Affidavit (specify)

☐ Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Signature:
Printed Name:
Title/Position:
Phone:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

COMPLIANCE BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204
Phone: 317-233-0178
Fax: 317-233-6865

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name:	Fort Wayne Foundry Corp. - Lima Road Division
Source Address:	4910 Lima Road, Fort Wayne, Indiana 46808
Mailing Address:	4910 Lima Road, Fort Wayne, Indiana 46808
Part 70 Permit No.:	T003-18740-00007

This form consists of 2 pages **Page 1 of 2**

☐ This is an emergency as defined in 326 IAC 2-7-1(12)

- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

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

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

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

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:

Title / Position:

Date:

Phone:

A certification is not required for this report.

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

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Fort Wayne Foundry Corp. - Lima Road Division
Source Address: 4910 Lima Road, Fort Wayne, Indiana 46808
Mailing Address: 4910 Lima Road, Fort Wayne, Indiana 46808
Part 70 Permit No.: T003-18740-00007

Months: _____ to _____ Year: _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".	
☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

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

Form Completed By:

Title/Position:

Date:

Phone:

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document (ATSD) for a Part 70 Operating Permit Renewal

Source Description and Location

Source Name:	**Fort Wayne Foundry Corp. – Lima Road Division**
Source Location:	**4910 Lima Road, Fort Wayne, Indiana 46808**
County:	**Allen**
SIC Code:	**3365**
Operation Permit No.:	**T003-7528-00007**
Operation Permit Issuance Date:	**December 28, 1999**
Permit Renewal No.:	**T003-18740-00007**
Permit Reviewer:	**Syed Jaffery**

Public Notice information

On November 8, 2007, the Office of Air Quality (OAQ) had a notice published in the Fort Wayne Journal Gazette, Fort Wayne, Indiana, stating that Fort Wayne Foundry Corp. – Lima Road Division located at 4910 Lima Road, Fort Wayne, Indiana, had applied for a Part 70 Operating Permit renewal, also called a Title V Permit, for the operation of an aluminum foundry. The notice also stated that OAQ 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.

Comments Received

On December 10, 2007, OAQ received comments from Kathy Moore, Senior Project Manager, Keramida Environmental, Inc. (Keramida), a consultant for Fort Wayne Foundry Corp. – Lima Road Division (Ft. Wayne Foundry). The comments were submitted in the Track Changes mode of the electronic version of the draft permit document. The comments are summarized in the subsequent pages, with IDEM's corresponding responses.

The OAQ prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

This Addendum to Technical Support Document becomes part of the Technical Support Document.

The summary of the comments and IDEM, OAQ responses, including changes to the permit (language deleted is shown in ~~strikeout~~ and language added is shown in **bold**) are as follows:

Comment 1:

The applicant requested to delete Condition D.1.6 Testing Requirements and gave the following reasons:

> Furnace operations have not changed since the previously conducted stack tests. The current Title V permit limits the raw material input to the melt furnaces by not allowing the use of any aluminum "post-consumer" scrap materials. Furthermore, the definition of "clean charge" under (40 CFR 63, Subpart RRR) limits the type of raw material input. This restriction minimizes variations in emission rates of PM and PM10. The furnaces are all natural gas fired furnaces and are uncontrolled, which would also minimize emission variability. The previous IDEM approved stack tests indicate that the uncontrolled particulate matter emissions (PM/PM10) are significantly less than the permit limits.

IDEM Response 1:

IDEM agrees to delete Condition D.1.6 Testing Requirements as shown below:

~~Compliance Determination Requirements~~

~~D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)]~~

> ~~Within 180 days after the issuance of this permit, the Permittee shall conduct PM and PM10 testing on the natural gas-fired reverberatory furnaces RF-1 and RF-2, utilizing methods as approved by the Commissioner, in order to demonstrate compliance with Conditions D.1.1(a) and (b). This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.~~

Comment 2:

The applicant requested that Condition D.2.5 Testing Requirements be deleted because the emissions from the sand handling process cannot be isolated as they exhaust to a baghouse that controls additional emission units.

IDEM Response 2:

The testing condition can not be deleted as the uncontrolled emissions from the sand handling are large. However, a single PM limit for the baghouse controlling the sand handling operation and other emission units associated with the baghouse has been established. Therefore, stack testing of only sand handling operation is not needed. The baghouse was never tested before, therefore, the baghouse will be tested within 180 days of the issuance of permit T003-18740-00007. Condition D.2.5 Testing Requirements has been revised accordingly, as shown below:

~~D.2.5 Testing Requirements [326 IAC 2-7-6(1),(6)]~~

> ~~Before March 2011, the Permittee shall conduct PM and PM10 testing for the sand handling operation (SH-1), utilizing methods as approved by the Commissioner, in order to demonstrate compliance with Conditions D.2.1(g) and (h). This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.~~

D.2.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

> **Within 180 days after the issuance of permit T003-18740-00007, the Permittee shall conduct PM testing for the baghouse which is identified as CD-1 and controls PM**

emissions from the cooling systems C-1 and C-2, shakeout knockout zones SK-1 and SK-2, and the sand handling operation SH-1, utilizing methods as approved by the Commissioner, in order to demonstrate compliance with Condition D.2.1(c). This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

Comment 3:

PM10 was not a regulated pollutant under PSD until July 1, 1987, therefore, the applicant requested for an explanation as to why there were limits for PM10 on units that were constructed prior to this date.

IDEM Response 3:

IDEM agrees that PM10 was not a regulated pollutant until 1987. Changes to the TSD are documented below:

TSD

State Rule Applicability- Entire Source

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

This source is not subject to the requirements of 326 IAC 2-2. This source was constructed prior to the August 7, 1977 applicability date, was a minor source at that time and is not one of the 28 listed source categories. Since 1977 the source has made the following modifications:

(a) The pouring line (P-2), castings cooling station (C-2), the shakeout knockout zone (SK-2), core machine (ISO-1), and the sand handling process were each constructed in 1978. The pouring line (P-1), castings cooling station (C-1), and the shakeout knockout zone (SK-1) were each constructed in 1979. The potential to emit of PM ~~and PM10~~ is greater than 250 tons per year. Therefore, an enforceable limit is included by this permit T003-18740-00007, which will limit PM ~~and PM10~~ emissions for the units installed in 1978 and 1979 to less than 250 tons per year. The uncontrolled potential to emit of CO and VOC from these emission units are less than 250 tons per year.

(1) The PM emission rate from the pouring operation P-1 shall be limited to less than 10.5 pounds per hour.

~~(2) The PM10 emission rate from the pouring operation P-1 shall be limited to less than 5.15 pounds per hour.~~

~~(3)~~**(2)** The PM emission rate from the pouring operation P-2 shall be limited to less than 10.5 pounds per hour.

~~(4) The PM10 emission rate from the pouring operation P-2 shall be limited to less than 5.15 pounds per hour.~~

~~(5)~~**(3)** The PM emission rate from the baghouse which is identified as CD-1 and controls PM emissions from the cooling systems C-1 and C-2, shakeout knockout zones SK-1 and SK-2, and the sand handling operation SH-1, shall be ~~limited to~~ less than 28 pounds per hour.

Compliance with these limits will limit total PM ~~and PM10~~ emissions from the units installed in 1978 and 1979 to less than 250 tons per year ~~each~~. Therefore, the requirements of 326 IAC 2-2 (PSD) will not apply to the 1978 and 1979 construction.

(b) One (1) core machine (ISO-2), constructed in 1981, is not subject to this rule because uncontrolled PM, PM10 and VOC emissions from the addition of this unit are 15.77, 2.37 and 15.33 tons per year, respectively~~, which are less than the PSD significant levels~~. **However, the total source-wide potential PM ~~and PM10~~ emissions are greater than 250 tons per year. Therefore, the source is considered a major PSD source with respect to the subsequent modifications to the source.**

(c) One (1) core machine (ISO-3), constructed in 1982, is not subject to this rule because uncontrolled PM, ~~PM10~~ and VOC emissions from the addition of this unit are 15.77, ~~2.37~~ and 15.33 tons per year, respectively, which are less than the PSD major modification thresholds. ~~However, the total source-wide potential PM and PM10 emissions are greater than 250 tons per year. Therefore, the source is considered a major PSD source with respect to the subsequent modifications to the source.~~

(d) Pursuant to Part 70 Permit No. T003-7528-00007, issued on December 28, 1999, the reverberatory furnace (RF-2) and the scrap and charge handling process, each constructed in 1985, are not subject to this rule because the limited PM ~~and PM10~~ emissions from the addition of these units are less than 25.0 ~~and 15.0~~ tons per year, respectively, which are less than the PSD ~~major modification thresholds~~ **significant level**.

(1) The PM emission rate from the natural gas-fired reverberatory furnace RF-2 shall be limited to less than 3.50 pounds per hour.

~~(2) The PM10 emission rate from the natural gas-fired reverberatory~~ furnace RF-2 shall be limited to less than 2.20 pounds per hour.

~~(3)~~**(2)** The PM emission rate from the scrap and charge handling process shall be limited to less than 2.20 pounds per hour.

~~(4) The PM10 emission rate from the scrap and charge handling process shall be limited to less than 1.20 pounds per hour.~~

Compliance with these limits will limit total combined PM ~~and PM10~~ emissions from the reverberatory furnace RF-2, and the scrap and charge handling process to less than 25 ~~and 15~~ tons per year~~, respectively~~.

(e) Pursuant to Part 70 Permit No. T003-7528-00007, issued on December 28, 1999, the reverberatory furnace (RF-1), constructed in 1986, is not subject to this rule because the limited PM ~~and PM10~~ emissions from the addition of this unit are 24.0 ~~and 14.0~~ tons per year, respectively, which are less than the PSD ~~major modification thresholds~~ **significant levels**.

(1) The PM emission rate from the natural gas-fired reverberatory furnace RF-1 shall be limited to less than 5.48 pounds per hour.

~~(2) The PM10 emission rate from the natural gas-fired reverberatory furnace RF-1 shall be limited to less than 3.20 pounds per hour.~~

Compliance with ~~these~~**this** limit~~s~~ will limit PM ~~and PM10~~ emissions from the reverberatory furnace RF-1 to less than 25 ~~and 15~~ tons per year~~, respectively~~.

(f) Three (3) core machines, (ISO-4, ISO-5 and ISO-7), constructed in 1988, 1993 and 1999, respectively, are not subject to this rule because uncontrolled VOC emissions from the addition of each of these units are 15.77, 2.37 and 15.33 tons per year, respectively, which are less than the PSD **significant level** ~~major modification thresholds~~.

…

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

…

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

Emission Unit	Control Device	Timeframe for Testing	Pollutant	Frequency of Testing	Limit or Requirement
~~Reverberatory Furnace RF-1~~	~~None~~	~~180 days after issuance~~	~~PM and PM10~~	~~Once every 5 years~~	~~5.48 lbs/hr PM 3.20 lbs/hr PM10~~
~~Reverberatory Furnace RF-2~~	~~None~~	~~180 days after issuance~~	~~PM and PM10~~	~~Once every 5 years~~	~~3.50 lbs/hr PM 2.20 lbs/hr PM10~~
~~Sand Handling Operation (SH-1)~~	Baghouse CD-1	~~Before March 2011~~ **Within 180 days after the issuance of permit T003-18740-00007**	PM ~~and PM10~~	Once every 5 years	~~5.0~~**28** lbs/hr PM ~~5.0 lbs/hr PM10~~

…

Revised Conditions D.1.1, D.1.2, D.2.1 and D.3.1 are shown below:

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

Pursuant to T003-7528-00007 issued December 28, 1999, the following conditions shall apply to the natural gas-fired reverberatory furnace RF-1:

(a) The PM emission rate from the natural gas-fired reverberatory furnace RF-1 shall be limited to less than 5.48 pounds per hour.

~~(b) The PM10 emission rate from the natural gas-fired reverberatory furnace RF-1 shall be limited to less than 3.20 pounds per hour.~~

Compliance with ~~these~~**this** limit~~s~~, will limit PM ~~and PM10~~ emissions from the reverberatory furnace RF-1 to less than 25 ~~and 15~~ tons per year, respectively and render 326 IAC 2-2 not applicable to ~~1985~~**1986** modification.

D.1.2 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]

Pursuant to T003-7528-00007 issued December 28, 1999 and revised by this permit, the following conditions shall apply to the natural gas-fired reverberatory furnace RF-2~~, and the scrap and charge handling process~~:

(a) The PM emission rate from the natural gas-fired reverberatory furnace RF-2 shall be limited to less than 3.50 pounds per hour.

~~(b) The PM10 emission rate from the natural gas-fired reverberatory furnace RF-2 shall be limited to less than 2.20 pounds per hour.~~

~~(c)~~**(b)** The PM emission rate from the scrap and charge handling process shall be limited to less than 2.20 pounds per hour.

~~(d) The PM10 emission rate from the scrap and charge handling process shall be limited to less than 1.20 pounds per hour.~~

Compliance with these limits will limit total combined PM ~~and PM10~~ emissions from the reverberatory furnace RF-2, and the scrap and charge handling process to less than 25 ~~and 15~~ tons per year~~, respectively~~ and render 326 IAC 2-2 not applicable to 1985 modification.

D.2.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

Pursuant to this permit T003-18740-00007, the following conditions shall apply:

(a) The PM emission rate from the pouring operation P-1 shall be limited to less than 10.5 pounds per hour.

~~(b) The PM10 emission rate from the pouring operation P-1 shall be limited to less than 5.15 pounds per hour.~~

~~(c)~~**(b)** The PM emission rate from the pouring operation P-2 shall be limited to less than 10.5 pounds per hour.

~~(d) The PM10 emission rate from the pouring operation P-2 shall be limited to less than 5.15 pounds per hour.~~

~~(e) The PM emission rate from the cooling systems C-1 shall be limited to less than 3.5 pounds per hour.~~

(c) The PM emission rate from the baghouse which is identified as CD-1 and controls PM emissions from the cooling systems C-1 and C-2, shakeout knockout zones SK-1 and SK-2, and the sand handling operation SH-1, shall be ~~limited to~~ less than 28 pounds per hour.

~~(f) The PM10 emission rate from the cooling system C-1 shall be limited to less than 3.5 pounds per hour.~~

~~(g) The PM emission rate from the cooling system C-2 shall be limited to less than 3.5 pounds per hour.~~

~~(h) The PM10 emission rate from the cooling system C-2 shall be limited to less than 3.5 pounds per hour.~~

~~(i) The PM emission rate from the shakeout knockout zone SK-1 shall be limited to less than 8.0 pounds per hour.~~

~~(j) The PM10 emission rate from the shakeout knockout zone SK-1 shall be limited to less than 5.6 pounds per hour.~~

~~(k) The PM emission rate from the shakeout knockout zone SK-2 shall be limited to less than 8.0 pounds per hour.~~

~~(l) The PM10 emission rate from the shakeout knockout zone SK-2 shall be limited to less than 5.6 pounds per hour.~~

~~(m) The PM emission rate from the sand handling operation SH-1 shall be limited to less than 5.0 pounds per hour.~~

~~(n) The PM10 emission rate from the sand handling operation SH-1 shall be limited to less than 5.0 pounds per hour.~~

Compliance with these limits, in conjunction with the limit in Condition D.3.1, shall limit PM ~~and PM10~~ emissions from the units constructed in 1978 and 1979 to less than 250 tons per year ~~each~~. Therefore, the requirements of 326 IAC 2-2 (PSD) will not apply to the 1978 and 1979 construction.

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

Pursuant to T003-7528-00007 issued December 28, 1999, the following conditions shall apply:

(a) The PM emission rate from the core machine (ISO-1) shall be limited to less than 2.76 pounds per hour.

~~(b) The PM10 emission rate from the core machine (ISO-1) shall be limited to less than 0.45 pounds per hour.~~

Compliance with this limit, in conjunction with the limits in Condition D.2.1, shall limit PM ~~and PM10~~ emissions from the units installed in 1978 **and 1979** to less than ~~100~~**250** tons per year ~~each~~. Therefore, the requirements of 326 IAC 2-2 (PSD) will not apply to 1978 **and 1979** construction.

Comment 4:

The applicant requested that the Appendix A emissions calculations be revised to address the following concerns:

1) The PM/PM10 emission factors listed for Pouring/Casting (4.2 lb/ton) is actually the emission factor for Pouring/Casting & Castings Cooling combined. Therefore, the calculation for the PM/PM10 emissions from castings cooling does not need to be a separate calculation.

2) Page 6 of 11, the PM emission factor for core making should be 1.1 lbs/ton not 3.6 lbs/ton (also, the SCC is 3-04-003-19, not 3-04-003-50)

IDEM Response 4:

1) IDEM agrees that the PM/PM10 emission factors listed for Pouring/Casting (4.2 lb/ton) is actually the emission factor for Pouring/Casting & Castings Cooling combined. Therefore, the calculation for the PM/PM10 emissions from castings cooling does not need to be a separate calculation, (see Addendum to Appendix A).

2) IDEM agrees that on Page 6 of 11, the PM emission factor for core making should be 1.1 lbs/ton not 3.6 lbs/ton (also, the SCC is 3-04-003-19, not 3-04-003-50) , (see Addendum to Appendix A).

Upon further review IDEM has made the following changes:

IDEM Change # 1:

Section A.1 of the draft permit refers to this plant as a "secondary aluminum metal production facility". IDEM's OAQ has determined that an "aluminum foundry" would be a more accurate description for this plant. Therefore, Section A.1 has been modified as follows:

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

The Permittee owns and operates a stationary ~~secondary aluminum metal production facility~~ **aluminum foundry**.

IDEM Change # 2:

Due to an administrative change at OAQ Permits Branch the signature block of the title page of the permit has been changed as follows:

Significant Source Modification No.: T003-18740-00007	
original signed by: ~~Nisha Sizemore, Chief~~ **Matthew Stuckey, Deputy Branch Chief** Permits Branch Office of Air Quality	Issuance Date:

IDEM Change # 3:

IDEM has modified permit conditions D.1.8 (now D.1.7) and D.2.9 as illustrated below:

~~D.1.8~~**D.1.7** Record Keeping Requirements

(a) To document compliance with Condition D.1.6, the Permittee shall maintain records of **the daily** visible emission notations of the natural gas-fired reverberatory furnaces RF-1 and RF-2 stack exhausts ~~once per day~~. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

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

D.2.9 Record Keeping Requirements

(a) To document compliance with Condition D.2.6, the Permittee shall maintain records of **the daily** visible emission notations of baghouse CD-1 stack exhaust ~~once per day~~. The Permittee shall include in its daily record when a visible emission notation is not taken

and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) To document compliance with Condition D.2.7, the Permittee shall maintain **a daily** record~~s once per day~~ of the pressure drop **across the baghouse controlling the process**. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

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

IDEM Change # 4:

Due to the deletion of certain permit conditions the subsequent conditions have been renumbered, and Table of Contents has also been revised, accordingly.

IDEM Change # 5:

The Description Box in Section D.2 has been revised as follows:

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

(a) one (1) pouring system, identified as P-1, constructed in 1979, with a maximum capacity of 2.5 tons of melted aluminum per hour and 27.5 tons of sand per hour, with emissions uncontrolled, and exhausting inside the building;

(b) one (1) pouring system, identified as P-2, constructed in 1978, with a maximum capacity of 2.5 tons of melted aluminum per hour and 27.5 tons of sand per hour, with emissions uncontrolled, and exhausting inside the building;

(c) one (1) castings cooling system, identified as C-1, constructed in 1979, with a maximum capacity of 2.5 tons of aluminum castings per hour and 27.5 tons of sand per hour, with emissions controlled by baghouse CD-1, and exhausting through stack CD-1;

~~Note: Operation of the baghouse to control the C-1 castings cooling system is voluntary and is not required per this permit.~~

(d) one (1) castings cooling system, identified as C-2, constructed in 1978, with a maximum capacity of 2.5 tons of aluminum castings per hour and 27.5 tons of sand per hour, with emissions controlled by baghouse CD-1, and exhausting through stack CD-1;

(e) one (1) shakeout knockout zone, identified as SK-1, constructed in 1979, with a maximum capacity of 27.5 tons of sand per hour and 2.5 tons of aluminum per hour, with emissions controlled by baghouse CD-1, and exhausting through stack CD-1;

(f) one (1) shakeout knockout zone, identified as SK-2, constructed in 1978, with a maximum capacity of 27.5 tons of sand per hour and 2.5 tons of aluminum per hour, with emissions controlled by baghouse CD-1, and exhausting through stack CD-1;

~~Note: Operation of the baghouse to control the shakeout knockout zone is voluntary and is not required per this permit.~~

(g) one (1) sand handling system, identified as SH-1, constructed in 1978, with a maximum capacity of 50 tons of sand per hour, controlled by baghouse CD-1, and exhausting through stack CD-1;

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

IDEM Change # 6:

Condition D.2.4 Particulate Control has been revised as follows:

D.2.4 Particulate Control

(a) The baghouse for particulate control shall be in operation and control emissions from the cooling line**s** (**C-1 and** C-2)**, shakeout knockout zones (SK-1 and SK-2),** and sandhandling operation (SH-1) at all times that the cooling line**s** (**C-1 and** C-2)**, shakeout knockout zones (SK-1 and SK-2),** and sandhandling operation (SH-1) are in operation.

…

IDEM Change # 7:

Condition C.18 General Record Keeping Requirements has been revised as follows:

~~C.18 General Record Keeping Requirements[326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2] [326 IAC 2-3]~~

~~(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.~~

~~(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.~~

~~(c) If there is a "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, other than projects at a source with a Plant-wide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1 (ee) and/or 326 IAC 2-3-1 (z)) and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1 (rr) and/or 326 IAC 2-3-1 (mm)), the Permittee shall comply with following:~~

~~(1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, document and maintain the following records:~~

~~(A) A description of the project.~~

~~(B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.~~

~~(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:~~

~~(i) Baseline actual emissions;~~

~~(ii) Projected actual emissions;~~
~~(iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1(mm)(2)(A)(iii); and~~
~~(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.~~

~~(2) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and~~

~~(3) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.~~

C.18 General Record Keeping Requirements[326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2] [326 IAC 2-3]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

(c) If there is a reasonable possibility (as defined in 40 CFR 51.165 (a)(6)(vi)(A), 40 CFR 51.165 (a)(6)(vi)(B), 40 CFR 51.166 (r)(6)(vi)(a), and/or 40 CFR 51.166 (r)(6)(vi)(b)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

(1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, document and maintain the following records:

(A) A description of the project.

(B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.

(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:

(i) Baseline actual emissions;

(ii) Projected actual emissions;

(iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1 (mm)(2)(A)(iii); and

(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

(d) If there is a reasonable possibility (as defined in 40 CFR 51.165 (a)(6)(vi)(A) and/or 40 CFR 51.166 (r)(6)(vi)(a)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

(1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and

(2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

IDEM Change # 8:

Condition C.19 General Reporting Requirements has been revised as follows:

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

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

~~(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:~~

~~Indiana Department of Environmental Management~~
~~Compliance Data Section, Office of Air Quality~~
~~100 North Senate Avenue~~
~~MC 61-53 IGCN 1003~~
~~Indianapolis, Indiana 46204-2251~~

~~(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.~~

~~(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

~~(e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.~~

~~(f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C- General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ :~~

~~(1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and~~

~~(2) The emissions differ from the preconstruction projection as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(ii).~~

~~(g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:~~

~~(1) The name, address, and telephone number of the major stationary source.~~

~~(2) The annual emissions calculated in accordance with (c)(2) and (3) in Section C- General Record Keeping Requirements.~~

~~(3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).~~

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

~~Reports required in this part shall be submitted to:~~

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

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

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

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

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

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

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

(f) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C- General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:

(1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and

(2) The emissions differ from the preconstruction projection as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(ii).

(g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:

(1) The name, address, and telephone number of the major stationary source.

(2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.

(3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).

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

Reports required in this part shall be submitted to:

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

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

IDEM Change # 9a:

Upon further review and on the basis of additional information supplied by Kathy Moore, Senior Project Manager, Keramida Environmental, Inc., the source consultant, on February 15, 2008, IDEM has recognized that PM emissions' testing has been performed on the sand handling operation SH-1. Therefore, IDEM has decided to revised permit Condition D.2.5 Testing Requirements as follows:

D.2.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

Before September 2010, ~~Within 180 days after the issuance of permit T003-18740-00007,~~ the Permittee shall conduct PM testing for the baghouse which is identified as CD-1 and controls PM emissions from the cooling systems C-1 and C-2, shakeout knockout zones SK-1 and SK-2, and the sand handling operation SH-1, utilizing methods as approved by the Commissioner, in order to demonstrate compliance with Condition D.2.1(c). This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

IDEM Change # 9b:

Due to the facts submitted in IDEM Change # 9a, the changes to the TSD are documented below:

TSD

State Rule Applicability- Entire Source

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

…

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

Emission Unit	Control Device	Timeframe for Testing	Pollutant	Frequency of Testing	Limit or Requirement
~~Reverberatory Furnace RF-1~~	~~None~~	~~180 days after issuance~~	~~PM and PM10~~	~~Once every 5 years~~	~~5.48 lbs/hr PM 3.20 lbs/hr PM10~~
~~Reverberatory Furnace RF-2~~	~~None~~	~~180 days after issuance~~	~~PM and PM10~~	~~Once every 5 years~~	~~3.50 lbs/hr PM 2.20 lbs/hr PM10~~
~~Sand Handling Operation (SH-1)~~	Baghouse CD-1	**Before September 2010** ~~Within 180 days after the issuance of permit T003-18740-00007~~	PM ~~and PM10~~	Once every 5 years	~~5.0~~**28** lbs/hr PM ~~5.0 lbs/hr PM10~~

…

IDEM Change # 10:

Due to an other administrative change at OAQ Permits Branch the signature block of the title page of the permit has been changed as follows:

Significant Source Modification No.: T003-18740-00007	
original signed by: ~~Nisha Sizemore, Chief~~ **Tripurari Sinha, Ph. D., Section Chief** Permits Branch Office of Air Quality	Issuance Date:

Addendum to Appendix A: Emission Calculations

Company Name: Fort Wayne Foundry - Lima Road Division
Address City IN Zip: 4910 Lima Road, Fort Wayne, IN 46808
Permit Number: T003-18740-00007
Reviewer: Syed Jaffery

Total Potential To Emit (tons/year)

	Emissions Generating Activity										
Pollutant	Reverberatory Furnaces (RF-1 and RF-2)	Charge Handling	Pouring/Casting (P-1)	Castings Cooling (C-1)	Shakeout (SK-1)	Sand Handling (SH-1)	Pouring/Casting (P-2)	Castings Cooling (C-2)	Shakeout (SK-2)	Coremaking (ISO-1 through ISO-5, and ISO-7)	**SUBTOTAL**
PM	10.95	13.14	45.99	~~15.33~~	35.04	788.40	45.99	~~15.33~~	35.04	94.61	**1069.16**~~1099.82~~
PM10	10.95	7.88	22.56	~~15.33~~	24.53	118.30	22.56	~~15.33~~	35.04	14.19	**256.01**~~286.67~~
SO2	0.00	0.00	0.22	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.44
NOx	0.00	0.00	0.11	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.22
VOC	7.00	0.00	1.53	0.00	13.14	0.00	1.53	0.00	13.14	91.98	128.32
CO	0.00	0.00	65.70			0.00	65.70			0.00	131.40
total HAPs	0.41	0.50	8.55			0.00	8.55			53.45	71.46
worst case single HAP	(Manganese) 0.34	(Manganese) 0.41	(Manganese) 2.99			0.00	(Manganese) 2.99			(TEA) 52.56	(TEA) 52.56

Total emissions based on rated capacities at 8,760 hours/year.
**For the purposes of determining Title V applicability, PM10 (not PM) is the regulated pollutant in consideration
The PM and PM10 emission factors are based on December 2000 stack tests.
PM/PM10 emissions for Pouring/Casting (P-1) represent total PM/PM10 emissions for Pouring/Casting (P-1) and Castings Cooling (C-1) combined
PM/PM10 emissions for Pouring/Casting (P-2) represent total PM/PM10 emissions for Pouring/Casting (P-2) and Castings Cooling (C-2) combined

Potential To Emit After Issuance (tons/year)

	Emissions Generating Activity										
Pollutant	Reverberatory Furnaces (RF-1 and RF-2)	Charge Handling	Pouring/Casting (P-1)	Castings Cooling (C-1)	Shakeout (SK-1)	Sand Handling (SH-1)	Pouring/Casting (P-2)	Castings Cooling (C-2)	Shakeout (SK-2)	Coremaking (ISO-1 through ISO-5, and ISO-7)	**SUBTOTAL**
PM	39.33	9.63	45.99	~~15.33~~	35.04	21.90	45.99	~~15.33~~	35.04	81.68	**314.60**~~345.26~~
PM10	23.63	5.26	22.56	~~15.33~~	24.53	21.90	22.56	~~15.33~~	24.53	12.38	**157.35**~~188.01~~
SO2	0.00	0.00	0.22	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.44
NOx	0.00	0.00	0.11	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.22
VOC	7.00	0.00	1.53	0.00	13.14	0.00	1.53	0.00	13.14	91.98	128.32
CO	0.00	0.00	65.70			0.00	65.70			0.00	131.40
total HAPs	0.41	0.50	8.55			0.00	8.55			53.45	71.46
worst case single HAP	(Manganese) 0.34	(Manganese) 0.41	(Manganese) 2.99			0.00	(Manganese) 2.99			(TEA) 52.56	(TEA) 52.56

Total emissions based on rated capacities at 8,760 hours/year.
**For the purposes of determining Title V applicability, PM10 (not PM) is the regulated pollutant in consideration
PM/PM10 emissions for Pouring/Casting (P-1) represent total PM/PM10 emissions for Pouring/Casting (P-1) and Castings Cooling (C-1) combined
PM/PM10 emissions for Pouring/Casting (P-2) represent total PM/PM10 emissions for Pouring/Casting (P-2) and Castings Cooling (C-2) combined

Addendum to Appendix A: Emission Calculations
Aluminum Foundry Emissions

Company Name: Fort Wayne Foundry - Lima Road Division
Address City IN Zip: 4910 Lima Road, Fort Wayne, IN 46808
Permit Number: T003-18740-00007
Reviewer: Syed Jaffery

* * Process Emissions * *

Process:	Rate (tons Al/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	Control Efficiency (%)	Eac (ton/yr)
Pouring/Casting P-1	2.5	PM	4.20	45.99	None		45.99
SCC# 3-04-003-18		PM-10	2.06	22.56			22.56
		SO2	0.02	0.22			0.22
		NOx	0.01	0.11			0.11
		VOC	0.14	1.53			1.53
		CO	6.00	65.70			65.70

Note: Emissions factors from USEPA's Factor Information Retrieval Data System, version 6.25
CO emission factor based on the best information for CO emissions from pouring, cooling, and shakeout operations. These emissions represent total emissions from Line 1 pouring, cooling and shakeout combined.
PM/PM10 emissions for Pouring/Casting (P-1) represent total PM/PM10 emissions for Pouring/Casting (P-1) and Castings Cooling (C-1) combined
Allowable Emissions:
The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates up to 30 tons per hour:

P= 30 tons/hr *Note: P includes the weight of the metal poured and the weight of the castings.*
limit = 4.1 x (30 ^0.67) = 40.0 lb/hr (allowable)

with potential:
46.0 tons/yr x 2000 lb/ton / 8760 hr/yr = 10.5 lb/hr (will comply)

~~Process:~~	~~Rate (tons Al/hr)~~	~~Pollutant~~	~~Ef (lb/ton produced)~~	~~Ebc (ton/yr)~~	~~Type of control~~	~~Control Efficiency (%)~~	~~Eac (ton/yr)~~
~~Castings Cooling C-1~~	~~2.5~~	~~PM~~	~~1.40~~	~~15.33~~	~~baghouse CD-1~~	~~0.00%~~	~~15.33~~
~~*SCC# 3-04-003-25*~~		~~PM-10~~	~~1.40~~	~~15.33~~	~~baghouse CD-1~~	~~0.00%~~	~~15.33~~
		~~SO2~~	~~0.00~~	~~0.00~~			~~0.00~~
		~~NOx~~	~~0.00~~	~~0.00~~			~~0.00~~
		~~VOC~~	~~0.00~~	~~0.00~~			~~0.00~~
		~~CO~~	~~**~~	~~0.00~~			~~0.00~~

~~Note: Emissions factors from USEPA's Factor Information Retrieval Data System, version 6.25~~
~~Operation of the baghouse to control the C-1 casting cooling system is voluntary.~~

~~*Allowable Emissions:*~~
~~The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates up to 30 tons per hour:~~

~~P= 30 tons/hr *Note: P includes the weight of the metal poured and the weight of the castings.*~~
~~limit = 4.1 x (30 ^0.67) = 40.0 lb/hr (allowable)~~

~~with potential:~~
~~15.3 tons/yr x 2000 lb/ton / 8760 hr/yr = 3.5 lb/hr (will comply)~~

Fort Wayne Foundry - Lima Road Division
4910 Lima Road, Fort Wayne, IN 46808

Reviewer: Syed Jaffery
Permit Number: T003-18740-00007

Process:	Rate (tons Al/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	Control Efficiency (%)	Eac (ton/yr)
Pouring/Casting P-2	2.5	PM	4.20	45.99	None		45.99
SCC# 3-04-003-18		PM-10	2.06	22.56			22.56
		SO2	0.02	0.22			0.22
		NOx	0.01	0.11			0.11
		VOC	0.14	1.53			1.53
		CO	6.00	65.70			65.70

Note: Emissions factors from USEPA's Factor Information Retrieval Data System, version 6.25
CO emission factor based on the best information for CO emissions from pouring, cooling, and shakeout operations. ** These emissions represent total emissions from pouring, cooling and shakeout combined.
PM/PM10 emissions for Pouring/Casting (P-2) represent total PM/PM10 emissions for Pouring/Casting (P-2) and Castings Cooling (C-2) combined
Allowable Emissions:
The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates up to 30 tons per hour:

P= 30 tons/hr *Note: P includes the weight of the metal poured and the weight of the castings.*

limit = 4.1 x (30 ^0.67) = 40.0 lb/hr (allowable)

with potential:
46.0 tons/yr x 2000 lb/ton / 8760 hr/yr = 10.5 lb/hr (will comply)

~~Process:~~	~~Rate (tons Al/hr)~~	~~Pollutant~~	~~Ef (lb/ton produced)~~	~~Ebc (ton/yr)~~	~~Type of control~~	~~Control Efficiency (%)~~	~~Eac (ton/yr)~~
~~Castings Cooling C-2~~	~~2.5~~	~~PM~~	~~1.40~~	~~15.33~~	~~baghouse CD-1~~	~~50.00%~~	~~7.67~~
~~*SCC# 3-04-003-25*~~		~~PM-10~~	~~1.40~~	~~15.33~~	~~baghouse CD-1~~	~~50.00%~~	~~7.67~~
		~~SO2~~	~~0.00~~	~~0.00~~			~~0.00~~
		~~NOx~~	~~0.00~~	~~0.00~~			~~0.00~~
		~~VOC~~	~~0.00~~	~~0.00~~			~~0.00~~
		~~CO~~	~~**~~	~~0.00~~			~~0.00~~

~~Note: Emissions factors from USEPA's Factor Information Retrieval Data System, version 6.25~~

~~*Allowable Emissions:*~~
~~The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates up to 30 tons per hour:~~

~~P= 30 tons/hr *Note: P includes the weight of the metal poured and the weight of the castings.*~~

~~limit = 4.1 x (30 ^0.67) = 40.0 lb/hr (allowable)~~

~~with potential:~~
~~7.7 tons/yr x 2000 lb/ton / 8760 hr/yr = 1.8 lb/hr (will comply)~~

Fort Wayne Foundry - Lima Road Division
4910 Lima Road, Fort Wayne, IN 46808

Reviewer: Syed Jaffery
Permit Number: T003-18740-00007

Process:	Rate (tons Al/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	Control Efficiency (%)	Eac (ton/yr)
Castings Shakeout SK-2	2.5	PM	3.20	35.04	baghouse CD-1	0.00%	35.04
SCC# 3-04-003-31		PM-10	2.24	24.53	baghouse CD-1	0.00%	24.53
		SO2	0.00	0.00			0.00
		NOx	0.00	0.00			0.00
		VOC	1.20	13.14			13.14
		CO	**	0.00			0.00

Note: Emissions factors from USEPA's Factor Information Retrieval Data System, version 6.25

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates up to 30 tons per hour:

P= 30 tons/hr *Note: P includes the weight of the metal poured and the weight of the castings.*

limit = 4.1 x (30 ^0.67) = 40.0 lb/hr (allowable)

with potential:

35.0 tons/yr x 2000 lb/ton / 8760 hr/yr = 8.0 lb/hr (will comply)

Process:	Rate (tons Al/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	Control Efficiency (%)	Eac (ton/yr)
Core Making (Sand Handling)	6.0	PM	**1.10**	**28.91**	None		**28.91**
ISO-1 through ISO-5, and ISO-7		PM-10	0.54	14.19			14.19
SCC# 3-04-003-~~50~~ ***19***		SO2	0.00	0.00			0.00
		NOx	0.00	0.00			0.00
		VOC	0.00	0.00			0.00
		CO	0.00	0.00			0.00

Note: Emissions factors from USEPA's Factor Information Retrieval Data System, version 6.25
See page 10 of 11 for coremaking VOC calculations.

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates up to 30 tons per hour:

P= 1 tons/hr *Note: P includes the weight of each core making machine.*

limit = 4.1 x (1 ^0.67) = 4.1 lb/hr (allowable)

with potential:

4.8 tons/yr x 2000 lb/ton / 8760 hr/yr = **1.1** lb/hr (will comply)

Note: IDEM agreed to change PM emission factor for core making from ~~3.6~~ lbs/ton to **1.1** lbs/ton. Therefore, the following values have been changed: Ef ~~3.6~~ to **1.1**; Eac ~~94.61~~ to **2**

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit Renewal

Source Background and Description

Source Name:	**Fort Wayne Foundry Corp. – Lima Road Division**
Source Location:	**4910 Lima Road, Fort Wayne, Indiana 46808**
County:	**Allen**
SIC Code:	**3365**
Operation Permit No.:	**T003-7528-00007**
Operation Permit Issuance Date:	**December 28, 1999**
Permit Renewal No.:	**T003-18740-00007**
Permit Reviewer:	**Alic Bent/EVP**

The Office of Air Quality (OAQ) has reviewed a Part 70 Operating Permit Renewal application from Fort Wayne Foundry Corp. – Lima Road Division relating to the operation of a stationary secondary aluminum metal production facility.

Permitted Emission Units and Pollution Control Equipment

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

(a) the scrap and charge handling process, constructed in 1985, with a maximum charge rate of 8 tons of aluminum ingots and scrap per hour, with emissions uncontrolled;

(b) the aluminum melting process, consisting of two (2) natural gas-fired reverberatory furnace systems, identified as RF-1 and RF-2, constructed in 1986 and 1985 respectively, each with a maximum charge rate of 4 tons per hour of aluminum ingots and scrap and each with a maximum production rate of 2.5 tons of melted aluminum per hour, both uncontrolled, and exhausting through stacks D1 and D2, respectively;

(c) one (1) pouring system, identified as P-1, constructed in 1979, with a maximum capacity of 2.5 tons of melted aluminum per hour and 27.5 tons of sand per hour, with emissions uncontrolled, and exhausting inside the building;

(d) one (1) pouring system, identified as P-2, constructed in 1978, with a maximum capacity of 2.5 tons of melted aluminum per hour and 27.5 tons of sand per hour, with emissions uncontrolled, and exhausting inside the building;

(e) one (1) castings cooling system, identified as C-1, constructed in 1979, with a maximum capacity of 2.5 tons of aluminum castings per hour and 27.5 tons of sand per hour, with emissions controlled by baghouse CD-1, and exhausting through stack CD-1;

Note: Operation of the baghouse to control the C-1 castings cooling system is voluntary and is not required per this permit.

(f) one (1) castings cooling system, identified as C-2, constructed in 1978, with a maximum capacity of 2.5 tons of aluminum castings per hour and 27.5 tons of sand per hour, with emissions controlled by baghouse CD-1, and exhausting through stack CD-1;

(g) one (1) shakeout knockout zone, identified as SK-1, constructed in 1979, with a maximum capacity of 27.5 tons of sand per hour and 2.5 tons of aluminum per hour, with emissions controlled by baghouse CD-1, and exhausting through stack CD-1;

Note: Operation of the baghouse to control the shakeout knockout zone is voluntary and is not required per this permit.

(h) one (1) shakeout knockout zone, identified as SK-2, constructed in 1978, with a maximum capacity of 27.5 tons of sand per hour and 2.5 tons of aluminum per hour, with emissions controlled by baghouse CD-1, and exhausting through stack CD-1;

Note: Operation of the baghouse to control the shakeout knockout zone is voluntary and is not required per this permit.

(i) one (1) sand handling system, identified as SH-1, constructed in 1978, with a maximum capacity of 50 tons of sand per hour, controlled by baghouse CD-1, and exhausting through stack CD-1;

(j) three (3) core making systems, identified as ISO-1 through ISO-3, constructed in 1978, 1981, and 1982, respectively, each with a maximum capacity of 1 ton of sand per hour, using a phenolic urethane cold box core making process, using a maximum of 2.0 pounds of TEA catalyst per ton of sand cores, all uncontrolled and exhausting through stack I-1; and

(k) three (3) core making systems, identified as ISO-4, ISO-5 and ISO-7, constructed in 1988, 1993, and 1999, respectively, each with a maximum capacity of 1 ton of sand per hour, using a phenolic urethane cold box core making process, using a maximum of 2.0 pounds of TEA catalyst per ton of sand cores, all uncontrolled and exhausting through stack I-1.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted emission units operating at this source during this review 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 (10) million Btu per hour;

(b) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month;

(c) Storage tanks with capacity less than or equal to 1000 gallons and annual throughputs less than 12,000 gallons;

(d) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids;

(e) Refractory storage not requiring air pollution control equipment;

(f) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings;

(g) Machining where an aqueous cutting coolant continuously floods the machining interface;

(h) Degreasing operations that do not exceed 10 tons VOC per year, 3 pounds VOC per hour, or 15 pounds VOC per day and is not subject to 326 IAC 20-6 including one (1) parts washer, constructed in 1991; [326 IAC 8-3-2] [326 IAC 8-3-5]

(i) Cleaners and solvents characterized as follows:

(1) having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100°F) or;

(2) having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.

(j) The following equipment related to manufacturing activities not resulting in the emission of HAPs; brazing equipment, cutting torches, soldering equipment, welding equipment; [326 IAC 6-3-2]

(k) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs;

(l) Water based adhesives that are less than or equal to 5% by volume of VOCs excluding HAPs;

(m) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment;

(n) Underground conveyors;

(o) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment;

(p) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower;

(q) Grinding and machining operations, constructed 1988, 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; [326 IAC 6-3-2]

(r) Grinding and machining operations, constructed 1988, uncontrolled consisting of blasting operations, finishing operations, belt grinders, saws, conveyors, cutting machines and trim presses, each with the potential to emit less than 5 tons PM-10 per year or 25 pounds PM-10 per day. [326 IAC 6-3-2]

(s) A laboratory as defined in 326 IAC 2-7-1(21)(D);

(t) Hot box core making;

(u) Sand reclamation screen;

(v) Core assembly glues; and

(w) Lake sand silo.

Existing Approvals

The source has constructed or has been operating under the following previous approvals:

(a) Part 70 Permit No.: T003-7528-00007, issued on December 28, 1999; and

(b) Part 70 Permit Reopening No.: 003-13133-00007, issued on January 25, 2002.

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

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A: pages 1 through 11 of this document for detailed emission calculations.

County Attainment Status

The source is located in Allen County.

Pollutant	Status
PM2.5	Attainment
PM10	Attainment
SO_2	Attainment
NO_2	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

Note: On September 6, 2007 the Indiana Air Pollution Control Board finalized a temporary emergency rule to redesignate Allen, Clark, Elkhart, Floyd, LaPorte, St. Joseph as attainment for the 8-hour ozone standard.

(a) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.

(b) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC emissions and NOx emissions are considered when evaluating the rule applicability relating to ozone. Allen County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

(c) Allen County has been classified as unclassifiable or attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions. See the State Rule Applicability for the source section.

(d) Allen County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	1099.82
PM10	286.67
SO_2	0.44
VOC	128.32
CO	131.40
NO_x	0.22

HAPs	tons/year
Benzene	Less than 10
Manganese	Less than 10
Xylene	Less than 10
Triethylamine (TEA)	Greater than 10
Toluene	Less than 10
Analine	Less than 10
Total	Greater than 25

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM10, VOC and CO is 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 to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(c) Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are not counted toward the determination of Part 70 applicability.

(d) This source only melts clean charge, customer returns, or internal scrap and does not operate sweat furnaces, thermal chip dryers, or scrap dryers/delacquering kilns/decoating kilns, therefore, it is not a secondary aluminum production facility.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2003 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	No data
PM10	14
SO_2	0
VOC	20
CO	2
NO_x	2
HAP	No data

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

(a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.

(b) Monitoring and related record keeping requirements which assure that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 permit renewal, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

	Potential to Emit (tons/year)						
Process/emission unit	PM	PM10	SO_2	VOC	CO	NO_X	HAPs
Scrap and Charge Handling - 1985	9.63	5.26	0.00	0.00	0.00	0.00	single HAP < 10 total HAPs < 25
Reverberatory Furnace (RF-1) - 1986	24.0	14.0	0.00	3.50	0.00	0.00	single HAP < 10 total HAPs < 25
Reverberatory Furnace (RF-2) - 1985	15.33	9.63	0.00	3.50	0.00	0.00	single HAP < 10 total HAPs < 25
Pouring/Casting (P-1) -1979	45.99	22.56	0.22	1.53	65.7	0.11	single HAP < 10 total HAPs < 25
Cooling line (C-1) - 1979	15.33	15.33	0.00	0.00		0.00	
Shakeout (SK-1) - 1979	35.04	24.53	0.00	13.14		0.00	
Pouring/Casting (P-2) - 1978	45.99	22.56	0.22	1.53	65.7	0.11	single HAP < 10 total HAPs < 25
Cooling line (C-2) - 1978	15.33	15.33	0.00	0.00		0.00	
Shakeout (SK-2) - 1978	35.04	24.53	0.00	13.14		0.00	
Sand Handling - 1978	21.9	21.9	0.00	0.00	0.00	0.00	0.00
Core Making Systems (ISO-1 through ISO-5 and ISO-7)	81.68	12.38	0.00	91.98	0.00	0.00	single HAP > 10 total HAPs > 25
Total PTE	345.26	188.01	0.44	128.3	131.4	0.22	single HAP > 10 total HAPs > 25

This existing stationary source is major for PSD because the emissions of PM are greater than two hundred fifty (>250) tons per year, and it is not one of the twenty-eight (28) listed source categories.

Federal Rule Applicability

(a) The requirements of the New Source Performance Standard (NSPS), 326 IAC 12, (40 CFR 60.191, Subpart S (Primary Aluminum Reduction) are not included in the permit because the source does not perform primary aluminum reduction as defined in 40 CFR 60.191. This source is a secondary aluminum foundry plant.

(b) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each pollutant-specific emission unit that meets the following criteria:

(1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;

(2) is subject to an emission limitation or standard for that pollutant; and

(3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each existing emission unit and specified pollutant subject to CAM:

Emission Unit / Pollutant	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
Scrap and charge handling – PM/PM10	None	Y	7.88	7.88	100	N	N
Reverberatory furnace (RF-1) – PM/PM10	None	Y	5.48	5.48	100	N	N
Reverberatory furnace (RF-2) – PM/PM10	None	Y	5.48	5.48	100	N	N
Pouring line (P-1) – PM/PM10	None	Y	22.56	22.56	100	N	N
Pouring line (P-1) – CO	None	N	65.70	65.70	100	N	N
Pouring line (P-1) - HAP	None	N	Single HAP < 10 Total HAPs < 25	Single HAP < 10 Total HAPs < 25	Single HAP - 10 Total HAPs - 25	N	N
Pouring line (P-2) – PM/PM10	None	Y	22.56	22.56	100	N	N
Pouring line (P-2) – CO	None	N	65.70	65.70	100	N	N
Pouring line (P-2) - HAP	None	Y	Single HAP < 10 Total HAPs < 25	Single HAP < 10 Total HAPs < 25	Single HAP - 10 Total HAPs - 25	N	N
Cooling line (C-1) – PM/PM10	None	Y	15.33	15.33	100	N	N
Cooling line (C-1) – HAP	None	N	Single HAP < 10 Total HAPs < 25	Single HAP < 10 Total HAPs < 25	Single HAP - 10 Total HAPs - 25	N	N
Cooling line (C-2) – PM/PM10	Baghouse CD-1	Y	15.33	7.67	100	N	N
Cooling line (C-2) – HAP	None	N	Single HAP < 10 Total HAPs < 25	Single HAP < 10 Total HAPs < 25	Single HAP - 10 Total HAPs - 25	N	N
Knockout zone (SK1) – PM/PM10	None	Y	24.53	24.53	100	N	N
Knockout zone (SK1) - VOC	None	N	13.14	13.14	100	N	N
Knockout zone (SK1) - HAP	None	N	Single HAP < 10 Total HAPs < 25	Single HAP < 10 Total HAPs < 25	Single HAP - 10 Total HAPs - 25	N	N
Knockout zone (SK2) – PM/PM10	None	Y	24.53	24.53	100	N	N
Knockout zone (SK2) - VOC	None	N	13.14	13.14	100	N	N
Knockout zone (SK2) - HAP	None	N	Single HAP < 10 Total HAPs < 25	Single HAP < 10 Total HAPs < 25	Single HAP - 10 Total HAPs - 25	N	N
Sand handling – PM/PM10	Baghouse CD-1	Y	118.3	9.0	100	Y	N
Each Core making machine – VOC	None	Y	15.33	15.33	100	N	N
Each Core making machine – PM/PM10	None	Y	2.37	2.37	100	N	N
Each Core making machine – HAP	None	N	Single HAP < 10 Total HAPs < 25	Single HAP < 10 Total HAPs < 25	Single HAP - 10 Total HAPs - 25	N	N

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to sand handling operation for PM/PM-10. A CAM plan has been submitted and the Compliance Determination and Monitoring Requirements section includes a detailed description of the CAM requirements.

(c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source. The degreasing performed at this source does not use chlorinated solvents, therefore, 40 CFR Part 63, Subpart T, is not included in the permit.

(d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Aluminum Production, 40 CFR 63.1500 through 63.1519, Subpart RRR, are not included in the permit because this source is not a secondary aluminum production facility as defined in 40 CFR 63.1503. Pursuant to 40 CFR 63.1503, aluminum die casting facilities, aluminum foundries, and aluminum extrusion facilities are not considered to be secondary aluminum production facilities if the only materials they melt are clean charge, customer returns, or internal scrap, and if they do not operate sweat furnaces, thermal chip dryers, or scrap dryers/delacquering kilns/decoating kilns. This source only melts clean charge, customer returns, or internal scrap and does not operate sweat furnaces, thermal chip dryers, or scrap dryers/delacquering kilns/decoating kilns, therefore, it is not a secondary aluminum production facility as defined in the rule.

State Rule Applicability – Entire Source

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

This source is not subject to the requirements of 326 IAC 2-2. This source was constructed prior to the August 7, 1977 applicability date, was a minor source at that time and is not one of the 28 listed source categories. Since 1977 the source has made the following modifications:

(a) The pouring line (P-2), castings cooling station (C-2), the shakeout knockout zone (SK-2), core machine (ISO-1), and the sand handling process were each constructed in 1978. The pouring line (P-1), castings cooling station (C-1), and the shakeout knockout zone (SK-1) were each constructed in 1979. The potential to emit of PM and PM10 is greater than 250 tons per year. Therefore, an enforceable limit is included by this permit T003-18740-00007, which will limit PM and PM10 emissions for the units installed in 1978 and 1979 to less than 250 tons per year. The uncontrolled potential to emit of CO and VOC from these emission units are less than 250 tons per year.

(1) The PM emission rate from the pouring operation P-1 shall be limited to less than 10.5 pounds per hour.

(2) The PM10 emission rate from the pouring operation P-1 shall be limited to less than 5.15 pounds per hour.

(3) The PM emission rate from the pouring operation P-2 shall be limited to less than 10.5 pounds per hour.

(4) The PM10 emission rate from the pouring operation P-2 shall be limited to less than 5.15 pounds per hour.

(5) The PM emission rate from the cooling system C-1 shall be limited to less than 3.5 pounds per hour.

(6) The PM10 emission rate from the cooling system C-1 shall be limited to less than 3.5 pounds per hour.

(7) The PM emission rate from the cooling system C-2 shall be limited to less than 3.5 pounds per hour.

(8) The PM10 emission rate from the cooling system C-2 shall be limited to less than 3.5 pounds per hour.

(9) The PM emission rate from the shakeout knockout zone SK-1 shall be limited to less than 8.0 pounds per hour.

(10) The PM10 emission rate from the shakeout knockout zone SK-1 shall be limited to less than 5.6 pounds per hour.

(11) The PM emission rate from the shakeout knockout zone SK-2 shall be limited to less than 8.0 pounds per hour.

(12) The PM10 emission rate from the shakeout knockout zone SK-2 shall be limited to less than 5.6 pounds per hour.

(13) The PM emission rate from the sand handling operation SH-1 shall be limited to less than 5.0 pounds per hour.

(14) The PM10 emission rate from the sand handling operation SH-1 shall be limited to less than 5.0 pounds per hour.

(15) The PM emission rate from the core machine (ISO-1) shall be limited to less than 2.76 pounds per hour.

(16) The PM10 emission rate from the core machine (ISO-1) shall be limited to less than 0.45 pounds per hour.

Compliance with these limits will limit total PM and PM10 emissions from the units installed in 1978 and 1979 to less than 250 tons per year each. Therefore, the requirements of 326 IAC 2-2 (PSD) will not apply to the 1978 and 1979 construction.

(b) One (1) core machine (ISO-2), constructed in 1981, is not subject to this rule because uncontrolled PM, PM10 and VOC emissions from the addition of this unit are 15.77, 2.37 and 15.33 tons per year, respectively, which are less than the PSD significant levels.

(c) One (1) core machine (ISO-3), constructed in 1982, is not subject to this rule because uncontrolled PM, PM10 and VOC emissions from the addition of this unit are 15.77, 2.37 and 15.33 tons per year, respectively, which are less than the PSD major modification thresholds. However, the total source-wide potential PM and PM10 emissions are greater than 250 tons per year. Therefore, the source is considered a major PSD source with respect to the subsequent modifications to the source.

(d) Pursuant to Part 70 Permit No. T003-7528-00007, issued on December 28, 1999, the reverberatory furnace (RF-2) and the scrap and charge handling process, each constructed in 1985, are not subject to this rule because the limited PM and PM10 emissions from the addition of these units are less than 25.0 and 15.0 tons per year, respectively, which are less than the PSD major modification thresholds.

(1) The PM emission rate from the natural gas-fired reverberatory furnace RF-2 shall be limited to less than 3.50 pounds per hour.

(2) The PM10 emission rate from the natural gas-fired reverberatory furnace RF-2 shall be limited to less than 2.20 pounds per hour.

(3) The PM emission rate from the scrap and charge handling process shall be limited to less than 2.20 pounds per hour.

(4) The PM10 emission rate from the scrap and charge handling process shall be limited to less than 1.20 pounds per hour.

Compliance with these limits will limit total combined PM and PM10 emissions from the reverberatory furnace RF-2, and the scrap and charge handling process to less than 25 and 15 tons per year, respectively.

(e) Pursuant to Part 70 Permit No. T003-7528-00007, issued on December 28, 1999, the reverberatory furnace (RF-1), constructed in 1986, is not subject to this rule because the limited PM and PM10 emissions from the addition of this unit are 24.0 and 14.0 tons per year, respectively, which are less than the PSD major modification thresholds.

(1) The PM emission rate from the natural gas-fired reverberatory furnace RF-1 shall be limited to less than 5.48 pounds per hour.

(2) The PM10 emission rate from the natural gas-fired reverberatory furnace RF-1 shall be limited to less than 3.20 pounds per hour.

Compliance with these limits will limit PM and PM10 emissions from the reverberatory furnace RF-1 to less than 25 and 15 tons per year, respectively.

(f) Three (3) core machines, (ISO-4, ISO-5 and ISO-7), constructed in 1988, 1993 and 1999, respectively, are not subject to this rule because uncontrolled VOC emissions from the addition of each of these units are 15.77, 2.37 and 15.33 tons per year, respectively, which are less than the PSD major modification thresholds.

326 IAC 2-6 (Emission Reporting)

Since this source is required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, this source is subject to 326 IAC 2-6 (Emission Reporting). In accordance with the compliance schedule in 326 IAC 2-6-3, an emission statement must be submitted annually if the potential to emit of VOC or PM10 is greater than 250 tons per year, otherwise the emission statement shall be submitted triennially. For this source, the source wide emissions of VOC and PM10 are each less than 250 tons per year. Therefore, in accordance with the compliance schedule in 326 IAC 2-6-3(b)(1), an emission statement shall be submitted triennially by July 1 beginning in 2004 and every 3 years thereafter. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

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

This source is not subject to this rule. This rule applies to major sources of hazardous air pollutants (HAP) that were constructed or reconstructed after July 27, 1997. The reverberatory furnaces (RF-1 and RF-2), pouring lines (P-1 and P-2), the shakeout knockout zones (SK-1 and SK-2), and five (5) core making systems (ISO-1 through ISO-5) were constructed prior to the applicability date of July 27, 1997. One (1) core making machine (ISO-7) was constructed after 1997, however, the uncontrolled potential to emit of single and total HAPs from this unit is less than 10 and 25 tons per year, respectively. Therefore, the requirements of 326 IAC 2-4.1-1 are not applicable to core making machine (ISO-7).

326 IAC 5-1 (Opacity Limitations)

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

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability – Individual Facilities

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

(a) The particulate from the facilities shall be limited by the following:

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

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

and

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

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Process Description	Process Weight Rate (ton/hr)	326 IAC 6-3-2 Allowable (lb/hr)	Controlled Emissions (lb/hr)	Compliance (Y/N)
scrap and charge handling	5.0	12.1	3.0	Y
reverberatory furnace (RF-1)	2.5	7.6	1.3	Y
reverberatory furnace (RF-2)	2.5	7.6	1.3	Y
pouring/casting (P-1)	30.0	40.0	10.5	Y
pouring/casting (P-2)	30.0	40.0	10.5	Y
cooling line (C-1)	30.0	40.0	3.5	Y
cooling line (C-2)	30.0	40.0	1.75	Y
knockout zone (SK1)	30.0	40.0	8.0	Y
knockout zone (SK2)	30.0	40.0	8.0	Y
sand handling (SH-1)	50.0	44.6	1.99	Y
core making (sand handling) (ISO-1 through ISO-5, and ISO-7)	1.0 each	4.1 each	3.6 each	Y

Emissions from the scrap and charge handling, the reverberatory furnaces RF-1 and RF-2, castings cooling stations (C-1 and C-2), the shakeout knockout zones (SK-1 and SK-2), and pouring/casting line P-2 are in compliance with 326 IAC 6-3-2 without using any control device. The baghouse shall be in operation at all times the sand handling process is in operation, in order to comply with the limit.

(b) Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitations for Manufacturing Process), the particulate matter emissions from the grinding and machining operations shall not exceed the pound per hour emission rate established as E in the following formula:

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

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

326 IAC 8-1-6 (New Facilities, General Reduction Requirements)

This rule applies to facilities constructed after January 1, 1980 which have the potential to emit 25 tons per year or more of VOC. The pouring lines (P-1 and P-2), shakeout knockout zones (SK-1 and SK-2), and one (1) core making system (ISO-1) are not subject to the requirements of 326 IAC 8-1-6 (New Facilities, General Reduction Requirements), because these facilities commenced operation before January 1, 1980. The reverberatory furnaces (RF-1 and RF-2), and the five (5) core making systems (ISO-2 through ISO-5, and ISO-7) were constructed after 1980 but are not subject to this rule because they each have the potential to emit less than 25 tons of VOC per year. Therefore, this rule does not apply.

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

This rule applies to existing facilities as of January 1, 1980, performing organic solvent degreasing operations located in Clark, Elkhart, Floyd, Lake, Marion, Porter, and St. Joseph Counties and which are located at sources which have potential emissions of one hundred (100) tons or more of VOC, and new facilities after January 1, 1980, performing organic solvent degreasing operations located anywhere in the state.

The one (1) parts washer was installed after 1980, therefore, it is subject to 326 IAC 8-3-2.

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the Permittee shall:

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide a permanent, conspicuous label summarizing the operation requirements;

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

326 IAC 8-3-5 (Cold Cleaner Degreaser Operation)

This rule applies to existing facilities as of July 1, 1990, performing organic solvent degreasing operations located in Clark, Elkhart, Floyd, Lake, Marion, Porter, and St. Joseph Counties, and new facilities after July 1, 1990, performing organic solvent degreasing operations located anywhere in the state.

The one (1) parts washer was installed after July 1, 1990, therefore, it is subject to 326 IAC 8-3-5.

Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:

(a) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(1) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));

(2) The solvent is agitated; or

(3) The solvent is heated.

(b) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(c) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(d) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(e) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^{O}C) (one hundred twenty degrees Fahrenheit (120°F)):

(1) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(2) A water cover when solvent is used is insoluble in, and heavier than, water.

(3) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility, shall ensure that the following operating requirements are met:

(a) Close the cover whenever articles are not being handled in the degreaser.

(b) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(c) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

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

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

Emission Unit	Control Device	Timeframe for Testing	Pollutant	Frequency of Testing	Limit or Requirement
Reverberatory Furnace RF-1	None	180 days after issuance	PM and PM10	Once every 5 years	5.48 lbs/hr PM 3.20 lbs/hr PM10
Reverberatory Furnace RF-2	None	180 days after issuance	PM and PM10	Once every 5 years	3.50 lbs/hr PM 2.20 lbs/hr PM10
Sand Handling Operation (SH-1)	Baghouse CD-1	Before March 2011	PM and PM10	Once every 5 years	5.0 lbs/hr PM 5.0 lbs/hr PM10

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

1. The two (2) natural gas-fired reverberatory furnaces RF-1 and RF-2 have applicable compliance monitoring conditions as specified below:

Emission Unit	Parameter	Frequency	Range	Excursions and Exceedances
Natural Gas-Fired Reverberatory Furnaces RF-1 and RF-2	Visible Emissions	Daily	Normal-Abnormal	Response Steps

These monitoring conditions are necessary because the two (2) natural gas-fired reverberatory furnaces RF-1 and RF-2 must operate properly to ensure compliance with 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 2-7 (Part 70).

2. The castings cooling station (C-2) and the sand handling operation (SH-1) have applicable compliance monitoring conditions as specified below:

Control	Parameter	Frequency	Range	Excursions and Exceedances
Baghouse CD-1 for the casting station (C-2) and sand handling operation (SH-1)	Water Pressure Drop	Daily	3 to 6 inches	Response Steps
	Visible Emissions		Normal-Abnormal	

These monitoring conditions are necessary because the baghouse for the castings cooling station (C-2) must operate properly to ensure compliance with 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 2-7 (Part 70), and the baghouse for the sand handling process (SH-1) must operate properly to ensure compliance with 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), 326 IAC 2-7 (Part 70) and 40 CFR, Part 64 (CAM).

Recommendation

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

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

An administratively complete Part 70 permit renewal application for the purposes of this review was received on April 5, 2004.

Conclusion

The operation of this secondary aluminum metal production facility shall be subject to the conditions of this Part 70 permit T003-18740-00007.

Appendix A: Emission Calculations

Company Name: Fort Wayne Foundry - Lima Road Division
Address City IN Zip: 4910 Lima Road, Fort Wayne, IN 46808
Permit Number: T003-18740-00007
Reviewer: AB/EVP

Total Potential To Emit (tons/year)

	Emissions Generating Activity										
Pollutant	Reverberatory Furnaces (RF-1 and RF-2)	Charge Handling	Pouring/Casting (P-1)	Castings Cooling (C-1)	Shakeout (SK-1)	Sand Handling (SH-1)	Pouring/Casting (P-2)	Castings Cooling (C-2)	Shakeout (SK-2)	Coremaking (ISO-1 through ISO-5, and ISO-7)	**SUBTOTAL**
PM	10.95	13.14	45.99	15.33	35.04	788.40	45.99	15.33	35.04	94.61	1099.82
PM10	10.95	7.88	22.56	15.33	24.53	118.30	22.56	15.33	35.04	14.19	286.67
SO2	0.00	0.00	0.22	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.44
NOx	0.00	0.00	0.11	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.22
VOC	7.00	0.00	1.53	0.00	13.14	0.00	1.53	0.00	13.14	91.98	128.32
CO	0.00	0.00	65.70			0.00	65.70			0.00	131.40
total HAPs	0.41	0.50	8.55			0.00	8.55			53.45	71.46
worst case single HAP	(Manganese) 0.34	(Manganese) 0.41	(Manganese) 2.99			0.00	(Manganese) 2.99			(TEA) 52.56	(TEA) 52.56

Total emissions based on rated capacities at 8,760 hours/year.
**For the purposes of determining Title V applicability, PM10 (not PM) is the regulated pollutant in consideration
The PM and PM10 emission factors are based on December 2000 stack tests.

Potential To Emit After Issuance (tons/year)

	Emissions Generating Activity										
Pollutant	Reverberatory Furnaces (RF-1 and RF-2)	Charge Handling	Pouring/Casting (P-1)	Castings Cooling (C-1)	Shakeout (SK-1)	Sand Handling (SH-1)	Pouring/Casting (P-2)	Castings Cooling (C-2)	Shakeout (SK-2)	Coremaking (ISO-1 through ISO-5, and ISO-7)	**SUBTOTAL**
PM	39.33	9.63	45.99	15.33	35.04	21.90	45.99	15.33	35.04	81.68	345.26
PM10	23.63	5.26	22.56	15.33	24.53	21.90	22.56	15.33	24.53	12.38	188.01
SO2	0.00	0.00	0.22	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.44
NOx	0.00	0.00	0.11	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.22
VOC	7.00	0.00	1.53	0.00	13.14	0.00	1.53	0.00	13.14	91.98	128.32
CO	0.00	0.00	65.70			0.00	65.70			0.00	131.40
total HAPs	0.41	0.50	8.55			0.00	8.55			53.45	71.46
worst case single HAP	(Manganese) 0.34	(Manganese) 0.41	(Manganese) 2.99			0.00	(Manganese) 2.99			(TEA) 52.56	(TEA) 52.56

Total emissions based on rated capacities at 8,760 hours/year.
**For the purposes of determining Title V applicability, PM10 (not PM) is the regulated pollutant in consideration

Appendix A: Emission Calculations
Aluminum Foundry Emissions

Company Name: Fort Wayne Foundry - Lima Road Division
Address City IN Zip: 4910 Lima Road, Fort Wayne, IN 46808
Permit Number: T003-18740-00007
Reviewer: AB/EVP

* * Process Emissions * *

Process:	Rate (tons Al/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	Control Efficiency (%)	Eac (ton/yr)
Scrap & Charge Handling	5	PM	0.60	13.14	None		13.14
SCC# 3-04-003-015		PM-10	0.36	7.88			7.88
		SO2	0.00	0.00			0.00
		NOx	0.00	0.00			0.00
		VOC	0.00	0.00			0.00
		CO	0.00	0.00			0.00

Note: Emissions factors from USEPA's Factor Information Retrieval Data System, version 6.25
Although the scrap and charge handling operation at the source has a charge capacity of 8 tons/hour, the maximum process rate is limited by the pouring/casting rates to 5 tons/hr.

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates up to 30 tons per hour:

P= 5 tons/hr

limit = 4.1 x (5 ^0.67) = 12.1 lb/hr (allowable)

with potential:
13.1 tons/yr x 2000 lb/ton / 8760 hr/yr = 3.0 lb/hr (will comply)

Process:	Rate (tons Al/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	Control Efficiency (%)	Eac (ton/yr)
Melting	5	* PM	0.50	10.95	None		10.95
Reverberatory Furnaces		* PM-10	0.50	10.95			10.95
RF-1 and RF-2		SO2	0.00	0.00			0.00
SCC# 3-04-001-03		NOx	0.00	0.00			0.00
		VOC	0.20	4.38			4.38
		CO	0.00	0.00			0.00

Note: Emissions factors from USEPA's Factor Information Retrieval Data System, version 6.25
* The PM and PM10 emission factors are based on December 2000 stack tests.
Although the melting furnaces at the source has a total melt capacity of 8 tons/hour, the maximum process rate is limited by the pouring/casting rates to 5 tons/hr.

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates up to 30 tons per hour:

P= 2.5 tons/hr

limit = 4.1 x (2.5 ^0.67) = 7.6 lb/hr (allowable)

with potential:
5.5 tons/yr x 2000 lb/ton / 8760 hr/yr = 1.3 lb/hr (will comply)

Fort Wayne Foundry - Lima Road Division
4910 Lima Road, Fort Wayne, IN 46808

Reviewer: AB/EVP
Permit Number: T003-18740-00007

Process:	Rate (tons Al/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	Control Efficiency (%)	Eac (ton/yr)
Pouring/Casting P-1	2.5	PM	4.20	45.99	None		45.99
SCC# 3-04-003-18		PM-10	2.06	22.56			22.56
		SO2	0.02	0.22			0.22
		NOx	0.01	0.11			0.11
		VOC	0.14	1.53			1.53
		CO	6.00	65.70			65.70

Note: Emissions factors from USEPA's Factor Information Retrieval Data System, version 6.25
CO emission factor based on the best information for CO emissions from pouring, cooling, and shakeout operations. These emissions represent total emissions from Line 1 pouring, cooling and shakeout combined.

Allowable Emissions:
The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates up to 30 tons per hour:

P= 30 tons/hr *Note: P includes the weight of the metal poured and the weight of the castings.*
limit = 4.1 x (30 ^0.67) = 40.0 lb/hr (allowable)

with potential:
46.0 tons/yr x 2000 lb/ton / 8760 hr/yr = 10.5 lb/hr (will comply)

Process:	Rate (tons Al/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	Control Efficiency (%)	Eac (ton/yr)
Castings Cooling C-1	2.5	PM	1.40	15.33	baghouse CD-1	0.00%	15.33
SCC# 3-04-003-25		PM-10	1.40	15.33	baghouse CD-1	0.00%	15.33
		SO2	0.00	0.00			0.00
		NOx	0.00	0.00			0.00
		VOC	0.00	0.00			0.00
		CO	**	0.00			0.00

Note: Emissions factors from USEPA's Factor Information Retrieval Data System, version 6.25
Operation of the baghouse to control the C-1 casting cooling system is voluntary.

Allowable Emissions:
The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates up to 30 tons per hour:

P= 30 tons/hr *Note: P includes the weight of the metal poured and the weight of the castings.*
limit = 4.1 x (30 ^0.67) = 40.0 lb/hr (allowable)

with potential:
15.3 tons/yr x 2000 lb/ton / 8760 hr/yr = 3.5 lb/hr (will comply)

Fort Wayne Foundry - Lima Road Division
4910 Lima Road, Fort Wayne, IN 46808

Reviewer: AB/EVP
Permit Number: T003-18740-00007

Process:	Rate (tons Al/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	Control Efficiency (%)	Eac (ton/yr)
Castings Shakeout SK-1	2.5	PM	3.20	35.04	baghouse CD-1	0.00%	35.04
SCC# 3-04-003-31		PM-10	2.24	24.53	baghouse CD-1	0.00%	24.53
		SO2	0.00	0.00			0.00
		NOx	0.00	0.00			0.00
		VOC	1.20	13.14			13.14
		CO	**	0.00			0.00

Note: Emissions factors from USEPA's Factor Information Retrieval Data System, version 6.25
Operation of the baghouse to control the SK-1 casting shakeout system is voluntary.

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates up to 30 tons per hour:

P= 30 tons/hr *Note: P includes the weight of the metal poured and the weight of the castings.*

limit = 4.1 x (30 ^0.67) = 40.0 lb/hr (allowable)

with potential:

35.0 tons/yr x 2000 lb/ton / 8760 hr/yr = 8.0 lb/hr (will comply)

Fort Wayne Foundry - Lima Road Division
4910 Lima Road, Fort Wayne, IN 46808

Reviewer: AB/EVP
Permit Number: T003-18740-00007

Process:	Rate (tons Al/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	Control Efficiency (%)	Eac (ton/yr)
Pouring/Casting P-2	2.5	PM	4.20	45.99	None		45.99
SCC# 3-04-003-18		PM-10	2.06	22.56			22.56
		SO2	0.02	0.22			0.22
		NOx	0.01	0.11			0.11
		VOC	0.14	1.53			1.53
		CO	6.00	65.70			65.70

Note: Emissions factors from USEPA's Factor Information Retrieval Data System, version 6.25
CO emission factor based on the best information for CO emissions from pouring, cooling, and shakeout operations. ** These emissions represent total emissions from pouring, cooling and shakeout combined.

Allowable Emissions:
The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates up to 30 tons per hour:

P= 30 tons/hr *Note: P includes the weight of the metal poured and the weight of the castings.*

limit = 4.1 x (30 ^0.67) = 40.0 lb/hr (allowable)

with potential:
46.0 tons/yr x 2000 lb/ton / 8760 hr/yr = 10.5 lb/hr (will comply)

Process:	Rate (tons Al/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	Control Efficiency (%)	Eac (ton/yr)
Castings Cooling C-2	2.5	PM	1.40	15.33	baghouse CD-1	50.00%	7.67
SCC# 3-04-003-25		PM-10	1.40	15.33	baghouse CD-1	50.00%	7.67
		SO2	0.00	0.00			0.00
		NOx	0.00	0.00			0.00
		VOC	0.00	0.00			0.00
		CO	**	0.00			0.00

Note: Emissions factors from USEPA's Factor Information Retrieval Data System, version 6.25

Allowable Emissions:
The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates up to 30 tons per hour:

P= 30 tons/hr *Note: P includes the weight of the metal poured and the weight of the castings.*

limit = 4.1 x (30 ^0.67) = 40.0 lb/hr (allowable)

with potential:
7.7 tons/yr x 2000 lb/ton / 8760 hr/yr = 1.8 lb/hr (will comply)

Fort Wayne Foundry - Lima Road Division
4910 Lima Road, Fort Wayne, IN 46808

Reviewer: AB/EVP
Permit Number: T003-18740-00007

Process:	Rate (tons Al/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	Control Efficiency (%)	Eac (ton/yr)
Castings Shakeout SK-2	2.5	PM	3.20	35.04	baghouse CD-1	0.00%	35.04
SCC# 3-04-003-31		PM-10	2.24	24.53	baghouse CD-1	0.00%	24.53
		SO2	0.00	0.00			0.00
		NOx	0.00	0.00			0.00
		VOC	1.20	13.14			13.14
		CO	**	0.00			0.00

Note: Emissions factors from USEPA's Factor Information Retrieval Data System, version 6.25

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates up to 30 tons per hour:

P= 30 tons/hr *Note: P includes the weight of the metal poured and the weight of the castings.*

limit = 4.1 x (30 ^0.67) = 40.0 lb/hr (allowable)

with potential:

35.0 tons/yr x 2000 lb/ton / 8760 hr/yr = 8.0 lb/hr (will comply)

Process:	Rate (tons Al/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	Control Efficiency (%)	Eac (ton/yr)
Core Making (Sand Handling)	6.0	PM	3.60	94.61	None		94.61
ISO-1 through ISO-5, and ISO-7		PM-10	0.54	14.19			14.19
SCC# 3-04-003-50		SO2	0.00	0.00			0.00
		NOx	0.00	0.00			0.00
		VOC	0.00	0.00			0.00
		CO	0.00	0.00			0.00

Note: Emissions factors from USEPA's Factor Information Retrieval Data System, version 6.25
See page 10 of 11 for coremaking VOC calculations.

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates up to 30 tons per hour:

P= 1 tons/hr *Note: P includes the weight of each core making machine.*

limit = 4.1 x (1 ^0.67) = 4.1 lb/hr (allowable)

with potential:

15.8 tons/yr x 2000 lb/ton / 8760 hr/yr = 3.6 lb/hr (will comply)

Fort Wayne Foundry - Lima Road Division
4910 Lima Road, Fort Wayne, IN 46808

Reviewer: AB/EVP
Permit Number: T003-18740-00007

Process:	Rate (tons sand/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	Control Efficiency (%)	Eac (ton/yr)
Sand Handling	50	PM	3.6	788.4	baghouse CD-1	98.90%	8.7
EPA SCC# 3-04-003-50		PM-10	0.54	118.3	baghouse CD-1	92.40%	9.0

Note: Emissions factors from USEPA's Factor Information Retrieval Data System, version 6.25

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates greater than 30 tons per hour:

P= 50 tons/hr

limit = 55 x (50 ^0.11) - 40 = 44.6 lb/hr (allowable)

with potential:

8.7 tons/yr x 2000 lb/ton / 8760 hr/yr = 2.0 lb/hr (will comply)

Methodology:

Ef = Emission factor
Ebc = Potential Emissions before controls = Rate (units/hr) x Ef(lbs/unit) x 8760 hrs/yr / 2000 lbs/hr
Eac = Potential Emissions after controls = (1-efficiency/100) x Ebc
1ton = 2000 lbs

Appendix A: Secondary Metal Production
Aluminum Foundry
Pouring, Cooling and Shakeout HAP Emissions

Company Name: Fort Wayne Foundry - Lima Division
Address City IN Zip: 4910 Lima Road, Fort Wayne, IN 46808
Permit No.: T003-18740-00007
Reviewer: AB/EVP

Organic Hazardous Air Pollution Emission Estimates

Maximum Rate for Pouring/Cooling/Shakeout	5	tons/hr
Analyte	Combined PCS Emissions Factor (lbs/ton)	Emission Before Controls (tons/yr)
Phenol	0.0718	1.5724
Benzene	0.1643	3.5982
Analine	0.0366	0.8015
o-Cresol	0.0185	0.4052
Naphthalene	0.0048	0.1051
N,N-Dimethylaniline	0.0085	0.1862
Toluene	0.0647	1.4169
m, p-Cresol	0.0059	0.1292
m, p-Xylene	0.0044	0.0964
Xylene (Total)	0.0383	0.8388
Acetaldehyde	0.0100	0.2190
Ethylbenzene	0.0070	0.1533
Formaldehyde	0.0011	0.0241
Hexane	0.0046	0.1007
Other HAPs	0.0070	0.1533
Total HAPs	**0.4475**	**9.8003**

METHODOLOGY

HAP Emissions = Usage Rate (tons/hr) * 8760 hrs/yr * EF (lb/ton) * 1 tons/2000 lbs

Emission factors from Reference Tests Recommended in "Organic Hazardous Air Pollutant Emission Factors for Iron Foundries", Prepared by the Air Quality Committee (10-E) of the American Foundry Society August 16, 2005 for Calculating Emission Factors for Pouring, Cooling and Shakeout.

Appendix A: Emission Calculations
HAP Emissions from Foundry Operations

Company Name: Fort Wayne Foundry - Lima Division
Address City IN Zip: 4910 Lima Road, Fort Wayne, IN 46808
Permit No.: T003-18740-00007
Reviewer: AB/EVP

* * Process Emissions * *

Process	Maximum Rate (tons Al/hr)	PM emission factor lb/ton	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Control Device	Control Efficiency (%)
Charge Handling	5	0.60	chromium	0.00023	0.005	0.005	N/A	
SCC# 3-04-003-15			nickel	0.00040	0.009	0.009		
Fire 6.25			arsenic	0.00008	0.002	0.002		
			Lead	0.00231	0.051	0.051		
			Manganese	0.01860	0.407	0.407		
			Antimony	0.00111	0.024	0.024		
			TOTAL	**0.02273**	**0.50**	**0.50**		
Melting	5	0.50	chromium	0.00019	0.004	0.004	N/A	
Reverbertory Furnaces			nickel	0.00034	0.007	0.007		
RF-1 and RF-2			arsenic	0.00007	0.001	0.001		
EPA SCC# 3-04-001-03			Lead	0.00193	0.042	0.042		
Fire 6.25			Manganese	0.01550	0.339	0.339		
			Antimony	0.00093	0.020	0.020		
			TOTAL	**0.01894**	**0.41**	**0.41**		
Pouring/Casting P-1	2.5	4.20	chromium	0.00160	0.017	0.017	N/A	
SCC# 3-04-003-18			nickel	0.00281	0.031	0.031		
Fire 6.25			arsenic	0.00055	0.006	0.006		
			Lead	0.01617	0.177	0.177		
			Manganese	0.13020	1.426	1.426		
			Antimony	0.00777	0.085	0.085		
			TOTAL	**0.15910**	**1.74**	**1.74**		
Cooling C-1	2.5	1.40	chromium	0.00053	0.006	0.006	baghouse CD-1	0.0%
SCC# 3-04-003-18			nickel	0.00094	0.010	0.010	baghouse CD-1	0.0%
Fire 6.25			arsenic	0.00018	0.002	0.002	baghouse CD-1	0.0%
			Lead	0.00539	0.059	0.059	baghouse CD-1	0.0%
			Manganese	0.04340	0.475	0.475	baghouse CD-1	0.0%
			Antimony	0.00259	0.028	0.028	baghouse CD-1	0.0%
			TOTAL	**0.05303**	**0.58**	**0.58**		
Shakeout SK-1	2.5	3.20	chromium	0.00122	0.013	0.013	baghouse CD-1	0.0%
SCC# 3-04-003-31			nickel	0.00214	0.023	0.023	baghouse CD-1	0.0%
Fire 6.25			arsenic	0.00042	0.005	0.005	baghouse CD-1	0.0%
			Lead	0.01232	0.135	0.135	baghouse CD-1	0.0%
			Manganese	0.09920	1.086	1.086	baghouse CD-1	0.0%
			Antimony	0.00592	0.065	0.065	baghouse CD-1	0.0%
			TOTAL	**0.12122**	**1.33**	**1.33**		
Pouring P-2	2.5	4.20	chromium	0.00160	0.017	0.017	N/A	
SCC# 3-04-003-18			nickel	0.00281	0.031	0.031		
Fire 6.25			arsenic	0.00055	0.006	0.006		
			Lead	0.01617	0.177	0.177		
			Manganese	0.13020	1.426	1.426		
			Antimony	0.00777	0.085	0.085		
			TOTAL	**0.15910**	**1.74**	**1.74**		
Cooling C-2	2.5	1.40	chromium	0.00053	0.006	0.003	baghouse CD-1	50.0%
SCC# 3-04-003-18			nickel	0.00094	0.010	0.010	baghouse CD-1	50.0%
Fire 6.25			arsenic	0.00018	0.002	0.002	baghouse CD-1	50.0%
			Lead	0.00539	0.059	0.059	baghouse CD-1	50.0%
			Manganese	0.04340	0.475	0.475	baghouse CD-1	50.0%
			Antimony	0.00259	0.028	0.028	baghouse CD-1	50.0%
			TOTAL	**0.05303**	**0.58**	**0.58**		
Shakeout SK-2	2.5	3.20	chromium	0.00122	0.013	0.013	N/A	
SCC# 3-04-003-31			nickel	0.00214	0.023	0.023		
Fire 6.25			arsenic	0.00042	0.005	0.005		
			Lead	0.01232	0.135	0.135		
			Manganese	0.09920	1.086	1.086		
			Antimony	0.00592	0.065	0.065		
			TOTAL	**0.12122**	**1.33**	**1.33**		

HAP emission factors are based on Fire 6.25 emission factors for PM and the percent of PM that is HAP based on information from SPECIATE, v 3.1.

USEPA Speciate v 3.1 Data	
Metal	Gen. Foundry
Manganese	3.100%
Chromium	0.038%
Nickel	0.067%
Arsenic	0.013%
Antimony	0.185%
Lead	0.385%

	Total Potential Emissions Before Controls	**Total Emissions After Controls**
chromium	0.08 tons/year	0.08 tons/year
nickel	0.15 tons/year	0.15 tons/year
arsenic	0.03 tons/year	0.03 tons/year
Lead	0.83 tons/year	0.83 tons/year
Manganese	6.72 tons/year	6.72 tons/year
Antimony	0.40 tons/year	0.40 tons/year
Total	**8.21 tons/year**	**8.21 tons/year**

Methodology:
Ef = Emission factor
Ebc = Potential Emissions before controls = Rate (units/hr) x Ef(lbs/unit) x 8760 hrs/yr / 2000 lbs/hr
Eac = Potential Emissions after controls = (1-efficiency/100) x Ebc
1 lb = 2000 tons

Company Name: Fort Wayne Foundry - Lima Road Division
Plant Location: 4910 Lima Road, Fort Wayne, IN 46808
Permit Reviewer: AB/EVP
Title V #: T003-18740-00007

Isocure Core Making Process

Machine	Date of Construction	Capacity (tons cores/hr)	Maximum Resin Content (%)	VOC Emission Factor from Resin Evaporation (lb/ton cores)	Max TEA Usage (lb TEA/ton cores)	Potential VOC Emissions from resin evap (tons/yr)	Potential TEA Emissions from TEA usage (tons/yr)	Total Potential VOC Emissions (tons/yr)
1	1978	1	1.5%	1.5	2	6.57	8.76	15.33
2	1981	1	1.5%	1.5	2	6.57	8.76	15.33
3	1982	1	1.5%	1.5	2	6.57	8.76	15.33
4	1988	1	1.5%	1.5	2	6.57	8.76	15.33
5	1993	1	1.5%	1.5	2	6.57	8.76	15.33
7	1999	1	1.5%	1.5	2	6.57	8.76	15.33
Total							52.56	91.98

Instructions:
Note: The maximum TEA usage should reflect the highest TEA usage ever used for the worst case core ever produced by the machine.
Note: The maximum resin usage should reflect the highest resin usage ever used for the worst case core ever produced by the machine.

For Isocure cold box core making, the
OCMA study shows an emission factor of 0.65 lb/ton of cores for VOC emissions from resin evaporation, based on 1% resin usage.
As an example, calculations for a source using a maximum of 1% resin would use an emission factor of 1 lb/ton to provide a conservative estimate of uncontrolled emissions so that no stack test would be necessary to verify emissions.
For a source with a maximum resin content of 1.2%, an emission factor of 1.2 lb/ton might be used to provide a conservative estimate so that no stack test would be necessary to verify emissions.
If the OCMA study emission factor of 0.65 lb/ton of cores is used, then a stack test should be required to verify the emissions.

Appendix A: Secondary Aluminum Foundry Operations
HAP Emission Calculations - Core Making

Company Name: Fort Wayne Foundry - Lima Road Division
Address City IN Zip: 4910 Lima Road, Fort Wayne, IN 46808
Operating Permit No.: T003-18740-00007
Reviewer: AB/EVP

Material	Maximum Usage (lbs/hr)	Weight % Biphenyl	Weight % MDI	Weight % Formaldehyde	Weight % Naphthalene	Weight % Xylene	Weight % Cumene	Biphenyl Emissions (ton/yr)	MDI Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Naphthalene Emissions (ton/yr)	Xylene Emissions (ton/yr)	Cumene Emissions (ton/yr)
Phenolic Urethane Cold Box Core Making (ISO-1 through ISO-5, and ISO-7)													
Isocure AL 393 N	11.66	0.05%	0.00%	5.00%	3.07%	0.00%	0.00%	0.03	0.00	0.05	0.05	0.00	0.00
Isocure AL II 693 N	9.53	1.54%	0.00%	0.00%	3.07%	0.00%	0.00%	0.02	0.00	0.00	0.04	0.00	0.00
Catalyst	3.64	0.00%	0.00%	0.00%	0.00%	3.08%	1.32%	0.00	0.00	0.00	0.00	4.9E-01	0.21
								0.05	**0.00**	**0.05**	**0.09**	**0.49**	**0.21**

Total Potential Emissions: **0.89**

Pollutant	Phenolic Urethane Cold Box Part I Reduction Factors	Phenolic Urethane Cold Box Part II Reduction Factors
Phenol	0.00%	N/A
MDI	N/A	0.00%
Formaldehyde	2.00%	N/A
Xylene	3.25%	3.25%
Naphthalene	3.25%	3.25%
Cumene	3.25%	N/A
Biphenyl	N/A	3.25%

METHODOLOGY

Max. Hourly Resin Usage Rate = Max. Annual Resin Usage rate (lbs/yr) / 8,760 (hrs/yr)
HAP Emissions from Resins = Max. Hourly Usage Rate * % HAP * Reduction Factor * 8760 hrs/yr * 1 ton/2000 lbs
Reduction factors obtained from the American Foundrymen's Society Publication entitled "Form R Reporting of Binder Chemicals used in Foundries", and refers to the weight percent of HAP that is emitted to the atmosphere.
HAP Emissions from Catalyst = Max. Hourly Usage Rate * % HAP * 8760 hrs/yr * 1 ton/2000 lbs