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

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: December 2, 2009

RE: Fort Wayne Foundry / 183-25810-00023

FROM: Matthew Stuckey, Deputy 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;
(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.dot12/3/07

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

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

Part 70 Operating Permit Renewal
OFFICE OF AIR QUALITY

Fort Wayne Foundry - Columbia City Division
2300 Cardinal Drive
Columbia City, Indiana 46725

(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 Renewal No.: T183-25810-00023	
Issued by: Donald F. Robin Donald F. Robin, P.E., Section Chief Permits Branch Office of Air Quality	Issuance Date: December 2, 2009 Expiration Date: December 2, 2014

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SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary aluminum foundry for the production of aluminum castings.

Source Address:	2300 Cardinal Drive, Columbia City, Indiana 46725
Mailing Address:	4912 Lima Road, Fort Wayne, Indiana 46808
General Source Phone Number:	219-483-0382
SIC Code:	3365
County Location:	Whitley
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Minor Source, under PSD Major Source, under 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:

I. The following equipment is part of the 30/30 line and was constructed in 1986:

Foundry Operations

(1) Four (4) natural gas-fired reverberatory melt furnaces identified as RF-1, RF-2, RF-3, and RF-4, each rated at 8.25 million (mm) British thermal units (Btu) per hour, and each with a maximum capacity of melting 2.0 tons of aluminum per hour, RF-1 and RF-2 exhausting through one (1) stack (S/V ID S-1) and RF-3 and RF-4 exhausting through one (1) stack (S/V ID S-2);

(2) One (1) sand handling system, identified as SH-1, with a maximum capacity of handling 130 tons of sand per hour, utilizing a baghouse (CD-1) for particulate matter control and exhausting through one (1) stack (S/V ID CD-1);

(3) Two (2) pouring/casting operations identified as P-1 and P-2, each with a maximum capacity of processing 4.0 tons of metal per hour, 2.36 tons of core sand per hour, and 55 tons of mold sand per hour, exhausting uncontrolled inside the plant;

(4) Two (2) castings cooling operations identified as C-1 and C-2, each with a maximum capacity of processing 4.0 tons of metal per hour, 2.36 tons of core sand per hour, and 55 tons of mold sand per hour, exhausting uncontrolled inside the plant;

(5) Two (2) castings knockout/shakeout operations identified as SK-1 and SK-2, each with a maximum capacity of processing 4.0 tons of metal per hour, 2.36 tons of core sand per hour, and 55 tons of mold sand per hour, utilizing a baghouse for particulate matter control (CD-1), and exhausting through one (1) stack (S/V ID CD-1);

(6) One (1) cleaning/finishing operation, identified as F-1, which includes the use of seven (7) belt grinders and one (1) cut off wheel with a maximum capacity of finishing eight (8) tons of unfinished metal per hour, utilizing a baghouse (CD-5) for particulate matter control and exhausting inside the plant;

(7) One (1) shot blasting unit, identified as SB-1, with a maximum capacity of blasting four (4) tons of metal castings per hour, utilizing a baghouse (CD-2) for particulate matter control, and exhausting inside the plant;

(8) One (1) metal reclamation screening operation, consisting of two (2) waste sand metal reclamation screens, with a maximum sand throughput of 12 tons per hour, utilizing a baghouse (CD-6) for particulate matter control, and exhausting inside the plant; and

(9) One (1) hexachloroethane fluxing operation, with a maximum usage rate of one (1) pound of hexachloroethane flux per ton of metal melted.

Note: The hexachloroethane fluxing operation is used in both the 30/30 line and the 40/40 line.

II. The following equipment is part of the 40/40 line and was constructed in 1995:

Foundry Operations

(1) One (1) natural gas-fired reverberatory melt system rated at 25 million (MM) British thermal units (Btu) per hour, identified as RF-5, with a maximum capacity of melting 5.0 tons of aluminum per hour, exhausting through one (1) stack (S-3);

(2) One (1) sand handling system identified as SH-2, with a maximum capacity of handling 100 tons of sand per hour, utilizing a baghouse (CD-3) for particulate matter control, and exhausting through one (1) stack (S/V ID CD-3);

(3) One (1) pouring/casting operation identified as P-3, with a maximum capacity of processing 5.0 tons per hour of metal, 2.95 tons of core sand per hour, and 71 tons of mold sand per hour, utilizing a baghouse (CD-3) for particulate matter control, and exhausting through one (1) stack (S/V ID CD-3);

(4) One (1) castings cooling operation identified as C-3, with a maximum capacity of processing 5.0 tons per hour of metal, 2.95 tons of core sand per hour, and 71 tons of mold sand per hour, utilizing a baghouse for particulate matter control (CD-3), and exhausting through one (1) stack (S/V ID CD-3);

(5) One (1) castings knockout/shakeout operation identified as SK-3, with a maximum capacity of processing 5.0 tons per hour of metal, 2.95 tons of core sand per hour, and 71 tons of mold sand per hour, utilizing a baghouse (CD-3) for particulate matter control, and exhausting through one (1) stack (S/V ID CD-3);

(6) Cleaning/finishing operations identified as F-2, which includes the use of trim presses, cutoff saws, and hand-held deburring tools, with a maximum capacity of

finishing 5.0 tons of unfinished metal per hour, utilizing a baghouse (CD-3) for particulate matter control and exhausting through one (1) stack (S/V ID CD-3);

(7) One (1) shot blasting unit, identified as SB-2, with a maximum capacity of blasting 2.5 tons of metal per hour, utilizing a baghouse (CD-4) for particulate matter control, and exhausting inside the plant; and

III. Core Making Facilities

(1) Eight (8) Isocure cold box core making facilities in 30/30 line, identified as ISO #1 - ISO #8, with ISO #1 - #4 constructed in 1985, ISO #5 - #6 constructed in 1988, and ISO #7 - #8 constructed in 1989, with a total maximum capacity of processing 4.72 tons of cores per hour, utilizing an amine gas scrubber (SC-1) for amine gas emissions control, and exhausting through one (1) stack (S/V ID SC-1); and

(2) Five (5) Isocure cold box core making facilities in 40/40 line, constructed in 1995, identified as ISO # 9 - ISO #13, with a total maximum capacity of processing 2.95 tons of cores per hour, utilizing an amine gas scrubber (SC-1) for amine gas emissions control, and exhausting through one (1) stack (S/V ID SC-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):

(1) Six (6) thirty-five (35) gallon cold-cleaner parts degreasers. [326 IAC 8-3-2 and 326 IAC 8-3-5]

(2) 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]

(3) Enclosed sand conveyors. [326 IAC 6-3-2]

(4) One (1) Hotbox coremaking machine emitting less than 25 pounds of PM per day and 15 pounds of VOC per day, and exhausting through one (1) stack (S/V ID SM-1). [326 IAC 6-3-2]

(5) One (1) waste sand metal reclamation screen, processing a maximum of twelve (12) tons of sand per hour, and emitting less than 25 pounds of PM per day. [326 IAC 6-3-2]

(6) Six (6) robotic saws and one (1) grinder, controlled by a baghouse, identified as CD-5, with a design grain loading less than 0.03 grains per actual cubic foot and a gas flow rate less than 4000 actual cubic feet per minute. [326 IAC 6-3-2]

(7) Four (4) robotic saws and one (1) grinder, controlled by a baghouse, identified as BH-7, with a design grain loading less than 0.03 grains per actual cubic foot and a gas flow rate less than 4000 actual cubic feet per minute. [326 IAC 6-3-2]

(8) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing;

polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6-3-2]

(9) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

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, T183-25810-00023, 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] [IC 13-17-12]

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

B.5 Severability [326 IAC 2-7-5(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) A "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 and Enforcement 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 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, and Northern Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865
Northern Regional Office phone: (574) 245-4870; fax: (574) 245-4877.

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

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

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

The notice fulfills the requirement of 326 IAC 2-7-5(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. Any emergencies that have been previously reported pursuant to paragraph (b)(5) of this condition and certified by the "responsible official" need only referenced by the date of the original 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 T183-25810-00023 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 and Enforcement Branch, 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

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

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 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]

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

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

and

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

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

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(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 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]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 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 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
Permit Administration and Support Section, 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
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification 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 Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require 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 or ninety (90) days of initial start-up, whichever is later. 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

The notification which shall be submitted by the Permittee does require 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 shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

(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; and/or

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

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

(e) The Permittee shall 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) In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), starting in 2004 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]

(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 or ninety (90) days of initial start-up, whichever is later.

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

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

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

(d) 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.

Stratospheric Ozone Protection

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

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

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

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

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

SECTION D.1 FACILITY OPERATION CONDITIONS

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

I. The following equipment is part of the 30/30 line and was constructed in 1986:

Foundry Operations

(1) Four (4) natural gas-fired reverberatory melt furnaces identified as RF-1, RF-2, RF-3, and RF-4, each rated at 8.25 million (mm) British thermal units (Btu) per hour, and each with a maximum capacity of melting 2.0 tons of aluminum per hour, RF-1 and RF-2 exhausting through one (1) stack (S/V ID S-1) and RF-3 and RF-4 exhausting through one (1) stack (S/V ID S-2);

(2) One (1) sand handling system, identified as SH-1, with a maximum capacity of handling 130 tons of sand per hour, utilizing a baghouse (CD-1) for particulate matter control and exhausting through one (1) stack (S/V ID CD-1);

(3) Two (2) pouring/casting operations identified as P-1 and P-2, each with a maximum capacity of processing 4.0 tons of metal per hour, 2.36 tons of core sand per hour, and 55 tons of mold sand per hour, exhausting uncontrolled inside the plant;

(4) Two (2) castings cooling operations identified as C-1 and C-2, each with a maximum capacity of processing 4.0 tons of metal per hour, 2.36 tons of core sand per hour, and 55 tons of mold sand per hour, exhausting uncontrolled inside the plant;

(5) Two (2) castings knockout/shakeout operations identified as SK-1 and SK-2, each with a maximum capacity of processing 4.0 tons of metal per hour, 2.36 tons of core sand per hour, and 55 tons of mold sand per hour, utilizing a baghouse for particulate matter control (CD-1), and exhausting through one (1) stack (S/V ID CD-1);

(6) One (1) cleaning/finishing operation, identified as F-1, which includes the use of seven (7) belt grinders and one (1) cut off wheel with a maximum capacity of finishing eight (8) tons of unfinished metal per hour, utilizing a baghouse (CD-5) for particulate matter control and exhausting inside the plant;

(7) One (1) shot blasting unit, identified as SB-1, with a maximum capacity of blasting four (4) tons of metal castings per hour, utilizing a baghouse (CD-2) for particulate matter control, and exhausting inside the plant;

(8) One (1) metal reclamation screening operation, consisting of two (2) waste sand metal reclamation screens, with a maximum sand throughput of 12 tons per hour, utilizing a baghouse (CD-6) for particulate matter control, and exhausting inside the plant; and

(9) One (1) hexachloroethane fluxing operation, with a maximum usage rate of one (1) pound of hexachloroethane flux per ton of metal melted.

Insignificant Activities:

(6) Six (6) robotic saws and one (1) grinder, controlled by a baghouse, identified as CD-5, with a design grain loading less than 0.03 grains per actual cubic foot and a gas flow rate less than 4000 actual cubic feet per minute. [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.1.1 Minor Limits for PM, PM_{10}, and CO [326 IAC 2-2]

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

(a) The PM and PM_{10} emissions from the following operations shall not exceed the emission limits listed in the table below:

Emission Unit	PM Emission Limit (pounds per hour)	PM_{10} Emission Limit (pounds per hour)
Reverberatory Furnaces (RF-1 and RF-2)	4.0	4.0
Reverberatory Furnaces (RF-3 and RF-4)	4.0	4.0
Baghouse CD-1 *	12.86	12.86
Baghouse CD-5 **	2.06	2.06
Baghouse CD-2 ***	2.06	2.06
Baghouse CD-6 ****	1.54	1.54

* Baghouse CD-1 controls PM/PM_{10} emissions from the sand handling system (SH-1) and the two (2) castings knockout/shakeout operations (SK-1 and SK-2).
** Baghouse CD-5 controls PM/PM_{10} emissions from the cleaning/finishing operation (F-1) and the insignificant six (6) robotic saws and one (1) grinder.
*** Baghouse CD-2 controls PM/PM_{10} emissions from the shot blasting unit (SB-1).
**** Baghouse CD-6 controls PM/PM_{10} emissions from the metal reclamation screening.

(b) The PM and PM_{10} emissions from the following operations shall not exceed the emission limits listed in the table below:

Emission Unit	PM Emission Limit (pounds per ton of metal throughput)	PM_{10} Emission Limit (pounds per ton of metal throughput)
Pouring/Casting Operations (P-1 and P-2)	2.80	2.06
Castings Cooling Operations (C-1 and C-2)	1.40	1.40

(c) The CO emissions from the pouring/casting operations (P-1 and P-2), the castings knockout/shakeout operations (SK-1 and SK-2), and the two (2) castings cooling operations (C-1 and C-2) shall not exceed 6.0 pounds per ton of metal throughput, total.

(d) The total throughput of metal to the two (2) pouring/casting operations (P-1 and P-2) shall not exceed 37,142 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with the above limits, combined with the limits in Condition D.2.1 and the potential to emit PM, PM_{10}, and CO from other emission units at the source, shall limit each of PM, PM_{10}, and CO from the entire source to less than 250 tons per twelve (12) consecutive month period and will render 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.1.2 Minor Limits for VOC [326 IAC 8-1-6]

In order to render the requirements of 326 IAC 8-1-6 not applicable, the Permittee shall comply with the following:

The VOC emissions from the two (2) pouring/casting operations (P-1 and P-2), the two (2) castings knockout/shakeout operations (SK-1 and SK-2), and the two (2) castings cooling operations (C-1 and C-2) shall not exceed 1.34 pounds of VOC per ton of metal throughput.

Compliance with the above limit, combined with the limit in Condition D.1.1(r), shall limit the VOC from the pouring/casting operations (P-1 and P-2), the castings knockout/shakeout operations

(SK-1 and SK-2), and the two (2) castings cooling operations (C-1 and C-2) to less than 25 tons per twelve (12) consecutive month period and will render 326 IAC 8-1-6 not applicable.

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

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from emission units shall not exceed allowable particulate emissions when operating at a maximum process weight rate as specified in the table below.

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

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

or

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

The allowable emissions for each facility operating at its maximum process weight rate are as follows:

Emission Unit ID	Process Weight (tons/hr)	Allowable Particulate Emissions (lb/hr)
Reverberatory Melt Furnace #1 (RF-1)	2.00	6.52
Reverberatory Melt Furnace #2 (RF-2)	2.00	6.52
Reverberatory Melt Furnace #3 (RF-3)	2.00	6.52
Reverberatory Melt Furnace #4 (RF-4)	2.00	6.52
Sand Handling (SH-1)	130.00	53.95
Pouring/Casting (P-1)	61.36*	46.50
Pouring/Casting (P-2)	61.36*	46.50
Castings Cooling (C-1)	61.36*	46.50
Castings Cooling (C-2)	61.36*	46.50
Knockout/Shakeout (SK-1)	61.36*	46.50
Knockout/Shakeout (SK-2)	61.36*	46.50
Shot Blasting (SB-1)	4.00	10.38
Cleaning/Finishing (F-1)	8.00	16.51
Metal Reclamation Screening	12.00	21.67
Six (6) Robotic Saws and One (1) Grinder	4.00	10.38

* Includes metal, mold sand, and core sand throughput.

(b) For purposes of demonstrating compliance with the particulate emission limits for the two (2) reverberatory furnaces #1 and #2 (RF-1 and RF-2) both exhausting through stack S-

1, the allowable particulate emission rate from stack S-1 shall be limited to 13.04 pounds per hour.

(c) For purposes of demonstrating compliance with the particulate emission limits for the two (2) reverberatory furnaces #3 and #4 (RF-3 and RF-4) both exhausting through stack S-2, the allowable particulate emission rate from stack S-2 shall be limited to 13.04 pounds per hour.

(d) For purposes of demonstrating compliance with the particulate emission limits for the sand handling (SH-1) and the two (2) knockout/shakeout operations (SK-1, SK-2), all exhausting through baghouse CD-1, the allowable particulate emission rate from baghouse CD-1 shall be limited to 146.95 pounds per hour.

(e) For purposes of demonstrating compliance with the particulate emission limits for the cleaning/finishing (F-1) and the six (6) robotic saws and one (1) grinder, all exhausting through baghouse CD-5, the allowable particulate emission rate from baghouse CD-1 shall be limited to 26.89 pounds per hour.

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

Each of the reverberatory furnaces (RF-1, RF-2, RF-3, RF-4) 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 each facility and its control device.

Compliance Determination Requirements

D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Conditions D.1.1 and D.1.3, the Permittee shall perform PM and PM_{10} testing by April, 2014 on Baghouse CD-1 stack exhaust utilizing methods as approved by the Commissioner. Testing shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

D.1.7 Particulate Control

(a) In order to comply with conditions D.1.1 and D.1.3, the baghouses for particulate control identified as CD-1, CD-2, CD-5, and CD-6 shall be in operation and control emissions from the sand handling (SH-1), knockout/shakeout (SK-1, SK-2), cleaning/finishing (F-1), shot blasting operations (SB-1), the metal reclamation screening, the six (6) robotic saws, and the grinder at all times that these facilities 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.1.8 Visible Emissions Notations

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

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

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

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

(e) If abnormal emissions are observed, the Permittee shall take reasonable response 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 violation of this permit.

D.1.9 Parametric Monitoring [40 CFR 64]

The Permittee shall record the pressure drop across each of the baghouses identified as CD-1, CD-2, and CD-6 controlling the sand handling (SH-1), knockout/shakeout (SK-1,SK-2), shot blasting (SB-1), and the metal reclamation screening at least once per day when the systems are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 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 violation of 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 annually or as established by the manufacturer's specifications, whichever is more frequent.

D.1.10 Broken or Failed Bag Detection

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

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

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

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

D.1.11 Record Keeping Requirements

(a) To document compliance with Condition D.1.1(d), the Permittee shall maintain records of the monthly throughput of metal to the pouring/casting operations (P-1 and P-2). Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(b) To document compliance with Condition D.1.8, the Permittee shall maintain a daily record of the 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 a visible emission notation (e.g. the process did not operate that day).

(c) To document compliance with Condition D.1.9, the Permittee shall maintain a daily record of the pressure drop during normal operation for baghouses CD-1, CD-2, and CD-6. The Permittee shall include in its daily record when a pressure drop is not taken and the reason for the lack of a pressure drop (e.g. the process did not operate that day).

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

D.1.12 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1(d) shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.2 FACILITY OPERATION CONDITIONS

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

II. The following equipment is part of the 40/40 line and was constructed in 1995:

Foundry Operations

(1) One (1) natural gas-fired reverberatory melt system rated at 25 million (MM) British thermal units (Btu) per hour, identified as RF-5, with a maximum capacity of melting 5.0 tons of aluminum per hour, exhausting through one (1) stack (S-3);

(2) One (1) sand handling system identified as SH-2, with a maximum capacity of handling 100 tons of sand per hour, utilizing a baghouse (CD-3) for particulate matter control, and exhausting through one (1) stack (S/V ID CD-3);

(3) One (1) pouring/casting operation identified as P-3, with a maximum capacity of processing 5.0 tons per hour of metal, 2.95 tons of core sand per hour, and 71 tons of mold sand per hour, utilizing a baghouse (CD-3) for particulate matter control, and exhausting through one (1) stack (S/V ID CD-3);

(4) One (1) castings cooling operation identified as C-3, with a maximum capacity of processing 5.0 tons per hour of metal, 2.95 tons of core sand per hour, and 71 tons of mold sand per hour, utilizing a baghouse for particulate matter control (CD-3), and exhausting through one (1) stack (S/V ID CD-3);

(5) One (1) castings knockout/shakeout operation identified as SK-3, with a maximum capacity of processing 5.0 tons per hour of metal, 2.95 tons of core sand per hour, and 71 tons of mold sand per hour, utilizing a baghouse (CD-3) for particulate matter control, and exhausting through one (1) stack (S/V ID CD-3);

(6) Cleaning/finishing operations identified as F-2, which includes the use of trim presses, cutoff saws, and hand-held deburring tools, with a maximum capacity of finishing 5.0 tons of unfinished metal per hour, utilizing a baghouse (CD-3) for particulate matter control and exhausting through one (1) stack (S/V ID CD-3);

(7) One (1) shot blasting unit, identified as SB-2, with a maximum capacity of blasting 2.5 tons of metal per hour, utilizing a baghouse (CD-4) for particulate matter control, and exhausting inside the plant; and

(8) One (1) hexachloroethane fluxing operation, with a maximum usage rate of one (1) pound of hexachloroethane flux per ton of metal melted.

Insignificant Activities:

(7) Four (4) robotic saws and one (1) grinder, controlled by a baghouse, identified as BH-7, with a design grain loading less than 0.03 grains per actual cubic foot and a gas flow rate less than 4000 actual cubic feet per minute. [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.2.1 Minor Limits for PM, PM_{10}, and CO [326 IAC 2-2]

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

(a) The PM and PM_{10} emissions from the following operations shall not exceed the emission limits listed in the table below:

Emission Unit	PM Emission Limit (pounds per hour)	PM_{10} Emission Limit (pounds per hour)
Reverberatory Furnace System (RF-5)	5.0	5.0
Baghouse CD-3 *	15.43	15.43
Baghouse CD-4 **	1.54	1.54

* Baghouse CD-3 controls PM/PM_{10} emissions from the pouring/casting operation (P-3), the castings cooling operation (C-3), the sand handling system (SH-2), the castings knockout/shakeout operation (SK-3), and the cleaning/finishing operation (F-2).
** Baghouse CD-4 controls PM/PM_{10} emissions from the shot blasting unit (SB-2).

(b) The CO emissions from the pouring/casting operation (P-3), the castings knockout/shakeout operation (SK-3), and the castings cooling operation (C-3) shall not exceed 6.0 pounds per ton of metal throughput, total.

(c) The total throughput of metal to the pouring/casting operation (P-3) shall not exceed 37,142 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with the above limits, combined with the limits in Condition D.1.1 and the potential to emit PM, PM_{10}, and CO from other emission units at the source, shall limit each of PM, PM_{10}, and CO from the entire source to less than 250 tons per twelve (12) consecutive month period and will render 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.2.2 Minor Limits for VOC [326 IAC 8-1-6]

In order to render the requirements of 326 IAC 8-1-6 not applicable, the Permittee shall comply with the following:

(a) The VOC emissions from the pouring/casting operation (P-3), the castings knockout/shakeout operation (SK-3), and the castings cooling operation (C-3) shall not exceed 1.34 pounds of VOC per ton of metal throughput.

Compliance with the above limits, combined with the limit in Condition D.2.1(c), shall limit the VOC from the pouring/casting operation (P-3), the castings knockout/shakeout operation (SK-3), and the castings cooling operation (C-3) to less than 25 tons per twelve (12) consecutive month period and will render 326 IAC 8-1-6 not applicable.

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

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from emission units shall not exceed allowable particulate emissions when operating at a maximum process weight rate as specified in the table below.

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

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

or

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

The allowable emissions for each facility operating at its maximum process weight rate are as follows:

Emission Unit ID	Process Weight (tons/hr)	Allowable Particulate Emissions (lb/hr)
Reverberatory Melt Furnace #5 (RF-5)	5.00	12.05
Pouring/Casting (P-3)	79.00*	48.93
Castings Cooling (C-3)	79.00*	48.93
Sand Handling (SH-2)	100.00	51.28
Knockout/Shakeout (SK-3)	79.00*	48.93
Cleaning/Finishing (F-2)	5.00	12.05
Shot Blasting (SB-2)	2.50	7.58
Four (4) Robotic Saws and One (1) Grinder	5.00	12.05

* Includes metal, mold sand, and core sand throughput.

(b) For purposes of demonstrating compliance with the particulate emission limits for the pouring/casting operation (P-3), the castings cooling operation (C-3), sand handling (SH-2), the knockout/shakeout operation (SK-3), and cleaning/finishing (F-2) all exhausting through baghouse CD-3, the allowable particulate emission rate from baghouse CD-3 shall be limited to 210.12 pounds per hour.

D.2.4 Secondary Aluminum NESHAP [40 CFR 63, Subpart RRR]

Reverberatory furnace RF-5 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.2.5 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 each facility and its control device.

Compliance Determination Requirements

D.2.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Conditions D.2.1 and D.2.3, the Permittee shall perform PM and PM_{10} testing by April, 2014 on Baghouse CD-3 stack exhaust utilizing methods as approved by the Commissioner. Testing 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.2.7 Particulate Control

(a) In order to comply with conditions D.2.1 and D.2.3, the baghouses for particulate control identified as CD-3 and CD-4 shall be in operation and control emissions from the pouring/casting (P-3), castings cooling (C-3), sand handling (SH-2), knockout/shakeout (SK-3), cleaning/finishing (F-2), and shot blasting (SB-2) operations at all times that these facilities 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.2.8 Visible Emissions Notations

(a) Visible emission notations of the CD-3 baghouse stack exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

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

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

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

(e) If abnormal emissions are observed, the Permittee shall take reasonable response 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 violation of this permit.

D.2.9 Parametric Monitoring [40 CFR 64]

The Permittee shall record the pressure drop across each of the baghouses identified as CD-3 and CD-4, controlling the pouring/casting (P-3), castings cooling (C-3), sand handling (SH-2), knockout/shakeout (SK-3), cleaning/finishing (F-2), and shot blasting (SB-2) operations, at least once per day when the system is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 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 violation of 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 annually or as established by the manufacturer's specifications, whichever is more frequent.

D.2.10 Broken or Failed Bag Detection

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

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

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

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

D.2.11 Record Keeping Requirements

(a) To document compliance with Condition D.2.1(c), the Permittee shall maintain records of the monthly throughput of metal to the pouring/casting operation (P-3). Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(b) To document compliance with Condition D.2.8, the Permittee shall maintain a daily record of the visible emission notations of baghouse CD-3 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 a visible emission notation (e.g. the process did not operate that day).

(c) To document compliance with Condition D.2.9, the Permittee shall maintain a daily record of the pressure drops during normal operation for baghouse CD-3 and CD-4. The Permittee shall include in its daily record when a pressure drop is not taken and the reason for the lack of a pressure drop (e.g. the process did not operate that day).

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

D.2.12 Reporting Requirements

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

SECTION D.3 FACILITY OPERATION CONDITIONS

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

III. Core Making Facilities

(1) Eight (8) Isocure cold box core making facilities in 30/30 line, identified as ISO #1 - ISO #8, with ISO #1 - #4 constructed in 1985, ISO #5 - #6 constructed in 1988, and ISO #7 - #8 constructed in 1989, with a total maximum capacity of processing 4.72 tons of cores per hour, utilizing an amine gas scrubber (SC-1) for amine gas emissions control, and exhausting through one (1) stack (S/V ID SC-1); and

(2) Five (5) Isocure cold box core making facilities in 40/40 line, constructed in 1995, identified as ISO # 9 - ISO #13, with a total maximum capacity of processing 2.95 tons of cores per hour, utilizing an amine gas scrubber (SC-1) for amine gas emissions control, and exhausting through one (1) stack (S/V ID SC-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 VOC Emission Limits [326 IAC 8-1-6]

In order to render the requirements of 326 IAC 8-1-6 not applicable, the Permittee shall comply with the following:

(a) The resin usage for core machines #1 - #4 shall not exceed 332,000 pounds of resin per 12 consecutive month period with compliance determined at the end of each month. Amine gas catalyst usage for core machines #1 - #4 shall not exceed 33,200 pounds of amine gas catalyst per 12 consecutive month period with compliance determined at the end of each month.

(b) The resin usage for core machines #9 - #13 shall not exceed 332,000 pounds of resin per 12 consecutive month period with compliance determined at the end of each month. Amine gas catalyst usage for core machines #9 - #13 shall not exceed 33,200 pounds of amine gas catalyst per 12 consecutive month period with compliance determined at the end of each month.

(c) The VOC emissions (not including amine gas catalyst) from core machines #1 - #4 shall not exceed 0.05 pounds per pound of resin.

(d) The VOC emissions (not including amine gas catalyst) from core machines #9 - #13 shall not exceed 0.05 pounds per pound of resin.

Compliance with the above limits shall limit the VOC from the core machines #1 - #4 and the core machines #9 - #13 to less than 25 tons per twelve (12) consecutive month period each and will render 326 IAC 8-1-6 not applicable.

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

D.3.2 Record Keeping Requirements

(a) To document compliance with Conditions D.3.1(a) and (b), the Permittee shall maintain records of the total amine gas catalyst and resin usages for core machines #1 - #4 and core machines #9 - #13. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(b) To document compliance with Conditions D.3.1(c) through (d), the Permittee shall maintain records of the type of binders used for core machines #1 - #4 and core machines #9 - #13, each month in order to demonstrate that the type of binder used has not changed.

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

D.3.3 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.3.1(a) through (b) shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported. The reports submitted by the Permittee do require the certification by the responsible official as defined by 326 IAC 2-7-1(34).

SECTION D.4 FACILITY OPERATION CONDITIONS

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

Insignificant Activities:

(1) Six (6) thirty-five (35) gallon cold-cleaner parts degreasers. [326 IAC 8-3-2 and 326 IAC 8-3-5]

(2) 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]

(3) Enclosed sand conveyors. [326 IAC 6-3-2]

(4) One (1) Hotbox coremaking machine emitting less than 25 pounds of PM per day and 15 pounds of VOC per day, and exhausting through one (1) stack (S/V ID SM-1). [326 IAC 6-3-2]

(5) One (1) waste sand metal reclamation screen, processing a maximum of twelve (12) tons of sand per hour, and emitting less than 25 pounds of PM per day. [326 IAC 6-3-2]

(8) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [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.4.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2, the six (6) thirty-five (35) gallon cold-cleaner parts degreasers shall comply with the following:

(a) Equip each cleaner with a cover;

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

(c) Close each 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]

Pursuant to 326 IAC 8-3-5, the six (6) thirty-five gallon cold cleaner parts degreasers shall comply with the following requirements:

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the Permittee shall ensure that the following control equipment requirements are met:

(1) Equip each 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 ($38^{O}C$) (one hundred degrees Fahrenheit ($100^{O}F$));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip each 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 ($38^{O}C$) (one hundred degrees Fahrenheit ($100^{O}F$)), 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 each 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 ($38^{O}C$) (one hundred degrees Fahrenheit ($100^{O}F$)), 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 ($120^{O}F$)):

(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 Permittee shall ensure that the following operating requirements are met:

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

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

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

D.4.3 Particulate Emission Limitation for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e), the particulate emissions from the brazing equipment, cutting torches, soldering equipment, welding equipment, enclosed sand conveyors, Hotbox coremaking machine, waste sand metal reclamation screen, and grinding and machining operations shall be limited by the following equation:

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

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Fort Wayne Foundry - Columbia City
Source Address: 2300 Cardinal Drive, Columbia City, Indiana 46725
Mailing Address: 4912 Lima Road, Fort Wayne, Indiana 46808
Part 70 Permit No.: T183-25810-00023

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 AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178
Fax: (317) 233-6865

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Fort Wayne Foundry - Columbia City
Source Address: 2300 Cardinal Drive, Columbia City, Indiana 46725
Mailing Address: 4912 Lima Road, Fort Wayne, Indiana 46808
Part 70 Permit No.: T183-25810-00023

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

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

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

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 AND ENFORCEMENT BRANCH
Part 70 Quarterly Report

Source Name: Fort Wayne Foundry - Columbia City Division
Source Address: 2300 Cardinal Drive, Columbia City, IN 46725
Mailing Address: 4912 Lima Road, Fort Wayne, IN 46808
Part 70 Permit No.: T183-25810-00023
Facility: P-1, P-2
Parameter: Metal Throughput
Limit: The total throughput of metal to the two (2) pouring/casting operations (P-1 and P-2) shall not exceed 37,142 tons per twelve (12) consecutive month period.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	Metal Throughput This Month	Metal Throughput Previous 11 Months	Metal Throughput 12 Month Total
Month 1			
Month 2			
Month 3			

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: Fort Wayne Foundry - Columbia City Division
Source Address: 2300 Cardinal Drive, Columbia City, IN 46725
Mailing Address: 4912 Lima Road, Fort Wayne, IN 46808
Part 70 Permit No.: T183-25810-00023
Facility: P-3
Parameter: Metal Throughput
Limit: The throughput of metal to the pouring/casting operation (P-3) shall not exceed 37,142 tons per twelve (12) consecutive month period

YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	Metal Throughput This Month	Metal Throughput Previous 11 Months	Metal Throughput 12 Month Total
Month 1			
Month 2			
Month 3			

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

Form Completed by:_____

Title / Position: _____

Date:_____

Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
Part 70 Quarterly Report

Source Name: Fort Wayne Foundry - Columbia City Division
Source Address: 2300 Cardinal Drive, Columbia City, IN 46725
Mailing Address 4912 Lima Road, Fort Wayne, IN 46808
Part 70 Permit No.: T183-25810-00023
Facility: Core machines #1 - #4, core machines #9 - #13
Parameter: Resin and amine gas catalyst usage to limit VOC emissions to less than 25 tons/year.
Limits: (a) The resin usage for core machines #1 - #4 shall not exceed 332,000 pounds of resin per 12 consecutive month period with compliance determined at the end of each month. Amine gas catalyst usage for core machines #1 - #4 shall not exceed 33,200 pounds of amine gas catalyst per 12 consecutive month period with compliance determined at the end of each month.

(b) The resin usage for core machines #9 - #13 shall not exceed 332,000 pounds of resin per 12 consecutive month period with compliance determined at the end of each month. Amine gas catalyst usage for core machines #9 - #13 shall not exceed 33,200 pounds of amine gas catalyst per 12 consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	Core Machine ID	Column 1		Column 2		Column 1 + Column 2	
		Resin Usage This Month (lbs)	Amine Gas Catalyst Usage This Month (lbs)	Resin Usage for Previous 11 Months (lbs)	Amine Gas Catalyst Usage for Previous 11 Months (lbs)	12 Month Total Resin Usage (lbs)	12 Month Total Amine Gas Catalyst Usage (lbs)
	#1 - #4						
	#9 - #13						
	#1 - #4						
	#9 - #13						
	#1 - #4						
	#9 - #13						

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Fort Wayne Foundry - Columbia City
Source Address: 2300 Cardinal Drive, Columbia City, Indiana 46725
Mailing Address: 4912 Lima Road, Fort Wayne, Indiana 46808
Part 70 Permit No.: T183-25810-00023

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

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

Source Background and Description

Source Name:	**Fort Wayne Foundry - Columbia City Division**
Source Location:	**2300 Cardinal Drive, Columbia City, IN 46725**
County:	**Whitley**
SIC Code:	**3365**
Permit Renewal No.:	**T183-25810-00023**
Permit Reviewer:	**John Haney**

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Fort Wayne Foundry - Columbia City Division relating to the operation of a stationary aluminum foundry for the production of aluminum castings.

History

On December 28, 2007, Fort Wayne Foundry - Columbia City Division submitted an application to the OAQ requesting to renew its operating permit. Fort Wayne Foundry - Columbia City Division was issued Part 70 Operating Permit No. T183-7530-00023 on October 2, 2003.

Permitted Emission Units and Pollution Control Equipment

I. The following equipment is part of the 30/30 line and was constructed in 1986:

Foundry Operations

(1) Four (4) natural gas-fired reverberatory melt furnaces identified as RF-1, RF-2, RF-3, and RF-4, each rated at 8.25 million (mm) British thermal units (Btu) per hour, and each with a maximum capacity of melting 2.0 tons of aluminum per hour, RF-1 and RF-2 exhausting through one (1) stack (S/V ID S-1) and RF-3 and RF-4 exhausting through one (1) stack (S/V ID S-2);

(2) One (1) sand handling system, identified as SH-1, with a maximum capacity of handling 130 tons of sand per hour, utilizing a baghouse (CD-1) for particulate matter control and exhausting through one (1) stack (S/V ID CD-1);

(3) Two (2) pouring/casting operations identified as P-1 and P-2, each with a maximum capacity of processing 4.0 tons of metal per hour, 2.36 tons of core sand per hour, and 55 tons of mold sand per hour, exhausting uncontrolled inside the plant;

(4) Two (2) castings cooling operations identified as C-1 and C-2, each with a maximum capacity of processing 4.0 tons of metal per hour, 2.36 tons of core sand per hour, and 55 tons of mold sand per hour, exhausting uncontrolled inside the plant;

(5) Two (2) castings knockout/shakeout operations identified as SK-1 and SK-2, each with a maximum capacity of processing 4.0 tons of metal per hour, 2.36 tons of core sand per hour, and 55 tons of mold sand per hour, utilizing a baghouse for particulate matter control (CD-1), and exhausting through one (1) stack (S/V ID CD-1);

(6) One (1) cleaning/finishing operation, identified as F-1, which includes the use of seven (7) belt grinders and one (1) cut off wheel with a maximum capacity of finishing eight (8) tons of unfinished metal per hour, utilizing a baghouse (CD-5) for particulate matter control and exhausting inside the plant;

(7) One (1) shot blasting unit, identified as SB-1, with a maximum capacity of blasting four (4) tons of metal castings per hour, utilizing a baghouse (CD-2) for particulate matter control, and exhausting inside the plant;

(8) One (1) metal reclamation screening operation, consisting of two (2) waste sand metal reclamation screens, with a maximum sand throughput of 12 tons per hour, utilizing a baghouse (CD-6) for particulate matter control, and exhausting inside the plant; and

(9) One (1) hexachloroethane fluxing operation, with a maximum usage rate of one (1) pound of hexachloroethane flux per ton of metal melted.

Note: The hexachloroethane fluxing operation is used in both the 30/30 line and the 40/40 line.

II. The following equipment is part of the 40/40 line and was constructed in 1995:

Foundry Operations

(1) One (1) natural gas-fired reverberatory melt system rated at 25 million (MM) British thermal units (Btu) per hour, identified as RF-5, with a maximum capacity of melting 5.0 tons of aluminum per hour, exhausting through one (1) stack (S-3);

(2) One (1) sand handling system identified as SH-2, with a maximum capacity of handling 100 tons of sand per hour, utilizing a baghouse (CD-3) for particulate matter control, and exhausting through one (1) stack (S/V ID CD-3);

(3) One (1) pouring/casting operation identified as P-3, with a maximum capacity of processing 5.0 tons per hour of metal, 2.95 tons of core sand per hour, and 71 tons of mold sand per hour, utilizing a baghouse (CD-3) for particulate matter control, and exhausting through one (1) stack (S/V ID CD-3);

(4) One (1) castings cooling operation identified as C-3, with a maximum capacity of processing 5.0 tons per hour of metal, 2.95 tons of core sand per hour, and 71 tons of mold sand per hour, utilizing a baghouse for particulate matter control (CD-3), and exhausting through one (1) stack (S/V ID CD-3);

(5) One (1) castings knockout/shakeout operation identified as SK-3, with a maximum capacity of processing 5.0 tons per hour of metal, 2.95 tons of core sand per hour, and 71 tons of mold sand per hour, utilizing a baghouse (CD-3) for particulate matter control, and exhausting through one (1) stack (S/V ID CD-3);

(6) Cleaning/finishing operations identified as F-2, which includes the use of trim presses, cutoff saws, and hand-held deburring tools, with a maximum capacity of finishing 5.0 tons of unfinished metal per hour, utilizing a baghouse (CD-3) for particulate matter control and exhausting through one (1) stack (S/V ID CD-3);

(7) One (1) shotblasting unit, identified as SB-2, with a maximum capacity of blasting 2.5 tons of metal per hour, utilizing a baghouse (CD-4) for particulate matter control, and exhausting inside the plant; and

(8) One (1) hexachloroethane fluxing operation, with a maximum usage rate of one (1) pound of hexachloroethane flux per ton of metal melted.

III. Core Making Facilities

(1) Eight (8) Isocure cold box core making facilities in 30/30 line, identified as ISO #1 - ISO #8, with ISO #1 - #4 constructed in 1985, ISO #5 - #6 constructed in 1988, and ISO #7 - #8 constructed in 1989, with a total maximum capacity of processing 4.72 tons of cores per hour, utilizing an amine gas scrubber (SC-1) for amine gas emissions control, and exhausting through one (1) stack (S/V ID SC-1); and

(2) Five (5) Isocure cold box core making facilities in 40/40 line, constructed in 1995, identified as ISO # 9 - ISO #13, with a total maximum capacity of processing 2.95 tons of cores per hour, utilizing an amine gas scrubber (SC-1) for amine gas emissions control, and exhausting through one (1) stack (S/V ID SC-1).

Specifically Regulated Insignificant Activities

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

(1) Six (6) thirty-five (35) gallon cold-cleaner parts degreasers. [326 IAC 8-3-2 and 326 IAC 8-3-5]

(2) 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]

(3) Enclosed sand conveyors. [326 IAC 6-3-2]

(4) One (1) Hotbox coremaking machine emitting less than 25 pounds of PM per day and 15 pounds of VOC per day, and exhausting through one (1) stack (S/V ID SM-1). [326 IAC 6-3-2]

(5) One (1) waste sand metal reclamation screen, processing a maximum of twelve (12) tons of sand per hour, and emitting less than 25 pounds of PM per day. [326 IAC 6-3-2]

(6) Six (6) robotic saws and one (1) grinder, controlled by a baghouse, identified as CD-5, with a design grain loading less than 0.03 grains per actual cubic foot and a gas flow rate less than 4000 actual cubic feet per minute. [326 IAC 6-3-2]

(7) Four (4) robotic saws and one (1) grinder, controlled by a baghouse, identified as BH-7, with a design grain loading less than 0.03 grains per actual cubic foot and a gas flow rate less than 4000 actual cubic feet per minute. [326 IAC 6-3-2]

(8) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6-3-2]

(9) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

Insignificant Activities

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

(1) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour [326 IAC 2-2]:

(a) three (3) air make-up units (S9, S16, and S17), rated at 6.25 mmBtu per hour, each;
(b) one (1) air make-up unit (S23), rated at 2.16 mmBtu per hour;
(c) one (1) air make-up unit (S35), rated at 1.89 mmBtu per hour;
(d) two (2) air make-up units (S36 and S37), rated at 2.916 mmBtu per hour, each;
(e) one (1) air make-up unit (S38), rated at 1.32 mmBtu per hour;
(f) one (1) air make-up unit (S39), rated at 6.048 mmBtu per hour;
(g) three (3) Aerovent heaters (AV1, AV2, and AV3), rated at 0.99 mmBtu per hour, each;
(h) one (1) water heater, rated at 0.725 mmBtu per hour;
(i) two (2) HVAC heaters (1 and 5), rated at 0.082 mmBtu per hour, each;
(j) three (3) HVAC heaters (2, 4, and 8), rated at 0.22 mmBtu per hour, each;
(k) one (1) HVAC heater (3), rated at 0.137 mmBtu per hour; and
(l) one (1) HVAC heater (10), rated at 0.088 mmBtu per hour.

(2) 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.

(3) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.

(4) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.

(5) Refractory storage not requiring air pollution control equipment.

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

(7) Machining where an aqueous cutting coolant continuously floods the machining interface.

(8) Cleaners and solvents characterized as follows:

(a) having a vapor pressure equal to or less than 2kPa, 15 mm HG, or 0.3 psi measured a 38 degrees Celsius (100 F) or;

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

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

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

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

(12) 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.

(13) Blowdown for any of the following: sight glass, boiler, compressors, pumps, and cooling towers.

(14) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38 degrees Celsius).

(15) A laboratory as defined in 326 IAC 2-7-1(21)(D).

(16) Other activities with emissions less than insignificant thresholds including the following:

(a) 40/40 line clay bond storage bin (vented inside the building);

(b) 40/40 line waste sand surge bin (vented inside the building);

(c) 30/30 line bonded tank (vented inside the building);

(d) waste sand storage silo with 2000 acfm exhaust fan (vented inside the building); and

(e) core adhesive/resins usage containing no VOC.

Existing Approvals

Since the issuance of the Part 70 Operating Permit T183-7530-00023 on October 2, 2003, the source has constructed or has been operating under the following approvals as well:

(a) Administrative Amendment No. 183-21208-00023, issued on September 21, 2005;

(b) Administrative Amendment No. 183-25286-00023, issued on October 26, 2007; and

(c) Significant Permit Modification No. 183-27478-00023, issued on April 22, 2009.

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.

The following terms and conditions from previous approvals have been revised in this Part 70 Operating Permit Renewal:

(a) Emission Units and Pollution Control Equipment Summary

The two (2) castings cooling operations, identified as C-1 and C-2, have been described as utilizing a baghouse for particulate matter control (CD-1), and exhausting through one (1) stack (S/V ID CD-1). However, these facilities are not captured and are exhausting uncontrolled inside the plant. The descriptions of the castings cooling operations in Conditions A.2 and D.1 have been revised.

(b) Emission Units and Pollution Control Equipment Summary

All of the Isocure cold box core making facilities have been described as utilizing 20 pounds of resin per ton of cores and 2.0 pounds of TEA catalyst per ton of cores. This information is not necessary to describe the core making facilities. The descriptions of the core making facilities in Conditions A.2.III(1), A.2.III(2), and D.3 have been revised.

(c) Emission Limitations and Standards

The previous pound per hour minor PSD limits for the two (2) pouring/casting operations, identified as P-1 and P-2, have been revised in Condition D.1.1(b) to pound per ton of throughput limits coupled with a metal throughput limit in Condition D.1.1(d).

(d) Emission Limitations and Standards

The two (2) castings cooling operations, identified as C-1 and C-2, have been described as utilizing a baghouse for particulate matter control (CD-1), and exhausting through one (1) stack (S/V ID CD-1). However, these facilities are not captured and exhaust uncontrolled inside the plant. Condition D.1.1(a) has been revised to indicate which facilities vent to baghouse CD-1. Condition D.1.1(b) indicates separate PM and PM_{10} PSD limits for the castings cooling operations. Condition D.1.3(d) has been clarified to not include the castings cooling operation C-1 and castings cooling operation C-2.

(e) Emission Limitations and Standards

The two (2) castings cooling operations, identified as C-1 and C-2, and the castings knockout/shakeout operations, identified as SK-1 and SK-2, should have individual particulate limits as opposed to combined limits. The table in Condition D.1.3(a) has been revised to indicate separate particulate limits for the castings cooling operation C-1, castings cooling operation C-2, castings knockout/shakeout operations SK-1, and castings knockout/shakeout operations SK-2.

(f) Compliance Determination Requirements

Conditions D.1.6 and D.2.6 have been revised to indicate combined testing for PM and PM_{10}. Upon the rule's effective date, the Permittee shall perform future PM_{10} testing on the baghouse CD-1 and baghouse CD-3 stack exhausts using the new or revised condensable PM test method(s) referenced in the U. S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers ($PM_{2.5}$), published in the May 16, 2008 Federal Register.

(g) Compliance Monitoring Requirements

The parametric monitoring requirements of baghouses CD-1, CD-2, CD-3, CD-4, and CD-6 have been determined to be CAM requirements as well. Conditions D.1.9 and D.2.9 now reference 40 CFR 64.

(h) Compliance Monitoring Requirements

Instruments used for parametric monitoring shall be calibrated at least once annually or as established by the manufacturer's specifications, whichever is more frequent, as opposed to every six months. Conditions D.1.9 and D.2.9 have been revised.

(i) Emission Limitations and Standards

The VOC emission limits for the core making facilities have been described as "not including amine gas (TEA)". The use of the term "TEA" is inconsistent with earlier references to amine gas catalyst which do not reference the specific amine gas TEA. Conditions D.3.1(e), D.3.1(f), D.3.1(g), and D.3.1(h) have been revised to indicate the use of amine gas catalyst.

The following terms and conditions from previous approvals have been determined no longer applicable; therefore, were not incorporated into this Part 70 Operating Permit Renewal:

(a) Pursuant to Significant Permit Modification 183-27478-00023, Conditions D.1.3(c) and D.1.3(d), the total throughput of metal to each of the two (2) castings knockout/shakeout operations (SK-1 and SK-2) and the two (2) castings cooling operations (C-1 and C-2) shall not exceed 37,142 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Reason not incorporated: Condition D.1.3(b) states the total throughput of metal to the two (2) pouring/casting operations (P-1 and P-2) shall not exceed 37,142 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The material from the pouring/casting operations goes directly to the casting cooling operations and then to the knockout/shakeout operations with no reasonable opportunity of removing material from the process flow. Therefore, the throughput for all three operations is the same. The metal throughput limit of the pouring/casting operations and the VOC emissions limit will still yield total VOC emissions from the pouring/casting operations, the castings knockout/shakeout operations, and the two (2) castings cooling operations that are less than 25 tons per year.

(b) Pursuant to Significant Permit Modification 183-27478-00023, Condition D.1.6(b), the Permittee shall perform PM_{10} testing on Baghouse CD-1 stack exhaust within 180 days of the effective date of the new or revised condensable PM test method(s) referenced in the U.S. EPA's Final Rule for the Implementation of the New Source Review (NSR) Program for Particulate Matter less than 10 Micrometers (PM_{10}), signed on May 8, 2008.

Reason not incorporated: The Permittee completed the required stack testing for this stack exhaust on March 31, 2009 whereas Significant Permit Modification 183-27478-00023 was issued on April 22, 2009. It is overly burdensome to require additional stack testing for PM_{10} less than two years after recent stack test results have indicated compliance with the permit limits. However, future testing shall be for PM and PM_{10} and shall utilize the new or revised condensable PM test method(s) if and when they are finalized.

(c) Pursuant to Significant Permit Modification 183-27478-00023, Condition D.1.9, the Permittee shall record the total static pressure drop across baghouse CD-5 controlling the cleaning/finishing (F-1) operations at least once per day when the systems are in operation.

Reason not incorporated: Parametric monitoring is not required for baghouse CD-5. Parametric monitoring is not required for facilities with a potential to emit less than 25 tons per year. Baghouse CD-5 is used to control the cleaning/finishing (F-1) operations as well as the six robotic saws with the one grinder; these facilities have a combined uncontrolled potential to emit less than five tons per year. Condition D.1.9 and D.1.12(c) has been revised to remove all references to baghouse CD-5 and the cleaning/finishing (F-1) operations.

(d) Pursuant to Significant Permit Modification 183-27478-00023, Condition D.2.3(b), the throughput of metal to each of the castings knockout/shakeout operation (SK-3) and the castings cooling operation (C-3) shall not exceed 37,142 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Reason not incorporated: Condition D.2.3(b) states the total throughput of metal to the two (2) pouring/casting operations (P-3) shall not exceed 37,142 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The material from the pouring/casting operations goes directly to the casting cooling operations and then the knockout/shakeout operations with no reasonable opportunity of removing material from the process flow. Therefore, the throughput for all three operations is the same. The metal throughput limit of the pouring/casting operations and the VOC emissions limit will still yield total VOC emissions from the pouring/casting operations, the castings knockout/shakeout operations, and the two (2) castings cooling operations that are less than 25 tons per year.

(e) Pursuant to Significant Permit Modification 183-27478-00023, Condition D.2.6(b), the Permittee shall perform PM_{10} testing on Baghouse CD-3 stack exhaust within 180 days of the effective date of the new or revised condensable PM test method(s) referenced in the U.S. EPA's Final Rule for the Implementation of the New Source Review (NSR) Program for Particulate Matter less than 10 Micrometers (PM_{10}), signed on May 8, 2008.

Reason not incorporated: The Permittee completed the required stack testing for this stack exhaust on April 1, 2009 whereas Significant Permit Modification 183-27478-00023 was issued on April 22, 2009. It is overly burdensome to require additional stack testing for PM_{10} less than two years after recent stack test results have indicated compliance with the permit limits. However, future testing shall be for PM and PM_{10} and shall utilize the new or revised condensable PM test method(s) if and when they are finalized.

(f) Pursuant to Significant Permit Modification 183-27478-00023, Conditions D.3.1(b) and D.3.1(f), core machines #5 - #6 will maintain production limits in order for the requirements of 326 IAC 8-1-6 (BACT) to not apply.

Reason not incorporated: 326 IAC 8-1-6 is not applicable to core machines #5 - #6, as a single facility, because they have an uncontrolled potential to emit of less than 25 tons per year. Therefore, these units do not need BACT avoidance limits.

(g) Pursuant to Significant Permit Modification 183-27478-00023, Conditions D.3.1(c) and D.3.1(g), core machines #7 - #8 will maintain production limits in order for the requirements of 326 IAC 8-1-6 (BACT) to not apply.

Reason not incorporated: 326 IAC 8-1-6 is not applicable to core machines #7 - #8, as a single facility, because they have an uncontrolled potential to emit of less than 25 tons per year. Therefore, these units do not need BACT avoidance limits.

The following terms and conditions from previous approvals have been added in this Part 70 Operating Permit Renewal:

(a) Emission Units and Pollution Control Equipment Summary

Descriptions of the following specifically regulated insignificant activity have been added in Conditions A.3 and D.1:

(6) Six (6) robotic saws and one (1) grinder, controlled by a baghouse, identified as CD-5, with a design grain loading less than 0.03 grains per actual cubic foot and a gas flow rate less than 4000 actual cubic feet per minute. [326 IAC 6-3-2]

(b) Emission Limitations

Pursuant to IDEM's "Notice of Limited Self-Disclosure Opportunity for CO Emissions from PCS Operations within the Foundry Sector", dated August 11, 2006, this source has evaluated its PTE for CO using a default emission factor of six (6) pounds per ton of metal poured for the combined pouring, cooling, and shakeout processes. These CO limits have been added to the permit in Conditions D.1.1(c) and D.2.1(b). Coupled with the existing metal throughput limits, compliance with these CO limits shall limit source-wide CO to less than 250 tons per year and render 326 IAC 2-2 (PSD) not applicable.

Enforcement Issues

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Whitley County

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.
[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for $PM_{2.5}$.	

(a) Ozone Standards

(1) 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.

(2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, and St. Joseph as attainment for the 8-hour ozone standard.

(3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.

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

(b) $PM_{2.5}$
Whitley County has been classified as attainment for $PM_{2.5}$. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for $PM_{2.5}$ emissions, and the effective date of these rules was July 15, 2008. Indiana has three years from the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM_{10} emissions as a surrogate for $PM_{2.5}$ emissions until 326 IAC 2-2 is revised.

(c) Other Criteria Pollutants
Whitley 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.

(d) This source melts no materials other than clean charge and does not operate a thermal chip dryer, sweat furnace, or scrap dryer/delacquering kiln/decoating kiln. Therefore, it is not a secondary metal production plant under 326 IAC 2-2.

(e) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD applicability.

Unrestricted Potential Emissions

Appendices A and B of this TSD reflects the unrestricted potential emissions of the source.

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM, PM_{10}, CO, and VOC 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 all other criteria pollutants are less than 100 tons per year.

(c) 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/or 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.

(d) 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.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2006 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	54.8
PM_{10}	33.6
SO_2	0.08
VOC	12.5
CO	11.5
NO_x	13.7
Hydrochloric acid (HCl)	0.09
Hydrogen fluoride (HF)	0.09
Hexachloroethane (HCE)	not reported

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 assume 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 per year)					
Process/Facility/Stack	**Control Device**	**PM**	**PM_{10}**	**SO_2**	**VOC**	**CO**	**NO_X**
Melt Furnaces (RF-1 & RF-2)	---	17.52	17.52	---	---	1.86	---
Melt Furnaces (RF-3 & RF-4)	---	17.52	17.52	---	---		---
Furnaces - Natural Gas Usage (RF-1 & RF-2, RF-3 & RF-4)	---	0.14	0.57	0.05	0.41	6.31	7.51
Pouring/Casting (P-1, P-2)	---	26.00	19.13	0.19	12.44	55.71	0.09
Castings Cooling (C-1, C-2)	---	13.00	13.00	0.19			0.09
Knockout/Shakeout (SK-1, SK-2)	CD-1	56.33	56.33	---			---
Sand Handling (SH-1)	CD-1			---	---	---	---
Cleaning/Finishing (F-1)	CD-5	2.06	2.06	---	---	---	---
Shot Blasting Unit (SB-1)	CD-2	2.06	2.06	---	---	---	---
Metal Reclamation Screening	CD-6	1.54	1.54	---	---	---	---
Hexachloroethane Fluxing (30/30)[1]	---	neg.	neg.	---	14.37	---	---
Melt System (RF-5)	---	21.90	21.90	---	---	---	---
Furnace System - Natural Gas Usage (RF-5)	---	0.17	0.69	0.05	0.50	7.65	9.10
Pouring/Casting (P-3)	CD-3	67.58	67.58	0.37	24.89	111.43	0.19
Castings Cooling (C-3)	CD-3			0.37			0.19
Knockout/Shakeout (SK-3)	CD-3			---			---
Sand Handling (SH-2)	CD-3			---	---	---	---
Cleaning/Finishing (F-2)	CD-3			---	---	---	---
Shot Blasting Unit (SB-2)	CD-4	1.54	1.54	---	---	---	---
Hexachloroethane Fluxing (40/40)[1]	---	neg.	neg.	---	8.98	---	---
Isocure Cold Box (ISO #1 - #4)	SC-1	--	--	--	11.62	--	--
Isocure Cold Box (ISO #5 - #6)	SC-1	--	--	--	7.24	--	--
Isocure Cold Box (ISO #7 - #8)	SC-1	--	--	--	7.24	--	--
Isocure Cold Box (ISO #9 - #13)	SC-1	--	--	--	11.62	--	--
Hotbox Coremaking	---	4.56	4.56	--	2.74	--	--
Waste Sand Reclaim Screening	---	4.56	4.56	--	--	--	--
Six Robots, One Grinder	CD-5	1.03	1.03	--	--	--	--
Four Robots, One Grinder	BH7	1.03	1.03	--	--	--	--
Grinding and Machining	---	1.03	1.03	--	--	--	--
Natural Gas Combustion	---	0.33	1.33	0.10	0.96	14.70	17.50
Total Emissions		**239.92**	**234.98**	**1.32**	**103.00**	**197.65**	**34.67**
Major Source Threshold		**250**	**250**	**250**	**250**	**250**	**250**

(a) This existing stationary source is not major for PSD because the emissions of each criteria pollutant are less than two hundred fifty (<250) tons per year, and it is not one of the twenty-eight (28) listed source categories.

(b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, fugitive emissions are not counted toward the determination of PSD applicability.

Federal Rule Applicability

CAM:

(a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to existing emission units that involve a pollutant-specific emission unit and meet 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)
Sand Handling (SH-1): PM	Baghouse CD-1	Y	2049.8	12.86	100	Y	N
Sand Handling (SH-1): PM_{10}	Baghouse CD-1	Y	307.5	12.86	100	Y	N
Castings Knockout/ Shakeout (SK-1): PM	Baghouse CD-1	Y	56.07	12.86	100	N	N
Castings Knockout/ Shakeout (SK-1): PM_{10}	Baghouse CD-1	Y	39.25	12.86	100	N	N
Castings Knockout/ Shakeout (SK-2): PM	Baghouse CD-1	Y	56.07	12.86	100	N	N
Castings Knockout/ Shakeout (SK-2): PM_{10}	Baghouse CD-1	Y	39.25	12.86	100	N	N
Cleaning/Finishing (F-1): PM	Baghouse CD-5	Y	0.35	<0.35	100	N	N
Cleaning/Finishing (F-1): PM_{10}	Baghouse CD-5	Y	0.16	<0.16	100	N	N
Shot Blasting Unit (SB-1): PM	Baghouse CD-2	Y	297.84	2.06	100	Y	N
Shot Blasting Unit (SB-1): PM_{10}	Baghouse CD-2	Y	29.78	2.06	100	N	N
Metal Reclamation Screening: PM	Baghouse CD-6	Y	189.2	1.54	100	Y	N
Metal Reclamation Screening: PM_{10}	Baghouse CD-6	Y	28.4	1.54	100	N	N
Sand Handling (SH-2): PM	Baghouse CD-3	Y	1576.8	15.43	100	Y	N

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)
Sand Handling (SH-2): PM_{10}	Baghouse CD-3	Y	236.5	15.43	100	Y	N
Pouring/Casting (P-3): PM	Baghouse CD-3	Y	61.32	15.43	100	N	N
Pouring/Casting (P-3): PM_{10}	Baghouse CD-3	Y	45.11	15.43	100	N	N
Castings Cooling (C-3): PM	Baghouse CD-3	Y	30.66	15.43	100	N	N
Castings Cooling (C-3): PM_{10}	Baghouse CD-3	Y	30.66	15.43	100	N	N
Castings Knockout/ Shakeout (SK-3): PM	Baghouse CD-3	Y	70.08	15.43	100	N	N
Castings Knockout/ Shakeout (SK-3): PM_{10}	Baghouse CD-3	Y	49.06	15.43	100	N	N
Cleaning/Finishing (F-2): PM	Baghouse CD-3	Y	0.22	<0.22	100	N	N
Cleaning/Finishing (F-2): PM_{10}	Baghouse CD-3	Y	0.10	<0.10	100	N	N
Shot Blasting Unit (SB-2): PM	Baghouse CD-4	Y	186.15	1.54	100	Y	N
Shot Blasting Unit (SB-2): PM_{10}	Baghouse CD-4	Y	18.62	1.54	100	N	N
Isocure Cold Box (ISO #1 - #4): VOC	Amine Gas Scrubber SC-1	Y	31.01	11.62	100	N	N
Isocure Cold Box (ISO #5 - #6): VOC	Amine Gas Scrubber SC-1	Y	15.51	7.24	100	N	N
Isocure Cold Box (ISO #7 - #8): VOC	Amine Gas Scrubber SC-1	Y	15.51	7.24	100	N	N
Isocure Cold Box (ISO #9 - #13): VOC	Amine Gas Scrubber SC-1	Y	38.76	11.62	100	N	N
Six (6) Robotic Saws, One (1) Grinder: PM	Baghouse CD-5	Y	4.56	1.03	100	N	N
Six (6) Robotic Saws, One (1) Grinder: PM_{10}	Baghouse CD-5	Y	4.56	1.03	100	N	N
Four (4) Robotic Saws, One (1) Grinder: PM	Baghouse BH-7	Y	4.56	1.03	100	N	N
Four (4) Robotic Saws, One (1) Grinder: PM_{10}	Baghouse BH-7	Y	4.56	1.03	100	N	N

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to Baghouses CD-1 and CD-3 for PM and PM_{10} upon issuance of the Title V Renewal; CAM are also applicable to Baghouses CD-2, CD-4, and CD-6 for PM upon issuance of the Title V Renewal. A CAM plan has been incorporated into this Part 70 permit renewal.

NSPS:

(b) The requirements of the New Source Performance Standard (NSPS) for Primary Aluminum Reduction (40 CFR 60.190, Subpart S) are not included in the permit because the source does not perform primary aluminum reduction as defined in 40 CFR 60.191.

(c) The requirements of the New Source Performance Standard (NSPS) for Metallic Mineral Processing Plants (40 CFR 60.380, Subpart LL) are not included in the permit because the source is not a metallic mineral processing plant that produces metallic mineral concentrates from ore as defined in 40 CFR 60.381.

(d) The requirements of the New Source Performance Standard (NSPS) for Nonmetallic Mineral Processing Plants (40 CFR 60.670, Subpart OOO) are not included in the permit because, pursuant to 40 CFR 60.670(a)(2), the provisions of this subpart do not apply to stand-alone screening operations at plants without crushers or grinding mills.

(e) The requirements of the New Source Performance Standard (NSPS) for Calciners and Dryers in Mineral Industries (40 CFR Part 60.730, Subpart UUU) are not included in the permit because Fort Wayne Foundry - Columbia City Division utilizes mechanical sand reclamation and not thermal sand reclamation.

Pursuant to EPA's Applicability Determination Index (ADI) database (http://www.epa.gov/compliance/monitoring/programs/caa/adi.html) posting dated April 29, 2004 (Control Number: 0500056), emission units used in the reclamation of foundry sand that remove water through direct or indirect heating meet the definition of calciners and dryers as defined in 40 CFR 60.731. However, mechanical sand reclamation does not meet this definition since heat is not being added for the reclamation of the sand.

NESHAP:

(f) The insignificant degreasers are not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants for Halogenated Solvent Cleaning (40 CFR Part 63.460, Subpart T) because the degreasers do not use halogenated solvents.

(g) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Primary Aluminum Reduction (40 CFR 63.840, Subpart LL) are not included in the permit because the source is not a primary aluminum reduction plant as defined in 40 CFR 63.842.

(h) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Aluminum Production (40 CFR 63.1500, 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 it 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.

(i) The requirements of the following National Emission Standards for Hazardous Air Pollutants (NESHAP) under 40 CFR Part 63 are not included in the permit:

- National Emission Standards for Hazardous Air Pollutants for Secondary Nonferrous Metals Processing Area Sources (40 CFR Part 63.11462, Subpart TTTTTT); and

- National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries (40 CFR Part 63.11544, Subpart ZZZZZZ).

These NESHAPs apply only to area sources. Since the potential to emit of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit of a combination of HAPs is equal to or greater than twenty-five (25) tons per year, Fort Wayne Foundry - Columbia City Division is a major source of HAPs and does not meet the definition of an area source.

State Rule Applicability - Entire Source

326 IAC 1-5-2 (Emergency Reduction Plans)
The source is subject to 326 IAC 1-5-2.

326 IAC 1-6-3 (Preventive Maintenance Plan)
The source is subject to 326 IAC 1-6-3.

326 IAC 2-2 (Prevention of Significant Deterioration)
The potential to emit PM, PM_{10}, and CO from the entire source is each greater than 250 tons per year, and this source is not one of the 28 listed source categories under 326 IAC 2-2. However, Fort Wayne Foundry - Columbia City Division is not subject to the PSD requirements of 326 IAC 2-2 because the source is taking the following limits to be a minor source:

Foundry Operations - 30/30 Line

(a) The PM and PM_{10} emissions from the following operations shall not exceed the emission limits listed in the table below:

Emission Unit	PM Emission Limit (pounds per hour)	PM_{10} Emission Limit (pounds per hour)
Reverberatory Furnaces (RF-1 and RF-2)	4.0	4.0
Reverberatory Furnaces (RF-3 and RF-4)	4.0	4.0
Baghouse CD-1 *	12.86	12.86
Baghouse CD-5 **	2.06	2.06
Baghouse CD-2 ***	2.06	2.06
Baghouse CD-6 ****	1.54	1.54

* Baghouse CD-1 controls PM/PM_{10} emissions from the sand handling system (SH-1) and the two (2) castings knockout/shakeout operations (SK-1 and SK-2).
** Baghouse CD-5 controls PM/PM_{10} emissions from the cleaning/finishing operation (F-1) and the insignificant six (6) robotic saws and one (1) grinder.
*** Baghouse CD-2 controls PM/PM_{10} emissions from the shot blasting unit (SB-1).
**** Baghouse CD-6 controls PM/PM_{10} emissions from the metal reclamation screening.

(b) The PM and PM_{10} emissions from the following operations shall not exceed the emission limits listed in the table below:

Emission Unit	PM Emission Limit (pounds per ton of metal throughput)	PM_{10} Emission Limit (pounds per ton of metal throughput)
Pouring/Casting Operations (P-1 and P-2)	2.80	2.06
Castings Cooling Operations (C-1 and C-2)	1.40	1.40

(c) The CO emissions from the pouring/casting operations (P-1 and P-2), the castings knockout/shakeout operations (SK-1 and SK-2), and the two (2) castings cooling operations (C-1 and C-2) shall not exceed 6.0 pounds per ton of metal throughput, total.

(d) The total throughput of metal to the two (2) pouring/casting operations (P-1 and P-2) shall not exceed 37,142 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Foundry Operations - 40/40 Line

(a) The PM and PM_{10} emissions from the following operations shall not exceed the emission limits listed in the table below:

Emission Unit	PM Emission Limit (pounds per hour)	PM_{10} Emission Limit (pounds per hour)
Reverberatory Furnace System (RF-5)	5.0	5.0
Baghouse CD-3 *	15.43	15.43
Baghouse CD-4 **	1.54	1.54

* Baghouse CD-3 controls PM/PM_{10} emissions from the pouring/casting operation (P-3), the castings cooling operation (C-3), the sand handling system (SH-2), the castings knockout/shakeout operation (SK-3), and the cleaning/finishing operation (F-2).
** Baghouse CD-4 controls PM/PM_{10} emissions from the shot blasting unit (SB-2).

(b) The CO emissions from the pouring/casting operation (P-3), the castings knockout/shakeout operation (SK-3), and the castings cooling operation (C-3) shall not exceed 6.0 pounds per ton of metal throughput, total.

(c) The total throughput of metal to the pouring/casting operation (P-3) shall not exceed 37,142 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

These limits, combined with the potential to emit PM, PM_{10}, and CO from other emission units at the source, shall limit the PM, PM_{10}, and CO from the entire source to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-2 not applicable.

326 IAC 2-6 (Emission Reporting)
This source is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit under 326 IAC 2-7, Part 70 program. Pursuant to this rule, the Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. In accordance with the compliance schedule specified in 326 IAC 2-6-3, an emission statement must be submitted triennially by July 1 beginning in 2004 and every 3 years after. Therefore, the next emission statement for this source must be submitted by July 1, 2010. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

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 Exemptions), 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.

326 IAC 6-4 (Fugitive Dust Emissions)
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 6-5 (Fugitive Particulate Matter Emission Limitations)
This source is not located in a county listed in 326 IAC 6-5-1(a) and has not added a facility with the potential to emit fugitive particulate matter greater than 25 tons per year, which requires a permit as set forth in 326 IAC 2, after December 13, 1985. Therefore, pursuant to 326 IAC 6-5-1, this source is not subject to the requirements of 326 IAC 6-5.

326 IAC 7-1.1-2 (Sulfur Dioxide Limitations)
None of the facilities at this source have the potential to emit sulfur dioxide greater than 25 tons per year. Therefore, the requirements of 326 IAC 7-1.1-2 do not apply to any of the facilities located at this source.

326 IAC 9 (Carbon Monoxide Emission Limits)
Although Fort Wayne Foundry - Columbia City Division is a stationary source which emits CO emissions and commenced operation after March 21, 1972, there are no specific CO emission limitations because the source is not an operation listed under 326 IAC 9-1-2. Therefore, the requirements of 326 IAC 9-1 do not apply.

326 IAC 10 (Nitrogen Oxide Emission Limitations)
The source is not subject to the requirements of 326 IAC 10 because it is not located in Clark County or Floyd County.

326 IAC 11-1 (Emission Limitations for Specific Types of Operation)
Since Fort Wayne Foundry - Columbia City Division commenced operation after December 6, 1968 then, pursuant to 326 IAC 11-1-1, particulate emissions from the foundry shall comply with 326 IAC 6-3. Therefore, the requirements of 326 IAC 11-1 do not apply.

State Rule Applicability – Individual Facilities

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

(a) The following facilities were constructed prior to the effective date of this rule (July 27, 1997):

(1) All facilities for the 30/30 line, constructed in 1986;
(2) All facilities for the 40/40 line, constructed in 1995; and
(3) All core making facilities, constructed in 1985, 1988, 1989, and 1995.

Therefore, 326 IAC 2-4.1 do not apply to these facilities.

(b) The operation of the six (6) robotic saws and one (1) grinder will emit less than 10 tons per year of a single HAP and less than 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

(c) The operation of the four (4) robotic saws and one (1) grinder, which were constructed in 2008, will emit less than 10 tons per year of a single HAP and less than 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
The potential to emit for particulate matter (PM) from each of the following facilities is less than 0.551 pounds per hour and, pursuant to 326 IAC 6-3-1(b)(14), is below the particulate exemption level: Cleaning/Finishing (F-1), Cleaning/Finishing (F-2), and the hexachloroethane fluxing operations.

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from facilities at this source shall be limited as follows when operating at the given process weight rates:

Process / Emission Unit	Process Weight Rate [P] (tons/hr)	Allowable Emissions [E] (lb/hr)	Equation Used	Uncontrolled Emissions (lb/hr)	Controlled Emissions (lb/hr)	Capable of Compliance?
Reverberatory Furnaces (RF-1 through RF-4, each)	2.00	6.52	(a)	< 2.00	---	yes - per test results
Pouring/Casting (P-1 & P-2, each)	61.36*	46.50	(b)	11.20	---	yes
Castings Cooling (C-1 & C-2, each)	61.36*	46.50	(b)	5.60	---	yes
Knockout/Shakeout (SK-1 & SK-2, each)	61.36*	46.50	(b)	12.80	2.94	yes
Sand Handling (SH-1)	130.00	53.95	(b)	468.00	2.94	yes - with control device
Shot Blasting Unit (SB-1)	4.00	10.38	(a)	68.00	0.47	yes - with control device
Cleaning/Finishing (F-1)	8.00	12.05	(a)	0.08	<0.08	exempt**
Metal Reclamation Screening	12.00	21.67	(a)	43.20	0.35	yes - with control device
Six (6) Robotic Saws and One Grinder	4.00	10.38	(a)	1.04	0.23	yes
Reverberatory Furnace System (RF-5)	5.00	12.05	(a)	< 5.00	---	yes - per test results
Pouring/Casting (P-3)	78.95*	48.93	(b)	14.00	3.52	yes
Castings Cooling (C-3)	78.95*	48.93	(b)	7.00	3.52	yes
Knockout/Shakeout (SK-3)	78.95*	48.93	(b)	16.00	3.52	yes
Sand Handling (SH-2)	100.00	51.28	(b)	360.00	3.52	yes - with control device
Shot Blasting Unit (SB-2)	2.50	7.58	(a)	42.50	0.35	yes - with control device
Cleaning/Finishing (F-2)	5.00	12.05	(a)	0.05	<0.05	exempt***
Four (4) Robotic Saws and One Grinder	5.00	12.05	(a)	1.04	0.23	yes
Waste Sand Metal Reclamation Screening	12.00	21.67	(a)	1.04	---	yes

* Includes metal, mold sand, and core sand throughput.
** Pursuant to 326 IAC 6-3-1(b)(14), this individual process is exempt from 326 IAC 6-3-2 as it has uncontrolled emissions less than 0.551 lb/hr. It has been listed above as its allowable emissions have been included in the allowable particulate emission rate for baghouse CD-5 listed below.
*** Pursuant to 326 IAC 6-3-1(b)(14), this individual process is exempt from 326 IAC 6-3-2 as it has uncontrolled emissions less than 0.551 lb/hr. It has been listed above as its allowable emissions have been included in the allowable particulate emission rate for baghouse CD-3 listed below.

These limitations are based upon the following:

(a) 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

(b) 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

The units listed in the table above are capable of complying with the allowable particulate emission limitations pursuant to 326 IAC 6-3. In order to comply with these limits, the baghouse CD-1 shall be in operation at all times any of the sand handling (SH-1) and the two (2) knockout/shakeout operations (SK-1, SK-2) are in operation; the baghouse CD-3 shall be in operation at all times any of the pouring/casting operation (P-3), castings cooling operation (C-3), sand handling (SH-2), knockout/shakeout operation (SK-3), and cleaning/finishing (F-2) are in operation; the baghouse CD-2 shall be in operation at all times the shot blasting unit (SB-1) is in operation; the baghouse CD-5 shall be in operation at all times the cleaning/finishing process (F-1) is in operation, the baghouse CD-6 shall be in operation at all times the metal reclamation screening is in operation; and the baghouse CD-4 shall be in operation at all times the shot blasting unit (SB-2) is in operation.

(1) For purposes of demonstrating compliance with the particulate emission limits for the two (2) reverberatory furnaces #1 and #2 (RF-1 and RF-2) both exhausting through stack S-1, the allowable particulate emission rate from stack S-1 shall be limited to 13.04 pounds per hour.

(2) For purposes of demonstrating compliance with the particulate emission limits for the two (2) reverberatory furnaces #3 and #4 (RF-3 and RF-4) both exhausting through stack S-2, the allowable particulate emission rate from stack S-2 shall be limited to 13.04 pounds per hour.

(3) For purposes of demonstrating compliance with the particulate emission limits for the sand handling (SH-1) and the two (2) knockout/shakeout operations (SK-1, SK-2) all exhausting through baghouse CD-1, the allowable particulate emission rate from baghouse CD-1 shall be limited to 146.95 pounds per hour.

(4) For purposes of demonstrating compliance with the particulate emission limits for the pouring/casting operation (P-3), the castings cooling operation (C-3), sand handling (SH-2), the knockout/shakeout operation (SK-3), and cleaning/finishing (F-2) all exhausting through baghouse CD-3, the allowable particulate emission rate from baghouse CD-3 shall be limited to 210.12 pounds per hour.

(5) Pursuant to 326 IAC 6-3-2(c), the allowable particulate emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour. The manufacturing activities, sand conveyors, hotbox coremaking machine, and the grinding and machining operations listed in the insignificant activities in Section D.4 shall be subject to this limit.

326 IAC 8-1-6 (BACT)

(a) The following facilities do not have the potential to emit VOC greater than 25 tons per year, each:

(1) five (5) reverberatory furnaces;

(2) hexachloroethane fluxing operation;

(3) core machines #5 - #6, as a single facility; and

(4) core machines #7 - #8, as a single facility.

Therefore, the requirements of 326 IAC 8-1-6 (BACT) do not apply to these facilities.

(b) In order to render the requirements of 326 IAC 8-1-6 (BACT) not applicable, the following conditions shall apply to the pouring/casting operations (P-1 and P-2), the castings cooling operations (C-1 and C-2), and the castings knockout/shakeout operations (SK-1 and SK-2):

(1) The VOC emissions from the two (2) pouring/casting operations (P-1 and P-2) shall not exceed 0.14 pound per ton of metal throughput.

(2) The VOC emissions from the two (2) castings knockout/shakeout operations (SK-1 and SK-2) shall not exceed 1.2 pounds of VOC per ton of metal throughput.

(3) The total throughput of metal to the two (2) pouring/casting operations (P-1 and P-2) shall not exceed 37,142 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

The metal throughput limit and the VOC emissions limitations yield total VOC emissions from the pouring/casting operations (P-1 and P-2), the castings cooling operations (C-1 and C-2), and the castings knockout/shakeout operations (SK-1 and SK-2) that are less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 (BACT) do not apply.

(c) In order to render the requirements of 326 IAC 8-1-6 (BACT) not applicable, the following conditions shall apply to the pouring/casting operations (P-1 and P-2), the castings cooling operations (C-1 and C-2), and the castings knockout/shakeout operations (SK-1 and SK-2):

(1) The VOC emissions from the pouring/casting operation (P-3) shall not exceed 0.14 pound per ton of metal throughput.

(2) The VOC emissions from the castings knockout/shakeout operation (SK-3) shall not exceed 1.2 pounds of VOC per ton of metal throughput.

(3) The throughput of metal to the pouring/casting operation (P-3) shall not exceed 37,142 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

The metal throughput limit and the VOC emissions limit yield total VOC emissions from the pouring/casting operation (P-3), the castings cooling operations (C-3), and the castings knockout/shakeout operation (SK-3) that are less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 (BACT) do not apply.

(d) In order to render the requirements of 326 IAC 8-1-6 (BACT) not applicable, the following conditions shall apply to the core machines:

(1) The resin usage for core machines #1 - #4 shall not exceed 332,000 pounds of resin per 12 consecutive month period with compliance determined at the end of each month. Amine gas catalyst usage for core machines #1 - #4 shall not exceed 33,200 pounds of amine gas catalyst per 12 consecutive month period with compliance determined at the end of each month.

(2) The resin usage for core machines #9 - #13 shall not exceed 332,000 pounds of resin per 12 consecutive month period with compliance determined at the end of each month. Amine gas catalyst usage for core machines #9 - #13 shall not exceed 33,200 pounds of amine gas catalyst per 12 consecutive month period with compliance determined at the end of each month.

(3) The VOC emissions (not including amine gas catalyst) from core machines #1 - #4 shall not exceed 0.05 pounds per pound of resin.

(4) The VOC emissions (not including amine gas catalyst) from core machines #9 - #13 shall not exceed 0.05 pounds per pound of resin.

(5) The amine gas catalyst usage in core machines #1 - #4 shall not exceed 2 pounds per ton of cores.

(6) The amine gas catalyst usage in core machines #9 - #13 shall not exceed 2 pounds per ton of cores.

Therefore, the requirements of 326 IAC 8-1-6 (BACT) shall not apply.

326 IAC 8-3-2 (Cold Cleaner Operation)
Pursuant to 326 IAC 8-3-1(a)(2), the six (6) thirty-five (35) gallon cold-cleaner parts degreasers are subject to the requirements of 326 IAC 8-3-2 since they were constructed after January 1, 1980. Pursuant to 326 IAC 8-3-2, the Permittee shall:

(a) Equip each cleaner with a cover;

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

(c) Close each 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 and Control
The six (6) thirty-five (35) gallon cold-cleaner parts degreasers are also subject to the requirements of 326 IAC 8-3-5 since they were constructed after July 1, 1990. Pursuant to this rule, the Permittee shall comply with the following requirements for cold cleaner degreaser operation and control:

(a) Pursuant to 326 IAC 8-3-5(a), the Permittee shall ensure that the following control equipment requirements are met:

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

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

(B) A water cover when solvent 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 Permittee shall ensure that the following operating requirements are met:

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

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

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

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:

(a) Emission Controls Operation

(1) The baghouse CD-1 for particulate emission control shall be in operation and control particulate emissions whenever any of the sand handling (SH-1) and knockout/shakeout (SK-1, SK-2) operations are in operation.

(2) The baghouse CD-2 for particulate emission control shall be in operation and control particulate emissions whenever the shot blasting (SB-1) operation is in operation.

(3) The baghouse CD-3 for particulate emission control shall be in operation and control particulate emissions whenever any of the pouring/casting (P-3), castings cooling (C-3), sand handling (SH-2), knockout/shakeout (SK-3), and cleaning/finishing (F-2) operations are in operation.

(4) The baghouse CD-4 for particulate emission control shall be in operation and control particulate emissions whenever the shot blasting (SB-2) operation is in operation.

(5) The baghouse CD-5 for particulate emission control shall be in operation and control particulate emissions whenever any of the cleaning/finishing (F-1) operation, six (6) robotic saws, and one grinder are in operation.

(6) The baghouse CD-6 for particulate emission control shall be in operation and control particulate emissions whenever the metal reclamation screening is in operation.

(b) Testing Requirements

(1) In order to demonstrate compliance with Conditions D.1.1 and D.1.3, the Permittee shall perform PM and PM_{10} testing by April, 2014 on the baghouse CD-1 (stack S/V ID CD-1) stack exhaust utilizing methods as approved by the Commissioner.

(2) In order to demonstrate compliance with Conditions D.2.1 and D.2.3, the Permittee shall perform PM and PM_{10} testing by April, 2014 on the baghouse CD-

3 (stack S/V ID CD-3) stack exhaust utilizing methods as approved by the Commissioner.

Upon the rule's effective date, the Permittee shall perform future PM_{10} testing on the baghouse CD-1 and baghouse CD-3 stack exhausts using the new or revised condensable PM test method(s) referenced in the U. S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers ($PM_{2.5}$), published in the May 16, 2008 Federal Register. This testing shall be conducted utilizing methods as approved by the Commissioner. PM_{10} will include filterable PM_{10} and condensable PM.

These tests shall be repeated at least once every five (5) years from the date of valid compliance demonstration. Testing shall be conducted in accordance with Section C-Performance Testing.

These requirements are required to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) and to render 326 IAC 2-2 (PSD) not applicable.

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

(a) Visible Emissions Notations
The Permittee shall perform daily visible emission notations of the following:

(1) Baghouse, CD-1, stack exhaust CD-1; and

(2) Baghouse, CD-3, stack exhaust CD-3.

(b) Baghouse Parametric Monitoring
The Permittee shall record the pressure drop across each of the baghouses identified as CD-1, CD-2, CD-3, CD-4, and CD-6, controlling the pouring/casting (P-3), castings cooling (C-3), sand handling (SH-1, SH-2), knockout/shakeout (SK-1, SK-2, SK-3), cleaning/finishing (F-2), shot blasting operations (SB-1, SB-2), and the metal reclamation screening at least once per day when the systems are in operation.

(c) Broken or Failed Bag Detection
The Permittee shall maintain baghouses CD-1, CD-2, CD-3, CD-4, CD-5, and CD-6 and replace broken or failed bags as needed.

These monitoring conditions are necessary because the baghouses for the source must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 2-7 (Part 70) and to render 326 IAC 2-2 (PSD) not applicable.

Recommendation

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

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

An application for the purposes of this review was received on December 28, 2007. Additional information was received on July 13, 2009, July 29, 2009, and August 31, 2009.

Conclusion

The operation of this stationary aluminum foundry shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No. T183-25810-00023.

Uncontrolled Potential Emissions (tons/yr)

Process	Maximum Throughput (ton/hr)	PM	PM_{10}	SO_2	NO_x	CO	VOC	Metallic HAPs	Organic HAPs
Melting - Reverberatory Furnaces (RF-1 & RF-2)	4.0	75.34	45.55	0.00	0.00	3.50	0.00	0.00	0.00
Melting - Reverberatory Furnaces (RF-3 & RF-4)	4.0	75.34	45.55	0.00	0.00	3.50	0.00	0.00	0.00
Furnaces - Natural Gas Usage (RF-1&2, RF-3&4)	---	0.27	1.08	0.09	14.17	11.90	0.78	7.77E-04	0.27
Pouring/Casting Line (P-1)	4.0	49.06	36.09	0.35	0.18	105.12	23.48	0.00	0.00
Cooling Line (C-1)	4.0	24.53	24.53	0.35	0.18				
Casting Knockout/Shakeout (SK-1)	4.0	56.06	39.24	0.00	0.00				
Pouring/Casting Line (P-2)	4.0	49.06	36.09	0.35	0.18	105.12	23.48	0.00	0.00
Cooling Line (C-2)	4.0	24.53	24.53	0.35	0.18				
Casting Knockout/Shakeout (SK-2)	4.0	56.06	39.24	0.00	0.00				
Sand Handling (SH-1)	130.0	2049.84	307.48	0.00	0.00	0.00	0.00	0.00	0.00
Shot Blasting Unit (SB-1)	4.0	297.84	29.78	0.00	0.00	0.00	0.00	0.00	0.00
Grinding/Finishing (F-1)	8.0	0.35	0.16	0.00	0.00	0.00	0.00	0.00	0.00
Metal Reclamation Screening	12.0	189.22	28.38	0.00	0.00	0.00	0.00	0.00	0.00
Hexachloroethane Fluxing	0.004	8.76E-03	9.32E-04	0.00	0.00	0.00	14.37	0.00	31.85
Melting - Reverberatory Furnace System (RF-5)	5.0	94.17	56.94	0.00	0.00	0.00	4.36	0.00	0.00
Furnace System - Natural Gas Usage (RF-5)	---	0.20	0.82	0.06	10.74	9.02	0.59	5.88E-04	0.20
Pouring/Casting Line (P-3)	5.0	61.32	45.11	0.44	0.22	131.40	29.35	0.00	0.00
Cooling Line (C-3)	5.0	30.66	30.66	0.44	0.22				
Casting Knockout/Shakeout (SK-3)	5.0	70.08	49.06	0.00	0.00				
Sand Handling (SH-2)	100.0	1576.80	236.52	0.00	0.00	0.00	0.00	0.00	0.00
Shot Blasting Unit (SB-2)	2.5	186.15	18.62	0.00	0.00	0.00	0.00	0.00	0.00
Grinding/Finishing (F-2)	5.0	0.22	0.10	0.00	0.00	0.00	0.00	0.00	0.00
Hexachloroethane Fluxing	0.003	5.48E-03	5.83E-04	0.00	0.00	0.00	8.98	0.00	19.91
Isocure Core Machines (#1 - #4)	2.36	0.00	0.00	0.00	0.00	0.00	31.01	0.00	20.67
Isocure Core Machines (#5 - #6)	1.18	0.00	0.00	0.00	0.00	0.00	15.51	0.00	10.34
Isocure Core Machines (#7 - #8)	1.18	0.00	0.00	0.00	0.00	0.00	15.51	0.00	10.34
Isocure Core Machines (#9 - #13)	2.95	0.00	0.00	0.00	0.00	0.00	38.76	0.00	25.84
Six Robotic Saws and One Grinder	---	4.56	4.56	0.00	0.00	0.00	0.00	0.00	0.00
Four Robotic Saws and One Grinder	---	4.56	4.56	0.00	0.00	0.00	0.00	0.00	0.00
Hotbox Coremaking	---	4.56	4.56	0.00	0.00	0.00	2.74	0.00	0.00
Waste Sand Metal Reclamation Screening	---	4.56	4.56	0.00	0.00	0.00	0.00	0.00	0.00
Grinding and Machining	---	4.56	4.56	0.00	0.00	0.00	0.00	0.00	0.00
Other Natural Gas Combustion	---	0.33	1.33	0.10	17.50	14.70	0.96	7.77E-04	0.27
Total Uncontrolled Emissions (tons/yr)		**4990.25**	**1119.67**	**2.53**	**43.54**	**384.27**	**209.88**	**0.00**	**119.68**

Emission Factors (lbs/unit)			
Control Device	Description	PM	PM_{10}
S/V ID S-1 (RF-1 & RF-2)	Stack Test Results (3/30/04)	1.112	1.332
	Limited/Controlled Calculations	4.00	4.00
S/V ID S-2 (RF-3 & RF-4)	Stack Test Results (3/30/04)	1.112	1.332
	Limited/Controlled Calculations	4.00	4.00
Baghouse CD-1 (SK-1, SK-2, SH-1)	Stack Test Results (3/31/09)	0.507	0.646
	Limited/Controlled Calculations	12.86	12.86
S/V ID S-3 (RF-5)	Stack Test Results (3/31/04)	1.080	2.040
	Limited/Controlled Calculations	5.00	5.00
Baghouse CD-3 (P-3, C-3, SK-3, SH-2, F-2)	Stack Test Results (4/1/09)	0.668	0.881
	Limited/Controlled Calculations	15.43	15.43

Controlled/ Limited Emissions (tons/yr)

30/30 Line Limited Melt Production 37142 TPY
40/40 Line Limited Melt Production 37142 TPY

Process	Control Device	PM	PM_{10}	SO_2	NO_x	CO	VOC	Metallic HAPs	Organic HAPs
Melting - Reverberatory Furnaces (RF-1 & RF-2)	---	17.52	17.52	0.00	0.00	1.86	0.00	0.00	0.00
Melting - Reverberatory Furnaces (RF-3 & RF-4)	---	17.52	17.52	0.00	0.00		0.00	0.00	0.00
Furnaces - Natural Gas Usage (RF-1&2, RF-3&4)	---	0.14	0.57	0.05	7.51	6.31	0.41	4.12E-04	0.14
Pouring/Casting Lines (P-1 & P-2)	---	26.00	19.13	0.19	0.09	55.71	12.44	0.00	0.00
Cooling Lines (C-1 & C-2)	---	13.00	13.00	0.19	0.09				
Casting Knockout/Shakeouts (SK-1 & SK-2)	Baghouse CD-1	56.33	56.33	0.00	0.00				
Sand Handling (SH-1)	Baghouse CD-1			0.00	0.00	0.00	0.00	0.00	0.00
Grinding/Finishing (F-1)	Baghouse CD-5	2.06	2.06	0.00	0.00	0.00	0.00	0.00	0.00
Shot Blasting Unit (SB-1)	Baghouse CD-2	2.06	2.06	0.00	0.00	0.00	0.00	0.00	0.00
Metal Reclamation Screening	Baghouse CD-6	1.54	1.54	0.00	0.00	0.00	0.00	0.00	0.00
Hexachloroethane Fluxing	---	8.76E-03	9.32E-04	0.00	0.00	0.00	14.37	0.00	31.85
Melting - Reverberatory Furnace System (RF-5)	---	21.90	21.90	0.00	0.00	0.00	0.00	0.00	0.00
Furnace System - Natural Gas Usage (RF-5)	---	0.17	0.69	0.05	9.10	7.65	0.50	4.99E-04	0.17
Pouring/Casting Line (P-3)	Baghouse CD-3	67.58	67.58	0.37	0.19	111.43	24.89	0.00	0.00
Cooling Line (C-3)	Baghouse CD-3			0.37	0.19				
Casting Knockout/Shakeout (SK-3)	Baghouse CD-3			0.00	0.00				
Sand Handling (SH-2)	Baghouse CD-3			0.00	0.00	0.00	0.00	0.00	0.00
Grinding/Finishing (F-2)	Baghouse CD-3			0.00	0.00	0.00	0.00	0.00	0.00
Shot Blasting Unit (SB-2)	Baghouse CD-4	1.54	1.54	0.00	0.00	0.00	0.00	0.00	0.00
Hexachloroethane Fluxing	---	5.48E-03	5.83E-04	0.00	0.00	0.00	8.98	0.00	19.91
Isocure Core Machines (#1 - #4)	Scrubber SC-1	0.00	0.00	0.00	0.00	0.00	11.62	0.00	3.32
Isocure Core Machines (#5 - #6)	Scrubber SC-1	0.00	0.00	0.00	0.00	0.00	7.24	0.00	2.07
Isocure Core Machines (#7 - #8)	Scrubber SC-1	0.00	0.00	0.00	0.00	0.00	7.24	0.00	2.07
Isocure Core Machines (#9 - #13)	Scrubber SC-1	0.00	0.00	0.00	0.00	0.00	11.62	0.00	3.32
Six Robotic Saws and One Grinder	Baghouse CD-5	1.03	1.03	0.00	0.00	0.00	0.00	0.00	0.00
Four Robotic Saws and One Grinder	Baghouse BH-7	1.03	1.03	0.00	0.00	0.00	0.00	0.00	0.00
Hotbox Coremaking	---	4.56	4.56	0.00	0.00	0.00	2.74	0.00	0.00
Waste Sand Metal Reclamation Screening	---	4.56	4.56	0.00	0.00	0.00	0.00	0.00	0.00
Grinding and Machining	---	1.03	1.03	0.00	0.00	0.00	0.00	0.00	0.00
Other Natural Gas Combustion	---	0.33	1.33	0.10	17.50	14.70	0.96	7.77E-04	0.27
Total Controlled Emissions (tons/yr)		**239.92**	**234.98**	**1.32**	**34.67**	**197.65**	**103.00**	**0.00**	**63.11**

Notes:
Potential Emissions (lb/hr) = Emission Factor (lb/ton) * Material throughput (ton/hr)*8760 hr/yr * 1/2000 ton/lb

Process:	Rate (tons metal/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	CFM	Grain Loading (gr/dscf)	Eac (ton/yr)
Reverberatory Furnaces	4.0	PM	4.30	75.34				75.34
(RF-1 & RF-2)	TOTAL	PM-10	2.60	45.55				45.55
Source of Criteria		SO2	0.00	0.00				0.00
Pollutant Factors:		NOx	0.00	0.00				0.00
SCC# 3-04-001-03		VOC	0.20	3.50				3.50
AP-42 Ch. 12.8		CO	0.00	0.00				0.00
Fifth edition 1995								

Allowable Emissions:

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

P= 2.00 tons/hr **(each)**

limit = 4.1 x (2.00 ^0.67) = 6.52 lb/hr (allowable)

with uncontrolled potential:

37.67 tons/yr x 2000 lb/ton / 8760 hr/yr = 8.60 lb/hr (will not comply)

with controlled potential:

PSD limit 2.0 lb/hr
4/1/04 Stack Test 0.556 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 = Ebc
1ton = 2000 lbs

Process	Rate (tons metal/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	CFM	Grain Loading (gr/dscf)	Eac (ton/yr)
Reverberatory Furnaces	4.0	PM	4.30	75.34				75.34
(RF-3 & RF-4)	TOTAL	PM-10	2.60	45.55				45.55
Source of Criteria		SO2	0.00	0.00				0.00
Pollutant Factors:		NOx	0.00	0.00				0.00
SCC# 3-04-001-03		VOC	0.20	3.50				3.50
AP-42 Ch. 12.8		CO	0.00	0.00				0.00
Fifth edition 1995								

Allowable Emissions:

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

P= 2.00 tons/hr **(each)**

limit = 4.1 x (2.00 ^0.67) = 6.52 lb/hr (allowable)

with uncontrolled potential:

37.67 tons/yr x 2000 lb/ton / 8760 hr/yr = 8.60 lb/hr (will not comply)

with controlled potential:

PSD limit 2.0 lb/hr

4/1/04 Stack Test 0.556 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 = Ebc

1ton = 2000 lbs

Reverberatory Furnaces (RF-1 & RF-2, RF-3 & RF-4)
Natural Gas Combustion Only
MM BTU/HR <100

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
33.00	283.4

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.27	1.08	0.09	14.17	0.78	11.90

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	2.976E-04	1.700E-04	1.063E-02	2.551E-01	4.818E-04

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	7.085E-05	1.559E-04	1.984E-04	5.385E-05	2.976E-04

Methodology
The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.
All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Process:	Rate (tons metal/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	CFM	Grain Loading (gr/dscf)	Eac (ton/yr)
Pouring/Casting (P-1 & P-2)	4.0	PM	2.80	49.06				49.06
Source of Criteria	EACH	PM-10	2.06	36.09				36.09
Pollutant Factors:		SO2	0.02	0.35				0.35
SCC# 3-04-003-20		NOx	0.01	0.18				0.18
SCC# 3-04-001-14		VOC	1.34	23.48				23.48
AP-42 Ch. 12.8 and 12.10		CO	6.00	105.12				105.12
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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= 61.36 tons/hr ***(Note: P includes the weight of the sand plus the weight of the metal and cores).***

limit = 55 x (61.36 ^0.11) - 40 = 46.50 lb/hr (allowable)

with uncontrolled potential:

49.06 tons/yr x 2000 lb/ton / 8760 hr/yr = 11.20 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 = Ebc

1ton = 2000 lbs

CO emission factor based on "CO Emissions Guidelines" notice for CO emissions from pouring, cooling, and shakeout combined.

Process	Rate (tons metal/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	CFM	Grain Loading (gr/dscf)	Eac (ton/yr)
Cooling Line (C-1 & C-2)	4.0	PM	1.40	24.53				24.53
Source of Criteria	EACH	PM-10	1.40	24.53				24.53
Pollutant Factors:		SO2	0.02	0.35				0.35
SCC# 3-04-003-18		NOx	0.01	0.18				0.18
SCC# 3-04-001-14		VOC	---	0.00				0.00
AP-42 Ch. 12.8 and 12.10		CO	---	0.00				0.00
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VOC and CO emissions have been accounted for under Pouring/Casting.

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= 61.36 tons/hr ***(Note: P includes the weight of the sand plus the weight of the metal and cores).***

limit = 55 x (61.36 ^0.11) - 40 = 46.50 lb/hr (allowable)

with uncontrolled potential:

24.53 tons/yr x 2000 lb/ton / 8760 hr/yr = 5.60 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 = Ebc

1ton = 2000 lbs

Process:	Rate (tons metal/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	CFM	Grain Loading (gr/dscf)	Eac (ton/yr)
Castings Knockout/Shakeout	4.0	PM	3.20	56.06	baghouse	50000	0.03	12.86
(SK-1 & SK-2)	EACH	PM-10	2.24	39.24	baghouse	50000	0.03	12.86
Source of Criteria		SO2	0.00	0.00				0.00
Pollutant Factors:		NOx	0.00	0.00				0.00
SCC# 3-04-003-31		VOC	---	0.00				0.00
AP-42 Ch. 12.10		CO	---	0.00				0.00
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VOC and CO emissions have been accounted for under Pouring/Casting.

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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= 61.36 tons/hr ***(Note: P includes the weight of the sand plus the weight of the metal and cores).***

limit = 55 x (61.36 ^0.11) - 40 = 46.50 lb/hr (allowable)

with uncontrolled potential:
56.06 tons/yr x 2000 lb/ton / 8760 hr/yr = 12.80 lb/hr (will comply)

with controlled potential:
12.86 tons/yr x 2000 lb/ton / 8760 hr/yr = 2.94 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 = CFM x Grain Loading (gr/dscf) x 1lb/7000gr x 60 min/1hr
1ton = 2000 lbs

Process:	Rate (tons sand/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	CFM	Grain Loading (gr/dscf)	Eac (ton/yr)
Sand Handling (SH-1)	130	PM	3.6	2049.84	baghouse	50000	0.03	12.86
Source of Criteria		PM-10	0.54	307.48	baghouse	50000	0.03	12.86
Pollutant Factors:								
SCC# 3-04-003-50								
AP-42 Ch. 12.10								
Fifth edition 1995								

CD-1

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= 130.00 tons/hr

limit = 55 x (130.00 ^0.11) - 40 = 53.95 lb/hr (allowable)

with uncontrolled potential:

2049.84 tons/yr x 2000 lb/ton / 8760 hr/yr = 468.00 lb/hr (will not comply)

with controlled potential:

12.86 tons/yr x 2000 lb/ton / 8760 hr/yr = 2.94 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 = CFM x Grain Loading (gr/dscf) x 1lb/7000gr x 60 min/1hr

1ton = 2000 lbs

Process:	Rate (tons metal/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	CFM	Grain Loading (gr/dscf)	Eac (ton/yr)
Castings Cleaning	4.0	PM	17.00	297.84	baghouse	8000	0.03	2.06
(Shotblast Unit SB-1)		PM-10	1.70	29.78	baghouse	8000	0.03	2.06
Source of Criteria								
Pollutant Factors:								
SCC# 3-04-003-40								
AP-42 Ch. 12.10								
Fifth edition 1995								

CD-2

Allowable Emissions:

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

P= 4.00 tons/hr

limit = 4.1 x (4.00 ^0.67) = 10.38 lb/hr (allowable)

with uncontrolled potential:
297.84 tons/yr x 2000 lb/ton / 8760 hr/yr = 68.00 lb/hr (will not comply)

with controlled potential:
2.06 tons/yr x 2000 lb/ton / 8760 hr/yr = 0.47 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 = CFM x Grain Loading (gr/dscf) x 1lb/7000gr x 60 min/1hr
1ton = 2000 lbs

Process:	Rate (tons metal/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	CFM	Grain Loading (gr/dscf)	Eac (ton/yr)
Castings Finishing (F-1)	8.0	PM	0.01	0.35	baghouse	8000	0.03	2.06
Source of Criteria		PM-10	0.0045	0.16	baghouse	8000	0.03	2.06
Pollutant Factors:								
SCC# 3-04-003-60								
AP-42 Ch. 12.10								
Fith edition 1995								

CD-5

Allowable Emissions:

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

P= 8.00 tons/hr

limit = 4.1 x (8.00 ^0.67) = 16.51 lb/hr (allowable)

with uncontrolled potential:

0.35 tons/yr x 2000 lb/ton / 8760 hr/yr = 0.080 lb/hr (exempt per 326 IAC 6-3-1(b)(14))

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 = CFM x Grain Loading (gr/dscf) x 1lb/7000gr x 60 min/1hr
1ton = 2000 lbs

Process	Rate (tons sand/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	CFM	Grain Loading (gr/dscf)	Eac (ton/yr)
Metal Reclamation Screening	12.0	PM	3.6	189.22	baghouse	6000	0.03	1.54
Source of Criteria		PM-10	0.54	28.38	baghouse	6000	0.03	1.54
Pollutant Factors:								
SCC# 3-04-003-50								
AP-42 Ch. 12.10								
Fifth edition 1995								

CD-6

Allowable Emissions:

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

P= 12.00 tons/hr

limit = 4.1 x (12.00 ^0.67) = 21.67 lb/hr (allowable)

with uncontrolled potential:
189.22 tons/yr x 2000 lb/ton / 8760 hr/yr = 43.20 lb/hr (will not comply)

with controlled potential:
1.54 tons/yr x 2000 lb/ton / 8760 hr/yr = 0.35 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 = CFM x Grain Loading (gr/dscf) x 1lb/7000gr x 60 min/1hr
1ton = 2000 lbs

Process	Rate (tons flux/hr)	Pollutant	Ef (lb/ton flux)	Ebc (ton/yr)	Type of control	CFM	Grain Loading (gr/dscf)	Eac (ton/yr)
Aluminum Fluxing (Chlorine)	0.004	PM	0.50	8.76E-03				8.76E-03
Source of Criteria		PM-10	0.0532	9.32E-04				9.32E-04
Pollutant Factors:		SO2	0.00	0.00				0.00
SCC# 3-04-001-04		NOx	0.00	0.00				0.00
AP-42 Ch. 12.8		VOC	820	14.37				14.37
Fifth edition 1995		CO	0.00	0.00				0.00
		HCl	980	17.17				17.17
		HF	18	0.32				0.32
		HCE	820	14.37				14.37
		Total HAPs						31.85

Flux usage is based on a usage rate of 1 lb/ton metal melted.
Emission factors for VOC, HCl, and HF are from stack test results for flux usage at an aluminum foundry (General Motors, Bedford, IN) performed in December, 2001.
Hexachloroethane is also a VOC; therefore, the hexachloroethane emission factor was used to calculate VOC emissions. HCl and HF are not VOCs.

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates less than 100 pounds per hour:

P= 8.00 pounds/hr

limit = 0.551 lb/hr (allowable)

with uncontrolled potential:

0.01 tons/yr x 2000 lb/ton / 8760 hr/yr = 0.002 lb/hr (exempt per 326 IAC 6-3-1(14))

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 = Ebc
1ton = 2000 lbs

Process:	Rate (tons metal/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	CFM	Grain Loading (gr/dscf)	Eac (ton/yr)
Reverberatory Furnace System	5.0	PM	4.30	94.17				94.17
(RF-5)		PM-10	2.60	56.94				56.94
Source of Criteria		SO2	0.00	0.00				0.00
Pollutant Factors:		NOx	0.00	0.00				0.00
SCC# 3-04-001-03		VOC	0.20	4.38				4.38
AP-42 Ch. 12.8		CO	0.00	0.00				0.00
Fifth edition 1995								

Allowable Emissions:

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

P= 5.00 tons/hr

limit = 4.1 x (5.00 ^0.67) = 12.05 lb/hr (allowable)

with uncontrolled potential:

94.17 tons/yr x 2000 lb/ton / 8760 hr/yr = 21.50 lb/hr (will not comply)

with controlled potential:

PSD limit 5.0 lb/hr

3/30/04 Stack Test 0.751 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 = Ebc

1ton = 2000 lbs

Reverberatory Furnaces (RF-5)
Natural Gas Combustion Only
MM BTU/HR <100

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
25.00	214.7

	Pollutant					
Emission Factor in lb/MMCF	PM* 1.9	PM10* 7.6	SO2 0.6	NOx 100 **see below	VOC 5.5	CO 84
Potential Emission in tons/yr	0.20	0.82	0.06	10.74	0.59	9.02

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

	HAPs - Organics				
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	2.254E-04	1.288E-04	8.051E-03	1.932E-01	3.650E-04

	HAPs - Metals				
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	5.368E-05	1.181E-04	1.503E-04	4.079E-05	2.254E-04

Methodology
The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.
All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Process:	Rate (tons metal/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	CFM	Grain Loading (gr/dscf)	Eac (ton/yr)
Pouring/Casting (P-3)	5.0	PM	2.80	61.32	baghouse	60000	0.03	15.43
Source of Criteria		PM-10	2.06	45.11	baghouse	60000	0.03	15.43
Pollutant Factors:		SO2	0.02	0.44				0.44
SCC# 3-04-003-18		NOx	0.01	0.22				0.22
SCC# 3-04-003-20		VOC	1.34	29.35				29.35
AP-42 Ch. 12.8		CO	6.00	131.40				131.40
Fifth edition 1995								

CD-3

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= 78.95 tons/hr ***(Note: P includes the weight of the sand plus the weight of the metal and cores).***

limit = 55 x (78.95 ^0.11) - 40 = 48.93 lb/hr (allowable)

with uncontrolled potential:
61.32 tons/yr x 2000 lb/ton / 8760 hr/yr = 14.00 lb/hr (will comply)

with controlled potential:
15.43 tons/yr x 2000 lb/ton / 8760 hr/yr = 3.52 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 = CFM x Grain Loading (gr/dscf) x 1lb/7000gr x 60 min/1hr
1ton = 2000 lbs

CO emission factor based on "CO Emissions Guidelines" notice for CO emissions from pouring, cooling, and shakeout combined.

Process:	Rate (tons metal/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	CFM	Grain Loading (gr/dscf)	Eac (ton/yr)
Cooling Line (C-3)	5.0	PM	1.40	30.66	baghouse	60000	0.03	15.43
Source of Criteria		PM-10	1.40	30.66	baghouse	60000	0.03	15.43
Pollutant Factors:		SO2	0.02	0.44				0.44
FIRE 6.01		NOx	0.01	0.22				0.22
SCC# 3-04-003-18		VOC	---	0.00				0.00
SCC# 3-04-003-20		CO	---	0.00				0.00

VOC and CO emissions have been accounted under Pouring/Casting.

CD-3

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= 78.95 tons/hr ***(Note: P includes the weight of the sand plus the weight of the metal and cores).***

limit = 55 x (78.95 ^0.11) - 40 = 48.93 lb/hr (allowable)

with uncontrolled potential:

30.66 tons/yr x 2000 lb/ton / 8760 hr/yr = 7.00 lb/hr (will comply)

with controlled potential:

15.43 tons/yr x 2000 lb/ton / 8760 hr/yr = 3.52 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 = CFM x Grain Loading (gr/dscf) x 1lb/7000gr x 60 min/1hr

1ton = 2000 lbs

Process:	Rate (tons metal/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	CFM	Grain Loading (gr/dscf)	Eac (ton/yr)
Castings Knockout/Shakeout	5.0	PM	3.20	70.08	baghouse	60000	0.03	15.43
(SK-3)		PM-10	2.24	49.06	baghouse	60000	0.03	15.43
Source of Criteria		SO2	0.00	0.00				0.00
Pollutant Factors:		NOx	0.00	0.00				0.00
SCC# 3-04-003-31		VOC	---	0.00				0.00
AP-42 Ch. 12.10		CO	---	0.00				0.00
Fifth edition 1995								

VOC and CO emissions have been accounted under Pouring/Casting.

CD-3

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= 78.95 tons/hr ***(Note: P includes the weight of the sand plus the weight of the metal and cores).***

limit = 55 x (78.95 ^0.11) - 40 = 48.93 lb/hr (allowable)

with uncontrolled potential:
70.08 tons/yr x 2000 lb/ton / 8760 hr/yr = 16.00 lb/hr (will comply)

with controlled potential:
15.43 tons/yr x 2000 lb/ton / 8760 hr/yr = 3.52 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 = CFM x Grain Loading (gr/dscf) x 1lb/7000gr x 60 min/1hr
1ton = 2000 lbs

Process:	Rate (tons sand/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	CFM	Grain Loading (gr/dscf)	Eac (ton/yr)
Sand Handling (SH-2)	100	PM	3.6	1576.8	baghouse	60000	0.03	15.43
Source of Criteria		PM-10	0.54	236.5	baghouse	60000	0.03	15.43
Pollutant Factors:								
FIRE 6.01								
EPA SCC# 3-04-003-50								

CD-3

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= 100.00 tons/hr

limit = 55 x (100.00 ^0.11) - 40 = 51.28 lb/hr (allowable)

with uncontrolled potential:

1576.80 tons/yr x 2000 lb/ton / 8760 hr/yr = 360.00 lb/hr (will not comply)

with controlled potential:

15.43 tons/yr x 2000 lb/ton / 8760 hr/yr = 3.52 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 = CFM x Grain Loading (gr/dscf) x 1lb/7000gr x 60 min/1hr

1ton = 2000 lbs

Process	Rate (tons metal/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	CFM	Grain Loading (gr/dscf)	Eac (ton/yr)
Castings Cleaning	2.5	PM	17.00	186.15	baghouse	6000	0.03	1.54
(Shotblast Unit SB-2)		PM-10	1.70	18.62	baghouse	6000	0.03	1.54
Source of Criteria								
Pollutant Factors:								
SCC# 3-04-003-40								
AP-42 Ch. 12.10								
Fifth edition 1995								

CD-4

Allowable Emissions:

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

P= 2.50 tons/hr

limit = 4.1 x (2.50 ^0.67) = 7.58 lb/hr (allowable)

with uncontrolled potential:
186.15 tons/yr x 2000 lb/ton / 8760 hr/yr = 42.50 lb/hr (will not comply)

with controlled potential:
1.54 tons/yr x 2000 lb/ton / 8760 hr/yr = 0.35 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 = CFM x Grain Loading (gr/dscf) x 1lb/7000gr x 60 min/1hr
1ton = 2000 lbs

Process:	Rate (tons metal/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	CFM	Grain Loading (gr/dscf)	Eac (ton/yr)
Castings Finishing (F-2)	5.0	PM	0.01	0.22	baghouse	60000	0.03	15.43
Source of Criteria		PM-10	0.0045	0.10	baghouse	60000	0.03	15.43
Pollutant Factors:								
SCC# 3-04-003-60								
AP-42 Ch. 12.10								
Fifth edition 1995								

CD-3

Allowable Emissions:

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

P= 5.00 tons/hr

limit = 4.1 x (5.00 ^0.67) = 12.05 lb/hr (allowable)

with uncontrolled potential:

0.22 tons/yr x 2000 lb/ton / 8760 hr/yr = 0.050 lb/hr (will comply)
(exempt per 326 IAC 6-3-1(b)(14))

with controlled potential:

15.43 tons/yr x 2000 lb/ton / 8760 hr/yr = 3.52 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 = CFM x Grain Loading (gr/dscf) x 1lb/7000gr x 60 min/1hr
1ton = 2000 lbs

Process:	Rate (tons flux/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Type of control	CFM	Grain Loading (gr/dscf)	Eac (ton/yr)
Aluminum Fluxing (Chlorine)	0.003	PM	0.50	5.48E-03				5.48E-03
Source of Criteria		PM-10	0.0532	5.83E-04				5.83E-04
Pollutant Factors:		SO2	0.00	0.00				0.00
SCC# 3-04-001-04		NOx	0.00	0.00				0.00
AP-42 Ch. 12.8		VOC	820	8.98				8.98
Fifth edition 1995		CO	0.00	0.00				0.00
		HCl	980	10.73				10.73
		HF	18	0.20				0.20
		HCE	820	8.98				8.98
		Total HAPs						19.91

Flux usage is based on a usage rate of 1 lb/ton metal melted.
Emission factors for VOC, HCl, and HF are from stack test results for flux usage at an aluminum foundry (General Motors, Bedford, IN) performed in December, 2001.
Hexachloroethane is also a VOC; therefore, the hexachloroethane emission factor was used to calculate VOC emissions. HCl and HF are not VOCs.

Allowable Emissions:
The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates less than 100 pounds per hour:

P= 5.00 pounds/hr

limit = 0.551 lb/hr (allowable)

with uncontrolled potential:
0.01 tons/yr x 2000 lb/ton / 8760 hr/yr = 0.001 lb/hr (exempt per 326 IAC 6-3-1(b)(14))

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 = Ebc
1ton = 2000 lbs

Core Making Facilities
TEA and VOC Emissions

Potential Emissions

Machine	Date of Construction	Capacity (tons cores/hr)	Resin Content (%)	Resin VOC E.F. (lb VOC/lb resin)	Catalyst (TEA) Usage (lb TEA/ton cores)	Potential VOC Emissions from TEA (tons/yr)	Potential VOC Emissions from Resin (tons/yr)	Total Potential VOC Emissions (tons/yr)
#1 - #4	1985	2.36	1%	0.05	2	20.67	10.34	31.01
#5, #6	1988	1.18	1%	0.05	2	10.34	5.17	15.51
#7, #8	1989	1.18	1%	0.05	2	10.34	5.17	15.51
#9 - #13	1995	2.95	1%	0.05	2	25.84	12.92	38.76
	Total	**7.67**				**67.19**		**100.78**

Controlled/Limited Emissions

Machine	Total Potential VOC Emissions (tons/yr)	8-1-6 VOC Limit (tons/yr)	Resin Content	Resin VOC E.F. (lb VOC/lb resin)	Catalyst (TEA) Usage (lb TEA/ton cores)	Limited Core Production (tons/yr)	Limited Catalyst (TEA) Usage (lbs/yr)	Limited Resin Usage (lbs/yr)
#1 - #4	31.01	24.90	1%	0.05	2	16600	33200	332000
#5, #6	15.51	---	1%	0.05	2	10337	20674	206736
#7, #8	15.51	---	1%	0.05	2	10337	20674	206736
#9 - #13	38.76	24.90	1%	0.05	2	16600	33200	332000

Core Machines	TEA Scrubber Control Eff. (%)	Controlled TEA Emissions (tons/yr)	Limited VOC Emissions from Resin (tons/yr)	Total Limited VOC Emissions (tons/yr)
#1 - #4	80%	3.32	8.30	11.62
#5, #6	80%	2.07	5.17	7.24
#7, #8	80%	2.07	5.17	7.24
#9 - #13	80%	3.32	8.30	11.62
	Total	**10.77**		**37.71**

Insignificant Activities

Process:	Pollutant	Ef (lb/day)	Ebc (ton/yr)	Type of control	CFM	Grain Loading (gr/dscf)	Eac (ton/yr)
Six (6) Robotic Saws and One (1) Grinder	PM	25	4.56	Baghouse	4000	0.03	1.03
	PM-10	25	4.56	Baghouse	4000	0.03	1.03
				CD-5			
Four (4) Robotic Saws and One (1) Grinder	PM	25	4.56	Baghouse	4000	0.03	1.03
	PM-10	25	4.56	Baghouse	4000	0.03	1.03
				BH7			
Hotbox Coremaking	PM	25	4.56				4.56
	PM-10	25	4.56				4.56
	VOC	15	2.74				2.74
Waste Sand Metal Reclamation Screening	PM	25	4.56				4.56
	PM-10	25	4.56				4.56
Grinding and Machining	PM	25	4.56	misc.	4000	0.03	1.03
	PM-10	25	4.56	misc.	4000	0.03	1.03

Allowable Emissions:

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

P= 4.00 tons/hr ***(The process weight rate for the six robotic saws and one grinder)***

limit = 4.1 x (4.00 ^0.67) = 10.38 lb/hr (allowable)

P= 5.00 tons/hr ***(The process weight rate for the four robotic saws and one grinder)***

limit = 4.1 x (5.00 ^0.67) = 12.05 lb/hr (allowable)

P= 12.00 tons/hr ***(The process weight rate for the waste sand metal reclamation screening)***

limit = 4.1 x (12.00 ^0.67) = 21.67 lb/hr (allowable)

with uncontrolled potential:
4.56 tons/yr x 2000 lb/ton / 8760 hr/yr = 1.04 lb/hr (will comply)

with controlled potential:
1.03 tons/yr x 2000 lb/ton / 8760 hr/yr = 0.23 lb/hr (will comply)

Methodology

Ef = Emission factor
Ebc = Potential Emissions before controls = Ef (lbs/day) x 365 days/yr / 2000 lbs/hr
Eac = Potential Emissions after controls = CFM x Grain Loading (gr/dscf) x 1lb/7000gr x 60 min/1hr
1ton = 2000 lbs

Make Up Air Units, Space Heaters
Natural Gas Combustion Only
MM BTU/HR <100

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
40.744	349.9

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.33	1.33	0.10	17.50	0.96	14.70

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	2.976E-04	1.700E-04	1.063E-02	2.551E-01	4.818E-04

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	7.085E-05	1.559E-04	1.984E-04	5.385E-05	2.976E-04

Methodology
The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.
All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

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

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Dave Lesher
Fort Wayne Foundry
4912 Lima Road
Fort Wayne, IN 46808

DATE: December 2, 2009

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

SUBJECT: Final Decision
Title V
183-25810-00023

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Bill Herrington, Responsible Official
Kathy Moore, Consultant, KERAMIDA
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

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December 2, 2009

TO: Peabody Library

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

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: **Fort Wayne Foundry**
Permit Number: **183-25810-00023**

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 11/30/07

Mail Code 61-53

IDEM Staff	DPABST 12/2/2009 Fort Wayne Foundry- Columbia City Div. I 183-25810-00023 (Final)		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Dave Lesher Fort Wayne Foundry- Columbia City Div. I 4912 Lima Road Fort Wayne IN 46808 (Source CAATS) (CONFIRM DELIVERY)									
2		Bill Herrington Plant Manager Fort Wayne Foundry- Columbia City Div. I 4912 Lima Road Fort Wayne IN 46808 *(RO CAATS)*									
3		Mr. Nondus Carr 1760 South 500 East Columbia City IN 46725 *(Affected Party)*									
4		Mr. Thomas E. Delaney 2640 East 400 Columbia City IN 46725 *(Affected Party)*									
5		Mr. William Overdeer 3285 Cider Mill Road Columbia City IN 46725 *(Affected Party)*									
6		Mr. Robert F. Taylor 7856 S 800 E-92 Fort Wayne IN 46814 *(Affected Party)*									
7		Daniel & Sandy Trimmer 15021 Yellow River Road Columbia City IN 46725 *(Affected Party)*									
8		Whitley County Commissioners 220 West Van Buren Street Suite 207 Columbia City IN 46725 *(Local Official)*									
9		Peabody Library 1160 E. SR 205 Columbia City IN 46725 *(Library)*									
10		Duane & Deborah Clark Clark Farms 6973 E. 500 S. Columbia City IN 46725 *(Affected Party)*									
11		William Riley PO Box 837 Columbia City IN 46725 *(Affected Party)*									
12		Gene Donaghy Northeastern REMC 4901 E. Park 30 Drive Columbia City IN 46725-8790 *(Affected Party)*									
13		Mr. Lynn Weirick 3954 E Old Trail Rd Columbia City IN 46725 (Affected Party)									
14		Whitley County Health Department 220 West Van Buren Steetr Suite 111 Columbia City IN 46725-2056 *(Health Department)*									
15		Ms. Camille Amiri News Channel 15 2915 W State Blvd Fort Wayne IN 46808 *(Affected Party)*									

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

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Mail Code 61-53

IDEM Staff	DPABST 12/2/2009 Fort Wayne Foundry- Columbia City Div. I 183-25810-00023 (Final)		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Charles 4655 S. 700 East Columbia City IN 46725 (Affected Party)									
2		Michael Gayle 1315 S. 500 East Columbia City IN 46725 *(Affected Party)*									
3		Mr. Columbia City Council and Mayors Office 112 South Chauncey Street Columbia City IN 46725 *(Local Official)*									
4		Mrs. Kathy Moore KERAMIDA Environmental, Inc. 401 North College Indianapolis IN 46202 *(Consultant)*									
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15											

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

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