



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: October 20, 2006
RE: Warsaw Foundry Company, Inc. / 085-14520-00006
FROM: Nisha Sizemore
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 according to IC 13-15-6-3, 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 and IC 13-15-6-1 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, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (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.

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
FNPER.dot 03/23/06



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Indianapolis, Indiana 46204-2251
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**FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP)
OFFICE OF AIR QUALITY**

**Warsaw Foundry Company, Inc.
1212 North Detroit Street
Warsaw, Indiana 46580**

(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. 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.

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F 085-14520-00006	
Issued by: Original signed by Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: October 20, 2006 Expiration Date: October 20, 2011

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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 2-8-3(b)]

The Permittee owns and operates a stationary gray and ductile iron foundry.

Authorized Individual:	President
Source Address:	1212 North Detroit Street, Warsaw, Indiana 46580
Mailing Address:	P.O. Box 227, Warsaw, Indiana 46581
General Source Phone Number:	574-267-8772
SIC Code:	3321
County Location	Kosciusko
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD Rules; Minor Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

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

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

- (a) One (1) charge handling operation, identified as EU1, installed prior to 1960, capacity: 5.0 tons of metal per hour.
- (b) One (1) cupola, identified as EU2, installed prior to 1960, equipped with a natural gas-fired afterburner rated at 1.0 million British thermal units per hour, and a venturi scrubber, exhausted through Stack C1, capacity: 5.0 tons of metal per hour.
- (c) One (1) electric induction furnace, identified as EU3, installed in November 2000, capacity: 2.5 tons of metal per hour.
- (d) One (1) magnesium treatment process, identified as magnesium treatment process, installed in 2000, capacity: 1.5 tons of metal per hour.
- (e) One (1) inoculation process, identified as inoculation process, installed in 1960, capacity: 5.0 tons of metal per hour.
- (f) One (1) pouring/casting operation, identified as EU4, installed prior to 1979, exhausted through Stack B4, capacity: 5.0 tons of metal per hour and 30 tons of sand per hour.
- (g) One (1) castings cooling operation, identified as EU5A and EU5B, installed prior to 1979, with south area EU5A controlled by Mold/Dump Baghouse (MDBH) and exhausted through Stack B4, and east area EU5B controlled by Main Baghouse (MBH) and exhausted through Stack B3, capacity: 5.0 tons of metal per hour and 30 tons of sand per hour.
- (h) One (1) castings shakeout operation, identified as EU6, installed prior to 1979, equipped with a baghouse, identified as Main Baghouse (MBH), installed in 1991, exhausted through Stack B3, capacity: 5.0 tons of metal per hour and 30 tons of sand per hour.

- (i) One (1) cleaning and finishing operation, identified as EU8A and EU8B, installed prior to 1979, consisting of the following:
 - (1) One (1) grinding area (EU8A), consisting of two (2) single station and two (2) double station grinding machines, equipped with a baghouse, identified as Grinding Baghouse (GBH), exhausted through Stack B1, capacity: 4.5 tons of metal per hour.
 - (2) One (1) Wheelabrator shot blast unit (EU8B), equipped with a baghouse, identified as Wheelabrator Baghouse (WBH), exhausted through Stack B2, capacity: 4.5 tons of metal per hour.
- (j) One (1) sand handling operation, identified as EU9, installed prior to 1979, equipped with a baghouse, identified as Main Baghouse (MBH), installed in 1991, exhausted through Stack B3, capacity: 30.0 tons of sand per hour.
- (k) One (1) natural gas-fired oil core oven, identified as EU10, installed in 1946, exhausted through Stack O1, rated at 0.5 million British thermal units per hour, capacity: 0.75 tons of sand per hour.
- (l) One (1) core wash and mold parting, identified as EU12, installed prior to 1987, capacity: 0.85 tons of cores per hour, 0.178 pounds of core wash per hour, 0.226 pounds of thinner per hour, and 2.76 pounds of liquid parting per hour.
- (m) One (1) core making operation, consisting of fifteen (15) shell core machines, collectively identified as EU11, capacity: 0.75 tons of sand per hour, total, consisting of the following:
 - (1) Three (3) U180 Shalco machines, installed in 1998, capacity: 200 pounds per hour, each.
 - (2) One (1) U150 Shalco machine, installed in 1998, capacity: 100 pounds per hour.
 - (3) Three (3) Dependable 100 machines, installed between 1960 and 1980, capacity: 100 pounds per hour, each.
 - (4) Five (5) Dependable 200 machines, installed between 1960 and 1980, capacity: 150 pounds per hour, each.
 - (5) One (1) Dependable 300 machines, installed between 1960 and 1980, capacity: 200 pounds per hour.
 - (6) Two (2) Redford HP43 machines, installed between 1960 and 1980, capacity: 200 pounds per hour, each.

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

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour with a total rating of 1.20 million British thermal units per hour consisting of:
 - Two (2) ladle heating torches, identified as EU13, installed prior to 1987, capacity: 0.60 million British thermal units per hour, total.

- (b) The following VOC and HAP storage containers: vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.
- (c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]
- (d) 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]
- (e) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (f) Paved and unpaved roads and parking lots with public access.

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

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

SECTION B GENERAL CONDITIONS

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

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, 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 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

- (a) This permit, 085-14520-00006, 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, 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 2-8-6]

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 2-8-4(4)]

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

B.6 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

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

B.7 Duty to Provide Information [326 IAC 2-8-4(5)(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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1). 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 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

- (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 an "authorized individual" 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) an "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.9 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

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

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

- (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 2-8-4(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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.10 Compliance Order Issuance [326 IAC 2-8-5(b)]

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

B.11 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]

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

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

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

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (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.12 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that 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 notifies IDEM, OAQ within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

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

Facsimile Number: 317-233-6865

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
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 2-8-4(3)(C)(ii) and must contain the following:

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

The notification which shall be submitted by the Permittee does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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 2-8-3(c)(6) 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 2-8 and any other applicable rules.

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

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

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

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

- (a) All terms and conditions of permits established prior to 085-14520-00006 and issued pursuant to permitting programs approved into the state implementation plan have been either:
- (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

B.14 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

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

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

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State 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 2-8-4(5)(C)]The notification by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (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 2-8-8(a)]
- (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 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, 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 2-8-8(c)]

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

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
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 2-8 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 Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

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

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d) without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
 - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
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 2-8-15(b) through (d). 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 2-8-15(b)(2), (c)(1), and (d).

- (c) Emission Trades [326 IAC 2-8-15(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 2-8-15(c).
- (d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, 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.20 Source Modification Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC13-30-3-1]

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 FESOP 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, at reasonable times, 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, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

The application which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][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.24 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][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 2-8-4(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 Overall Source Limit [326 IAC 2-8]

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

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable;
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), potential to emit particulate matter (PM) from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period.

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

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

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

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

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

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

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

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

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

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management

Asbestos Section, Office of Air Quality
100 North Senate Avenue
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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

Testing Requirements [326 IAC 2-8-4(3)]

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

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

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (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.10 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 2-8-4][326 IAC 2-8-5(a)(1)]

C.11 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

C.12 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.13 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(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 2-8-4][326 IAC 2-8-5(a)(1)]

C.14 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 prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

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

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

The ERP does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) Upon direct notification by IDEM, 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.15 Risk Management Plan [326 IAC 2-8-4] [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.16 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

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

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

(1) initial inspection and evaluation

(2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or

- (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records;
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
 - (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.18 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]

- (a) In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), starting in 2007 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
Indianapolis, Indiana 46204-2251

The emission statement does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.20 General Reporting Requirements [326 IAC 2-8-4(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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:
- Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- (f) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C - General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

Stratospheric Ozone Protection

C.21 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 2-8-4(10)]: Melting, pouring operations

- (a) One (1) charge handling operation, identified as EU1, installed prior to 1960, capacity: 5.0 tons of metal per hour.
- (b) One (1) cupola, identified as EU2, installed prior to 1960, equipped with a natural gas-fired afterburner rated at 1.0 million British thermal units per hour, and a venturi scrubber, exhausted through Stack C1, capacity: 5.0 tons of metal per hour.
- (c) One (1) electric induction furnace, identified as EU3, installed in November 2000, capacity: 2.5 tons of metal per hour.
- (d) One (1) magnesium treatment process, identified as magnesium treatment process, installed in 2000, capacity: 1.5 tons of metal per hour.
- (e) One (1) inoculation process, identified as inoculation process, installed in 1960, capacity: 5.0 tons of metal per hour.

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

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

D.1.1 Metal Throughput Limit [326 IAC 2-8-4]

The total combined metal throughput to the one (1) cupola and the one (1) electric induction furnace shall be limited to less than 11,300 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

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

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the charge handling operation (EU1), shall not exceed 12.1 pounds per hour when operating at a process weight rate of 5.0 tons per hour.
- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the one (1) electric induction furnace (EU3) shall not exceed 7.58 pounds per hour when operating at a process weight rate of 2.5 tons per hour.
- (c) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the magnesium treatment process shall not exceed 5.38 pounds per hour when operating at a process weight rate of 1.5 tons per hour.
- (d) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the inoculation process shall not exceed 12.1 pounds per hour when operating at a process weight rate of 5.0 tons per hour.

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

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

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

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

D.1.3 Particulate [326 IAC 11-1]

Pursuant to 326 IAC 11-1 (Existing Foundries), the particulate emission rate from the one (1) cupola shall not exceed 16.65 pounds per hour when operating at a process weight rate of 5.0 tons per hour.

D.1.4 Particulate Matter (PM₁₀) [326 IAC 2-8-4] [326 IAC 2-2]

- (a) The PM₁₀ emission rate from the one (1) charge handling operation (EU1) shall not exceed 0.361 pounds per ton of metal melted. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.
- (b) The PM₁₀ emission rate from the one (1) cupola (EU2) after controls shall not exceed 5.154 pounds per ton of metal melted. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.
- (c) The PM₁₀ emission rate from the one (1) electric induction furnace (EU3) shall not exceed 0.86 pounds per ton of metal melted. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.
- (d) The PM₁₀ emission rate from the one (1) magnesium treatment process shall not exceed 1.80 pounds per ton of metal melted. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.
- (e) The PM₁₀ emission rate from the one (1) inoculation process shall not exceed 1.80 pounds per ton of metal melted. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

D.1.5 Particulate Matter (PM) [326 IAC 2-2]

- (a) The PM emission rate from the one (1) charge handling operation (EU1) shall not exceed 0.60 pounds per ton of metal melted. Therefore, the requirements of 326 IAC 2-2 are not applicable.
- (b) The PM emission rate from the one (1) cupola (EU2) after controls shall not exceed 2.26 pounds per ton of metal melted. Therefore, the requirements of 326 IAC 2-2 are not applicable.
- (c) The PM emission rate from the one (1) electric induction furnace (EU3) shall not exceed 0.90 pounds per ton of metal melted. Therefore, the requirements of 326 IAC 2-2 are not applicable.
- (d) The PM emission rate from the one (1) magnesium treatment process shall not exceed 1.80 pounds per ton of metal melted. Therefore, the requirements of 326 IAC 2-2 are not applicable.
- (e) The PM emission rate from the one (1) inoculation process shall not exceed 1.80 pounds per ton of metal melted. Therefore, the requirements of 326 IAC 2-2 are not applicable.

D.1.6 Carbon Monoxide (CO) [326 IAC 2-8-4] [326 IAC 2-2]

The CO emission rate from the one (1) cupola (EU2) after controls shall not exceed 11.52 pounds per ton of metal melted. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

D.1.7 Lead [326 IAC 2-8-4] [326 IAC 2-2]

The lead emission rate from the one (1) cupola (EU2) after controls shall not exceed 1.614 pounds per ton of metal melted. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

D.1.8 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the one (1) cupola, the cupola charge door, and any control devices.

Compliance Determination Requirements

D.1.9 Emission Controls

In order to comply with Conditions D.1.3, D.1.4(b), D.1.5(b), D.1.6 and D.1.7, the afterburner and wet scrubber for PM, PM₁₀, CO and lead control shall be in operation and control emissions from the one (1) cupola at all times that the one (1) cupola is in operation.

D.1.10 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

Within 180 days after issuance of this FESOP permit, in order to demonstrate compliance with Conditions D.1.3, D.1.4(b), D.1.5(b), D.1.6 and D.1.7, the Permittee shall perform CO, PM and PM₁₀ testing utilizing methods as approved by the Commissioner. This testing shall be repeated at least once every two and one-half (2.5) years from the date of this valid compliance demonstration. PM₁₀ includes filterable and condensable PM₁₀. Testing shall be conducted in accordance with Section C - Performance Testing.

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

D.1.11 Visible Emissions Notations

- (a) Visible emission notations of the cupola stack exhaust (Stack C1) and the cupola charge door 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 deviation from this permit.

D.1.12 Parametric Monitoring

The Permittee shall record the flow rate and the pressure drop across the scrubber at least once per day when the one (1) cupola is in operation. When for any one (1) reading, the pressure drop across the scrubber is less than the minimum of 16.0 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. When for any one (1) reading, the flow rate for the scrubbing liquor is less than the minimum of 198 gallons of water per minute or a flow rate 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 or a flow rate less than the above mentioned minimums is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.1.13 Failure Detection

In the event that a scrubber failure has been observed:

If failure is indicated by a significant drop in the scrubber's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if scrubber failure is determined by other means, such as flow rates, air infiltration, leaks, or pH, failed units and the associated process will be shut down immediately until the failed units have 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).

D.1.14 Afterburner Temperature

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on the afterburner for measuring operating temperature. For the purpose of this condition, continuously means no less than once per minute. The output of this system shall be recorded as an hourly average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Response to Excursions or Exceedances whenever the hourly average temperature of the afterburner is below 1400°F. An hourly average temperature that is below 1400°F is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) The Permittee shall determine the hourly average temperature from the most recent valid stack test that demonstrates compliance with limits in Conditions D.1.3, D.1.4(b), D.1.5(b), D.1.6 and D.1.7, as approved by IDEM.
- (c) On and after the date the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Response to Excursions or Exceedances whenever the hourly average temperature of the afterburner is below the hourly average temperature as observed during the compliant stack test. An hourly average temperature that is below the hourly average temperature as observed during the compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.1.15 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain monthly records of the amount of metal melted in the one (1) cupola and the amount of metal melted in the one (1) electric induction furnace.
- (b) To document compliance with Condition D.1.11, the Permittee shall maintain records of once per day visible emission notations of the cupola stack exhaust (Stack C1) and the cupola charge door.
- (c) To document compliance with Condition D.1.12, the Permittee shall maintain once per day records of the pressure drop and flow rate.
- (d) To document compliance with Condition D.1.14, the Permittee shall maintain the continuous temperature records (reduced to an hourly average basis) for the afterburner and the hourly average temperature used to demonstrate compliance during the most recent compliant stack test.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.16 Reporting Requirements

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

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Casting, cooling, sand and finishing

- (f) One (1) pouring/casting operation, identified as EU4, installed prior to 1979, exhausted through Stack B4, capacity: 5.0 tons of metal per hour and 30 tons of sand per hour.
- (g) One (1) castings cooling operation, identified as EU5A and EU5B, installed prior to 1979, with south area EU5A controlled by Mold/Dump Baghouse (MDBH) and exhausted through Stack B4, and east area EU5B controlled by Main Baghouse (MBH) and exhausted through Stack B3, capacity: 5.0 tons of metal per hour and 30 tons of sand per hour.
- (h) One (1) castings shakeout operation, identified as EU6, installed prior to 1979, equipped with a baghouse, identified as Main Baghouse (MBH), installed in 1991, exhausted through Stack B3, capacity: 5.0 tons of metal per hour and 30 tons of sand per hour.
- (i) One (1) cleaning and finishing operation, identified as EU8A and EU8B, installed prior to 1979, consisting of the following:
 - (1) One (1) grinding area (EU8A), consisting of two (2) single station and two (2) double station grinding machines, equipped with a baghouse, identified as Grinding Baghouse (GBH), exhausted through Stack B1, capacity: 4.5 tons of metal per hour.
 - (2) One (1) Wheelabrator shot blast unit (EU8B), equipped with a baghouse, identified as Wheelabrator Baghouse (WBH), exhausted through Stack B2, capacity: 4.5 tons of metal per hour.
- (j) One (1) sand handling operation, identified as EU9, installed prior to 1979, equipped with a baghouse, identified as Main Baghouse (MBH), installed in 1991, exhausted through Stack B3, capacity: 30.0 tons of sand per hour.

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

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

D.2.1 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the grinding area (EU8A), exhausting to Stack B1, shall not exceed 11.2 pounds per hour when operating at a process weight rate of 4.5 tons per hour.
- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the Wheelabrator shot blast (EU8B), exhausting to Stack B2, shall not exceed 11.2 pounds per hour when operating at a process weight rate of 4.5 tons per hour.
- (c) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the east casting cooling operation (EU5B), the castings shakeout process (EU6) and the sand handling system (EU9), exhausting to Stack B3, shall not exceed a total of 41.3 pounds per hour when operating at a process weight rate of 35.0 tons per hour.

- (d) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the south casting cooling operation (EU5A) and the pouring and casting operation (EU4), exhausting to Stack B4, shall not exceed a total of 41.3 pounds per hour when operating at a process weight rate of 35.0 tons per hour.

The above pounds per hour limitations were calculated with the following equations:

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

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

and

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

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

D.2.2 Particulate Matter (PM₁₀) [326 IAC 2-8-4] [326 IAC 2-2]

- (a) The PM₁₀ emission rate from the grinding area (EU8A), exhausting to Stack B1, after controls shall not exceed 0.0131 pounds per ton of metal melted.
- (b) The PM₁₀ emission rate from the Wheelabrator shot blast (EU8B), exhausting to Stack B2, after controls shall not exceed 0.2485 pounds per ton of metal melted.
- (c) The PM₁₀ emission rate from Stack B3 after controls shall not exceed 5.72 pounds per hour.
- (d) The PM₁₀ emission rate from Stack B4 after controls shall not exceed 5.36 pounds per hour.

Therefore, the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-7 (Part 70) are not applicable.

D.2.3 Particulate Matter (PM) [326 IAC 2-2]

- (a) The PM emission rate from the grinding area (EU8A), exhausting to Stack B1, after controls shall not exceed 0.0515 pounds per ton of metal melted. Therefore, the requirements of 326 IAC 2-2 are not applicable.
- (b) The PM emission rate from the Wheelabrator shot blast (EU8B), exhausting to Stack B2, after controls shall not exceed 0.98 pounds per ton of metal melted. Therefore, the requirements of 326 IAC 2-2 are not applicable.
- (c) The PM emission rate from Stack B3 after controls shall not exceed 7.90 pounds per hour. Therefore, the requirements of 326 IAC 2-2 are not applicable.
- (d) The PM emission rate from Stack B4 after controls shall not exceed 5.479 pounds per hour. Therefore, the requirements of 326 IAC 2-2 are not applicable.

D.2.4 Carbon Monoxide (CO) [326 IAC 2-8-4] [326 IAC 2-2]

The CO emission rate from the one (1) pouring/casting operation (EU4), the one (1) castings cooling operation (EU5A and EU5B) and the one (1) castings shakeout operation (EU6), exhausting to Stacks B3 and B4, shall not exceed a total of 6.0 pounds per ton of metal melted. Therefore, the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-7 (Part 70) are not applicable.

D.2.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

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

Compliance Determination Requirements

D.2.6 Particulate Matter (PM)

In order to comply with Conditions D.2.1, D.2.2 and D.2.3:

- (a) The Main Baghouse (MBH) for PM and PM₁₀ control shall be in operation and control emissions from the east castings cooling (EU5B), the casting shakeout (EU6) and the sand handling operation (EU9) at all times that the facilities are in operation.
- (b) The Mold/Dump Baghouse (MDBH) for PM and PM₁₀ control shall be in operation and control emissions from the south castings cooling operation (EU5A) at all times that the facility is in operation.
- (c) The Grinding Baghouse (GBH) for PM and PM₁₀ control shall be in operation and control emissions from the grinding area (EU8A) at all times that the facility is in operation.
- (d) The Wheelabrator Baghouse (WBH) for PM and PM₁₀ control shall be in operation and control emissions from the Wheelabrator shot blast (EU8B) at all times that the facility is in operation.
- (e) 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.

D.2.7 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

Within 180 days after issuance of this permit, in order to demonstrate compliance with Conditions D.2.1, D.2.2 and D.2.3, the Permittee shall perform PM and PM₁₀ testing of the pouring and casting operation (EU4), the castings cooling operation (EU5A and B), the castings shakeout process (EU6), the cleaning and finishing operations (EU8A and B), and the sand handling process (EU9), utilizing methods as approved by the Commissioner. This testing shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM₁₀ includes filterable and condensable PM₁₀. Testing shall be conducted in accordance with Section C - Performance Testing.

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

D.2.8 Visible Emissions Notations

- (a) Visible emission notations of the pouring/casting operation, the castings cooling operation, the castings shakeout operation, the cleaning and finishing operations, and the sand handling system stack exhausts (Stacks B1, B2, B3 and B4) 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 deviation from this permit.

D.2.9 Parametric Monitoring

- (a) The Permittee shall record the pressure drop across the Main Baghouse (MBH) used in conjunction with the east castings cooling operation, the castings shakeout process and the sand handling process, at least once per day when any of the processes are in operation. When for any one reading, the pressure drop across the MBH is outside the normal range of 4.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) The Permittee shall record the pressure drop across the Grinding Baghouse (GBH) used in conjunction with the cleaning and finishing operations, at least once per day when the cleaning and finishing operations are in operation. When for any one reading, the pressure drop across the GBH is outside the normal range of 1.0 and 5.0 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 ranges is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (c) The Permittee shall record the pressure drop across the Wheelabrator Baghouse (WBH) used in conjunction with the cleaning and finishing operations, at least once per day when the cleaning and finishing operations are in operation. When for any one reading, the pressure drop across the WBH is outside the normal range of 4.0 and 8.0 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 ranges is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (d) The Permittee shall record the pressure drop across the Mold/Dump Baghouse (MDBH) used in conjunction with the south castings cooling operation, at least once per day when the process is in operation. When for any one reading, the pressure drop across the MDBH is outside the normal range of 4.0 and 8.0 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. Failure to take response

steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.2.10 Broken or Failed Bag Detection

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

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

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

D.2.11 Record Keeping Requirements

- (a) To document compliance with Condition D.2.8, the Permittee shall maintain records of the pouring/casting operation, the castings cooling operation, the castings shakeout operation, the cleaning and finishing operations, and the sand handling system stack exhausts (Stacks B1, B2, B3 and B4) once per day during normal daylight operations.
- (b) To document compliance with Condition D.2.9, the Permittee shall maintain records once per day of the pressure drop.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3

FACILITY OPERATION CONDITIONS

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

- (i) One (1) natural gas-fired oil core oven, identified as EU10, installed in 1946, exhausted through Stack O1, rated at 0.5 million British thermal units per hour, capacity: 0.75 tons of sand per hour.
- (j) One (1) core wash and mold parting, identified as EU12, installed prior to 1987, capacity: 0.85 tons of cores per hour, 0.178 pounds of core wash per hour, 0.226 pounds of thinner per hour, and 2.76 pounds of liquid parting per hour.
- (m) One (1) core making operation, consisting of fifteen (15) shell core machines, collectively identified as EU11, capacity: 0.75 tons of sand per hour, total, consisting of the following:
 - (1) Three (3) U180 Shalco machines, installed in 1998, capacity: 200 pounds per hour, each.
 - (2) One (1) U150 Shalco machine, installed in 1998, capacity: 100 pounds per hour.
 - (3) Three (3) Dependable 100 machines, installed between 1960 and 1980, capacity: 100 pounds per hour, each.
 - (4) Five (5) Dependable 200 machines, installed between 1960 and 1980, capacity: 150 pounds per hour, each.
 - (5) One (1) Dependable 300 machines, installed between 1960 and 1980, capacity: 200 pounds per hour.
 - (6) Two (2) Redford HP43 machines, installed between 1960 and 1980, capacity: 200 pounds per hour, each.

(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 2-8-4(1)]

D.3.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the oil core oven (EU10), shall not exceed 3.38 pounds per hour when operating at a process weight rate of 0.75 tons per hour.

This pound per hour limitation was calculated with the following equation:

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

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

SECTION D.4 FACILITY OPERATION CONDITIONS

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour with a total rating of 1.20 million British thermal units per hour consisting of:

Two (2) ladle heating torches, identified as EU13, installed prior to 1987, capacity: 0.60 million British thermal units per hour, total.
- (b) The following VOC and HAP storage containers: vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.
- (c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]
- (d) 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]
- (e) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (f) Paved and unpaved roads and parking lots with public access.

(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 2-8-4(1)]

D.4.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable PM emission rate from the insignificant brazing equipment, cutting torches, soldering equipment and welding equipment shall not exceed the allowable PM emission rate based on 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:

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

or

if the process weight rate is less than one hundred pounds per hour, then the allowable emission rate shall be 0.551 pounds per hour.

D.4.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

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

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

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

D.4.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for a cold cleaner degreaser without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°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 or 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), for a cold cleaning facility construction of which commenced after July 1, 1990, 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.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY**

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

Source Name: Warsaw Foundry Company, Inc.
Source Address: 1212 North Detroit Street, Warsaw, Indiana 46580
Mailing Address: P.O. Box 227, Warsaw, Indiana 46581
FESOP No.: F 085-14520-00006

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

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify) _____
- Report (specify) _____
- Notification (specify) _____
- Affidavit (specify) _____
- Other (specify) _____

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865**

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

Source Name: Warsaw Foundry Company, Inc.
Source Address: 1212 North Detroit Street, Warsaw, Indiana 46580
Mailing Address: P.O. Box 227, Warsaw, Indiana 46581
FESOP No.: F 085-14520-00006

This form consists of 2 pages

Page 1 of 2

<input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12) <ul style="list-style-type: none">▪ The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and▪ The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16

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

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

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

Page 2 of 2

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

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

FESOP Quarterly Report

Source Name: Warsaw Foundry Company, Inc.
 Source Address: 1212 North Detroit Street, Warsaw, Indiana 46580
 Mailing Address: P.O. Box 227, Warsaw, Indiana 46581
 FESOP No.: F 085-14520-00006
 Facilities: The one (1) cupola and the one (1) electric induction furnace
 Parameter: Total amount of metal melted
 Limit: Less than 11,300 tons per twelve (12) consecutive month period with compliance determined at the end of each month

YEAR:

Month	Tons of metal melted	Tons of metal melted	Tons of metal melted
	This Month	Previous 11 Months	12 Month Total

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

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

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

Source Name: Warsaw Foundry Company, Inc.
Source Address: 1212 North Detroit Street, Warsaw, Indiana 46580
Mailing Address: P.O. Box 227, Warsaw, Indiana 46581
FESOP No.: F 085-14520-00006

Months: _____ to _____ Year: _____

Page 1 of 2

<p>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".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> 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:	

- 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

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

Source Name: Warsaw Foundry Company, Inc.
Source Location: 1212 North Detroit Street, Warsaw, Indiana 46580
County: Kosciusko
FESOP: F 085-14520-00006
SIC Code: 3321
Permit Reviewer: Edward A. Longenberger

On April 2, 2005, the Office of Air Quality (OAQ) had a notice published in the Times Union, Warsaw, Indiana, stating that Warsaw Foundry Company, Inc. had applied for a Federally Enforceable State Operating Permit (FESOP) to operate a gray and ductile iron foundry with baghouses for particulate control. The notice also stated that OAQ proposed to issue a FESOP for this operation and provided information on how the public could review the proposed FESOP and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this FESOP should be issued as proposed.

On May 1, 2005, Ron Ward of Cornerstone Environmental submitted comments on the proposed FESOP, and on August 9, 2005, supplemental comments were submitted. The comments are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1:

Section D.1 - Condition D.1.10 Testing Requirements to demonstrate compliance with Conditions D.1.3, D.1.4(b), D.1.5(b), D.1.6 and D.1.7 requires that testing be repeated at least once every two and one-half (2.5) years from the date of the last valid compliance demonstration. We request that the repeat test interval be once every five (5) years, in line with other permits issued by IDEM for similar sources. Compliance demonstration at this testing interval will provide for adequate compliance demonstration and reduce the economic burden of additional testing on the source.

Response 1:

Because of the high potential emissions, IDEM, OAQ has determined that more frequent testing for the cupola is required. No change to the permit has been made as a result of this comment.

Comment 2:

Section D.1 - Condition D.1.11 Visible Emissions Notations requires that visible emissions notations of the cupola charge door shall be performed once per shift during normal daylight operations. We are of the opinion that this is overly burdensome in light of the fact that visible emissions notations of the cupola stack exhaust (Stack C1) are required.

Response 2:

Visible emissions notations are required for the cupola charge door to ensure that the door is properly closed. Otherwise, emissions that are designed to vent through the stack may be exhausted to the plant interior. In this event, the visible emissions notations of only the stack would not be sufficient. Note that the requirement to perform visible emissions notations has been changed from once per shift to once per day (see Change 5).

Comment 3:

Condition D.2.2: Under subsection (a), Stack B1 should be referenced, and under subsection (b), Stack B2 should be referenced for clarity.

Condition D.2.3: Under subsection (a), Stack B1 should be referenced, and under subsection (b), Stack B2 should be referenced for clarity.

Response 3:

The stack references have been added as requested:

D.2.2 Particulate Matter (PM₁₀) [326 IAC 2-8-4] [326 IAC 2-2]

- (a) The PM₁₀ emission rate from the grinding area (EU8A), **exhausting to Stack B1**, after controls shall not exceed 0.0193 pounds per ton of metal melted.
- (b) The PM₁₀ emission rate from the Wheelabrator shot blast (EU8B), **exhausting to Stack B2**, after controls shall not exceed 0.366 pounds per ton of metal melted.

Therefore, the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-7 (Part 70) are not applicable.

D.2.3 Particulate Matter (PM) [326 IAC 2-2]

- (a) The PM emission rate from the grinding area (EU8A), **exhausting to Stack B1**, after controls shall not exceed 0.0743 pounds per ton of metal melted. Therefore, the requirements of 326 IAC 2-2 are not applicable.
- (b) The PM emission rate from the Wheelabrator shot blast (EU8B), **exhausting to Stack B2**, after controls shall not exceed 1.414 pounds per ton of metal melted. Therefore, the requirements of 326 IAC 2-2 are not applicable.

Comment 4:

Section D.2 - Condition D.2.6 Testing Requirements requires compliance testing within 180 days after issuance of this permit. We request that the time allowed for testing be extended to 24 months to allow testing to be accomplished in stages, thus reducing the economic burden on Warsaw Foundry Company.

Section D.2 - Condition D.2.6 Testing Requirements (continued) requires that PM₁₀ testing include filterable and condensable PM₁₀. Condensable PM₁₀ testing should not be required for the Grinding Baghouse (Stack B1) and the Wheelabrator Baghouse (Stack B2) since condensable particulates are not associated with these activities.

Response 4:

Since the last stack test at Warsaw Foundry was in 1994, IDEM, OAQ feels that an additional delay of up to two (2) years is unacceptable. Since PM₁₀ does include both filterable and condensable PM₁₀, no change to the permit is made as a result of this comment.

Comment 5:

The understanding is that the emission units Castings Shakeout EU6, Sand Handling EU9, and East Castings Cooling EU5B, commonly controlled by Main Baghouse (Stack B3), will be operated concurrently during testing, and not have to be tested individually.

The understanding is that the emission units South Castings Cooling EU5A and Pouring/ Casting

EU4, commonly controlled by Mold/Dump Baghouse (Stack B4), will be operated concurrently during testing, and not have to be tested individually.

Response 5:

IDEM, OAQ agrees. That is why the limits in Conditions D.2.2(c) and (d) and Conditions D.2.3(c) and (d) are written as hourly limits for Stacks B3 and B4 and not for the individual processes.

Comment 6:

Section D.3 The following statements should be added at the end of this section for clarification:

Compliance Determination Requirements There are no specific Compliance Determination Requirements applicable to these emission units.

Compliance Monitoring Requirements There are no specific Compliance Monitoring Requirements applicable to these emission units.

Response 6:

The IDEM, OAQ does not agree that these statements are necessary. No change to the permit has been made as a result of these comments.

Comment 7:

Technical Support Document (TSD)

Page 7 of 23, Table Limited Potential to Emit, Stack B4 should read "South Castings Cooling EU5A," instead of "EU5B."

Page 9 of 23, second table, Stack B4 should read "South Castings Cooling EU5A," instead of "EU5B."

Page 11 of 23, Process / Unit ID table, Stack B4 should read "South Castings Cooling EU5A," instead of "EU5B."

Page 13 of 23, Process / Unit ID table, Stack B4 should read "South Castings Cooling EU5A," instead of "EU5B."

Appendix A, Page 1 of 12, second table on the page, first row PM calculation for *Controlled Emission Rate* does not take into account the control efficiency of the baghouse.

Response 7:

The IDEM, OAQ prefers that the Technical Support Document reflect the document that was on public notice. Changes to the technical support material that occur after the public notice period are documented in this Addendum to the Technical Support Document. The South Castings Cooling Area should be identified as EU5A, and is so identified throughout the permit. Therefore, no changes are made to the permit as a result of this comment.

Regarding the calculation on Page 1 of 12 of Appendix A, the controlled PM emission rate for the cupola (EU2) should read 40.8 tons per year. This change results in no changes to the permit document since the permit limits are based on the limited annual metal throughput, rather than the controlled potential emissions for the cupola.

Comment 8:

As the result of a recent conversation with Joe VanCamp, who works with me at Cornerstone, and Dick Sekula's recent IDEM inspection, some very important issues have come to light. Joe has been involved with air permitting for the Muncie Casting Corporation, which has a FESOP, No. F 035-9977-00061, that was issued October 6, 2000 and a First Significant Permit Revision No. 035-19855-00061 that was just issued July 26, 2005. The FESOP renewal has not been issued at this time, but we have no reason to believe that the permit language will be different from that, which exists in the First Significant Permit Revision. Joe pointed out to me that Muncie Casting, who casts grey iron and aluminum, has also taken a limit on annual throughput like Warsaw Foundry. Muncie Casting's annual throughput limit is actually greater than Warsaw Foundry's limited throughput. Stack testing is not required as a condition in the Muncie Casting permit for the same processes as those present at Warsaw Foundry. I feel that the Muncie Casting's permit sets a precedent for Warsaw Foundry, and they should not be burdened economically to a greater extent than a like-source by having to do stack testing.

IDEM has not required stack testing to demonstrate compliance at the Muncie Casting facility, based on the conservative baghouse control efficiency of ninety-five percent (95%) used in the calculation, and the fact that the combined controlled and uncontrolled emissions for the source based on the limited throughput are comfortably below the 100-ton major source threshold as would be the case for Warsaw Foundry and thus avoiding PSD. IDEM did, of course, include ample record keeping and reporting for compliance demonstration purposes in Muncie Casting's permit. Warsaw Foundry is willing to accept the lower control efficiency of ninety-five percent (95%), which currently is at ninety-six percent (96%), and abide by the appropriate recordkeeping and reporting that would be required to demonstrate compliance in order to eliminate the need to perform stack testing.

Response 8:

Each source is unique, and as such each source is reviewed on its own merits. The permit conditions for Warsaw Foundry were a result of the permit review process for this source and the types of processes and control devices that are used at Warsaw Foundry. IDEM is obligated to write permits with enforceable limitations and to be able to determine continuous compliance with those conditions. This shall be verified by the stack test requirements in Conditions D.1.10 and D.2.6. No change to the permit is made as a result of this comment.

Comment 9:

Also, I would like to request that the single emission factor used for pouring/casting have the emission factor for cooling subtracted from it. IDEM accepts emission factors of 4.20 pounds per ton for PM (SCC 3-04-003-18) and 2.06 pounds per ton for PM₁₀ (SCC 3-04-003-18) for pouring/ casting and cooling combined. The emission factor used in the permit of 1.40 pounds per ton for cooling (PM and PM₁₀) is intended to be included in the 4.20 and 2.06 pounds per ton values. It is requested that the pouring/casting emission factors be reduced to 2.8 pounds per ton for PM and 0.65 pounds per ton for PM₁₀ to take into consideration the cooling emission factor separately accounted for in the calculations.

Response 9:

IDEM, OAQ has determined that the appropriate emission factor for pouring and casting is 4.2 pounds of PM and 2.06 pounds of PM₁₀ per ton, and the appropriate PM and PM₁₀ emission factor for castings cooling is 1.4 pounds per ton. There is no emission factor of 2.8 pounds of PM or 0.65 pounds of PM₁₀ per ton for pouring/casting in AP-42 or any other accepted source of emission factors. No change to the permit is made as a result of this comment.

Comment 10:

Using your spreadsheets, I have recalculated the limited potential emission taking into account the absence of control on the pouring/casting. Further, I have not included controls for the cooling areas even though they are controlled. All baghouse control efficiencies have been reduced to ninety-five (95) percent. Following Muncie Casting's permit, I have assumed a yield of sixty (60) percent for the metal throughput for the cleaning and finishing (Grinding and Wheelabrator shot blaster). Muncie Casting's permit only considers emissions from the shot blasters with grinding considered to be an insignificant activity.

Response 10:

The limited table and the following conditions have been amended in order to maintain the overall PM and PM₁₀ limits of one hundred (100) tons per year. Conditions D.1.4, D.1.5, D.2.2 and D.2.3 have been revised as requested based on 95% control for the baghouses and no control on the pouring/casting operations (EU4), as shown:

D.1.4 Particulate Matter (PM₁₀) [326 IAC 2-8-4] [326 IAC 2-2]

- (b) The PM₁₀ emission rate from the one (1) cupola (EU2) after controls shall not exceed **5.154** ~~9.48~~ pounds per ton of metal melted. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 are not applicable.

D.1.5 Particulate Matter (PM) [326 IAC 2-2]

- (b) The PM emission rate from the one (1) cupola (EU2) after controls shall not exceed **2.26** ~~4.077~~ pounds per ton of metal melted. Therefore, the requirements of 326 IAC 2-2 are not applicable.

D.2.2 Particulate Matter (PM₁₀) [326 IAC 2-8-4] [326 IAC 2-2]

- (a) The PM₁₀ emission rate from the grinding area (EU8A), exhausting to Stack B1, after controls shall not exceed **0.0131** ~~0.0493~~ pounds per ton of metal melted.
- (b) The PM₁₀ emission rate from the Wheelabrator shot blast (EU8B), exhausting to Stack B2, after controls shall not exceed **0.2485** ~~0.366~~ pounds per ton of metal melted.
- (c) The PM₁₀ emission rate from Stack B3 after controls shall not exceed **5.72** ~~4.53~~ pounds per hour.
- (d) The PM₁₀ emission rate from Stack B4 after controls shall not exceed **5.36** ~~0.807~~ pounds per hour.

Therefore, the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-7 (Part 70) are not applicable.

D.2.3 Particulate Matter (PM) [326 IAC 2-2]

- (a) The PM emission rate from the grinding area (EU8A), exhausting to Stack B1, after controls shall not exceed **0.0515** ~~0.0743~~ pounds per ton of metal melted. Therefore, the requirements of 326 IAC 2-2 are not applicable.
- (b) The PM emission rate from the Wheelabrator shot blast (EU8B), exhausting to Stack B2, after controls shall not exceed **0.98** ~~4.444~~ pounds per ton of metal melted. Therefore, the requirements of 326 IAC 2-2 are not applicable.
- (c) The PM emission rate from Stack B3 after controls shall not exceed **7.90** ~~9.89~~ pounds per hour. Therefore, the requirements of 326 IAC 2-2 are not applicable.

- (d) The PM emission rate from Stack B4 after controls shall not exceed **5.479** ~~0.553~~ pounds per hour. Therefore, the requirements of 326 IAC 2-2 are not applicable.

The Limited Potential to Emit table from the TSD has been updated as follows to reflect the changes to the limits:

Process/emission unit		Limited Potential to Emit (tons/year)							
		PM	PM ₁₀	SO ₂	NO _x	VOC	CO	Lead	Other HAPs
EU1	Charge handling	3.39	2.04	0.00	0.00	0.00	0.00	0.013	0.004
EU2	Worst case melting	12.776	29.125						
EU3		23.04	53.59	6.78	0.565	1.02	65.1	9.12	0.915
Inoculation or magnesium treatment		10.17	10.17	0.00	0.00	0.00	0.00	0.00	0.00
EU8A	Cleaning and Finishing (grinding only)	0.291	0.074						
		0.420	0.109	0.00	0.00	0.00	0.00	0.001	0.006
EU8B	Cleaning and Finishing (shotblast only)	5.537	1.405						
		7.99	2.07	0.00	0.00	0.00	0.00	0.024	0.117
Stack B3 (Castings Shakeout EU6, Sand Handling EU9, East Castings Cooling EU5B)		34.604	25.052						
		43.34	49.84	0.00	0.00	6.78	33.9	0.068	0.023
Stack B4 (South Castings Cooling EU5A and Pouring/Casting EU4)		24.0	23.488						
		2.424	3.534	0.113	0.057	0.791		0.090	0.030
EU10	Oil core oven	7.29	7.29	0.125	1.64	0.00	0.00	0.00	0.00
EU11	Shell core machines	0.00	0.00	1.05	1.64	0.00	0.00	0.00	5.32
EU12	Core wash/mold part	0.00	0.00	0.00	0.00	13.25	0.00	0.00	0.980
Insignificant combustion		0.017	0.070	0.005	0.920	0.051	0.773	0.00	0.017
Unpaved roads		0.910	0.280	0.00	0.00	0.00	0.00	0.00	0.00
Other insignificant		1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00
Total PTE After Issuance		99.99	99.99	8.07	4.83	22.89	99.77	9.32	7.41

The permit document has also been amended to show that the pouring/casting operation is not controlled, as shown:

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

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

- (f) One (1) pouring/casting operation, identified as EU4, installed prior to 1979, ~~controlled by Mold/Dump Baghouse (MDBH)~~ and exhausted through Stack B4, capacity: 5.0 tons of metal per hour and 30 tons of sand per hour.

SECTION D.2 FACILITY OPERATION CONDITIONS

<p>Facility Description [326 IAC 2-8-4(10)]: Casting, cooling, sand and finishing</p> <ul style="list-style-type: none">(f) One (1) pouring/casting operation, identified as EU4, installed prior to 1979, controlled by Mold/Dump Baghouse (MDBH) and exhausted through Stack B4, capacity: 5.0 tons of metal per hour and 30 tons of sand per hour. <p>(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)</p>

D.2.5 Particulate Matter (PM)

- (b) The Mold/Dump Baghouse (MDBH) for PM and PM₁₀ control shall be in operation and control emissions from ~~the pouring/casting operation (EU4)~~ and the south castings cooling operation (EU5A) at all times that the facility ~~ies are is~~ is in operation.

D.2.8 Parametric Monitoring

- (d) The Permittee shall record the pressure drop across the Mold/Dump Baghouse (MDBH) used in conjunction with ~~the pouring/casting process~~ and the south castings cooling operation, at least once per day when ~~either of the processes are~~ is in operation. When for any one reading, the pressure drop across the MDBH is outside the normal range of 4.0 and 8.0 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. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

Upon further review, the OAQ has decided to make the following changes to the FESOP: The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language is **bolded**):

Change 1:

The following statement was added to the cover page of the permit document:

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

Change 2:

This condition is now contained in Condition B.13:

~~A.5 — Prior Permits Superseded [326 IAC 2-1-1-9.5]~~

~~(a) — All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either~~

~~(1) — incorporated as originally stated,~~

~~(2) — revised, or~~

~~(3) — deleted~~

~~by this permit.~~

~~(b) — All previous registrations and permits are superseded by this permit.~~

Change 3:

1. The letterhead of the permit has been revised to indicate the new Governor and the new Commissioner of IDEM. The IDEM, OAQ address has been changed as follows throughout the permit, and the Compliance Branch phone and fax number has been changed in Condition B.12 and the Emergency Occurrence Report Form:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana ~~46206-6015~~ **46204**

Compliance Branch:
Telephone No.: 317-233-~~5674~~ **0178**
Facsimile No.: 317-233-~~5967~~ **6865**

2. IDEM has determined that the Permittee is not required to keep records of all preventive maintenance. However, where the Permittee seeks to demonstrate that an emergency has occurred, the Permittee must provide, upon request records of preventive maintenance in order to establish that the lack of proper maintenance did not cause or contribute to the deviation. Therefore, IDEM has deleted paragraph (b) of Condition B.11 – Preventive Maintenance and has amended Condition B.12 – Emergency Provisions.
3. For clarification purposes, Condition B.19 - Operational Flexibility has been revised.
4. In accordance with 326 IAC 1-1-6, a condition for Credible Evidence has been added to Section B of the permit.
5. In order to avoid duplication of requirements which may be included in D sections, Condition C.7 – Operation of Equipment has been removed from the permit.
6. IDEM realizes that the specifications of Condition C.13 - Pressure Gauge and Other Instrument Specifications, can only be practically applied to analog units, and has therefore clarified the condition to state that the condition only applies to analog units. Upon further review, IDEM has also determined that the accuracy of the instruments is not nearly as important as whether the instrument has a range that is appropriate for the normal expected reading of the parameter. Therefore, the language in Condition C.13 has been revised (see the changes in the section of Proposed Changes).
7. IDEM has reconsidered the requirement to develop and follow a Compliance Response Plan

(Condition C.16). The Permittee will still be required to take reasonable response steps when a compliance monitoring parameter is determined to be out of range or abnormal. Replacing the requirement to develop and follow a Compliance Response Plan with a requirement to take reasonable response steps will ensure that the control equipment is returned to proper operation as soon as practicable, while still allowing the Permittee the flexibility to respond to situations that were not anticipated. Therefore, the condition for "Compliance Response Plan" has been replaced by the condition for "Response to Excursions or Exceedances". The Section D conditions that refer to this condition have been revised to reflect the new condition title (see the changes in the section of Proposed Changes).

SECTION B ————— GENERAL CONDITIONS

~~B.1 — Permit No Defense [IC 13]~~

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

~~B.2 — Definitions [326 IAC 2-8-1]~~

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

~~B.3 — Permit Term [326 IAC 2-8-4(2)] [326 IAC 2-1.1-9.5]~~

~~This permit 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.~~

~~B.4 — Enforceability [326 IAC 2-8-6]~~

~~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 — Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]~~

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

~~B.6 — Severability [326 IAC 2-8-4(4)]~~

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

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

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

~~B.8 — Duty to Provide Information [326 IAC 2-8-4(5)(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 "authorized individual" as defined by 326 IAC 2-1.1-1(1). 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.9 Compliance Order Issuance [326 IAC 2-8-5(b)]~~

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

~~B.10 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]~~

~~(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 an authorized individual 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) An authorized individual is defined at 326 IAC 2-1.1-1(1).~~

~~B.11 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]~~

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

~~Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2254~~

~~(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 2-8-4(3); and~~

~~(5) Such other facts as specified in Sections D of this permit. IDEM, OAQ, may require~~

to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

~~B.12 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]~~

~~(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:~~

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

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

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

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

~~Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2254~~

~~The PMP extension notification does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~(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 "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~(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.13 Emergency Provisions [326 IAC 2-8-12]~~

~~(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.~~

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

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

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

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

~~(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, 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 No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section)
or,
Telephone No.: 317-233-5674 (ask for Compliance Section)
Facsimile No.: 317-233-5967
Northern Regional Office: 574-245-4870, facsimile 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 Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2254~~

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

~~The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:~~

~~(A) A description of the emergency;~~

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

~~(C) Corrective actions taken.~~

~~The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~(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 2-8-3(c)(6) 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 2-8 and any other applicable rules.~~

~~(g) Operations may continue during an emergency only if the following conditions are met:~~

~~(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.~~

~~(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:~~

~~(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and~~

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

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

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

~~B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]~~

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

~~Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2254~~

~~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 need to be included in this report.~~

~~The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

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

~~B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]~~

~~(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

- ~~(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 2-8-8(a)]~~
- ~~(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 2-8-8(b)]~~
- ~~(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, 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 2-8-8(c)]~~

~~B.16 Permit Renewal [326 IAC 2-8-3(h)]~~

- ~~(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~Request for renewal shall be submitted to:~~

~~Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2254~~

- ~~(b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]~~
- ~~(1) A timely renewal application is one that is:~~
 - ~~(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and~~
 - ~~(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.~~
 - ~~(2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.~~
- ~~(c) Right to Operate After Application for Renewal [326 IAC 2-8-9]
If the Permittee submits a timely and complete application for renewal of this permit, the~~

source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, 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 needed to process the application.

~~B.17 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]~~

~~(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.~~

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

~~Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2254~~

~~Any such application shall be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~(c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]~~

~~(d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.~~

~~B.18 Operational Flexibility [326 IAC 2-8-15] [326 IAC 2-8-11.1]~~

~~(a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:~~

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

~~(2) Any approval required by 326 IAC 2-8-11.1 has been obtained;~~

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

~~(4) The Permittee notifies the:~~

~~Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2254~~

~~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 2-8-15(b) through (d). 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 2-8-15(b)(2), (c)(1), and (d).~~

- ~~(b) Emission Trades [326 IAC 2-8-15(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 2-8-15(c).~~
- ~~(c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.~~
- ~~(d) 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.19 Permit Revision Requirement [326 IAC 2-8-11.1]~~

~~A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.~~

~~B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)] [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 FESOP 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, at reasonable times, 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 at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;~~
- ~~(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and~~
- ~~(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.~~

~~B.21 Transfer of Ownership or Operational Control [326 IAC 2-8-10]~~

- ~~(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee~~

~~seeks to change the ownership or operational control of the source and no other change in the permit is necessary.~~

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

~~Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2254~~

~~The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

- ~~(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]~~

~~B.22 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16] [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) 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.23 Credible Evidence [326 IAC 2-8-4(3)] [326 IAC 2-8-5] [62 FR 8314]~~

~~Notwithstanding the conditions of this permit that state specific methods that may be used to demonstrate compliance with, or a violation of, applicable requirements, any person (including the Permittee) may also use other credible evidence to demonstrate compliance with, or a violation of, any term or condition of this permit.~~

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [40 CFR 52 Subpart P] [326 IAC 6-3-2]

- ~~(a) Pursuant to 40 CFR 52 Subpart P, particulate matter emissions 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 one hundred (100) pounds per hour shall not exceed 0.551 pounds per hour.~~

- ~~(b) 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 one hundred (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 Overall Source Limit [326 IAC 2-8]~~

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

~~(a) Pursuant to 326 IAC 2-8:~~

~~(1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable;~~

~~(2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and~~

~~(3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.~~

~~(b) Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), potential to emit particulate matter (PM) from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.~~

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

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

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

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

~~C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]~~

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

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

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

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

~~The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.~~

~~C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]~~

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

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

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

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

~~(A) Asbestos removal or demolition start date;~~

~~(B) Removal or demolition contractor; or~~

~~(C) Waste disposal site.~~

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

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

~~All required notifications shall be submitted to:~~

~~Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2254~~

~~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 "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~(e) Procedures for Asbestos Emission Control~~

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

all facility components.

~~(f) Demolition and renovation~~

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

~~(g) Indiana Accredited Asbestos Inspector~~

~~The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.~~

Testing Requirements [326 IAC 2-8-4(3)]

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

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

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

~~Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2254~~

~~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 "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~(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 "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~(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.10 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 2-8-4] [326 IAC 2-8-5(a)(1)]

C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

~~Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any~~

~~required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:~~

~~Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2254~~

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

~~The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.~~

~~C.12 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.13 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(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 2-8-4] [326 IAC 2-8-5(a)(1)]~~

~~C.14 Risk Management Plan [326 IAC 2-8-4] [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 2-8-4] [326 IAC 2-8-5]~~

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

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

- (1) ~~initial inspection and evaluation;~~
 - (2) ~~recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or~~
 - (3) ~~any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.~~
- (c) ~~A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:~~
- (1) ~~monitoring results;~~
 - (2) ~~review of operation and maintenance procedures and records;~~
 - (3) ~~inspection of the control device, associated capture system, and the process.~~
- (d) ~~Failure to take reasonable response steps shall be considered a deviation from the permit.~~
- (e) ~~The Permittee shall maintain the following records:~~
- (1) ~~monitoring data;~~
 - (2) ~~monitor performance data, if applicable; and~~
 - (3) ~~corrective actions taken.~~
- (f) ~~For purposes of this Condition:~~
- (1) ~~“Exceedance” shall mean a condition that is detected by monitoring that provides data in terms of an emission limitation or standard and that indicates that emissions are, or opacity is, greater than the applicable emission limitation or standard (or less than the applicable standard in the case of a percent reduction requirement), consistent with any averaging period specified for averaging the results of the monitoring.~~
 - (2) ~~“Excursion” shall mean a departure from an indicator range established for monitoring under Section D of this permit, consistent with any averaging period specified for averaging the results of the monitoring.~~

~~C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4]
[326 IAC 2-8-5]~~

- (a) ~~When the results of a stack test performed in conformance with Section C—Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.~~
- (b) ~~A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.~~

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

~~The response action documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]~~

~~C.17 Emission Statement [326 IAC 2-6] [326 IAC 2-8-3(3)]~~

- ~~(a) Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit an emission statement by July 1 following a calendar year when the source emits oxides of nitrogen into the ambient air equal to or greater than twenty-five (25) tons. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.~~

~~The statement must be submitted to:~~

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

~~The emission statement does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

- ~~(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 2-8-4(3)] [326 IAC 2-8-5]~~

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

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

~~C.19 General Reporting Requirements [326 IAC 2-8-4(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 "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

- ~~(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 Branch, Office of Air Quality~~

~~100 North Senate Avenue
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 "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~
- ~~(e) The first report covered the period commencing on the date of issuance of the original FESOP and ended on the last day of the reporting period. All subsequent reporting periods shall be based on calendar years. 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 B

GENERAL CONDITIONS

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

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, 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 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

- (a) This permit, 085-14520-00006, 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, 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 2-8-6]

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 2-8-4(4)]

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

B.6 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

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

B.7 Duty to Provide Information [326 IAC 2-8-4(5)(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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1). 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 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

- (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 an "authorized individual" 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) an "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.9 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

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

later than July 1 of each year to:

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

- (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 2-8-4(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 an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

B.10 Compliance Order Issuance [326 IAC 2-8-5(b)]

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

B.11 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]

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

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

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

The PMP extension notification does not require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

- (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 an “authorized individual” as defined by 326 IAC 2-1.1-1(1).
- (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.12 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

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

Indiana Department of Environmental Management

**Compliance Branch, Office of Air Quality
100 North Senate Avenue
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 2-8-4(3)(C)(ii) and must contain the following:

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

The notification which shall be submitted by the Permittee does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

economic value.

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

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

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

- (a) All terms and conditions of permits established prior to 085-14520-00006 and issued pursuant to permitting programs approved into the state implementation plan have been either:

- (1) incorporated as originally stated,
- (2) revised, or
- (3) deleted.

- (b) All previous registrations and permits are superseded by this permit.

B.14 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

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

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

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State 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 2-8-4(5)(C)]The notification by the Permittee does require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

- (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 2-8-8(a)]
- (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 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, 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 2-8-8(c)]

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

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
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 2-8 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 identi-

fied as being needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:
- Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
- Any such application shall be certified by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d) without a prior permit revision, if each of the following conditions is met:
- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
 - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
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 2-8-15(b) through (d). 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 2-8-15(b)(2), (c)(1), and (d).

- (c) **Emission Trades [326 IAC 2-8-15(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 2-8-15(c).
- (d) **Alternative Operating Scenarios [326 IAC 2-8-15(d)]**
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, 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.20 Source Modification Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC13-30-3-1]

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 FESOP 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, at reasonable times, 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, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

The application which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][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.24 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][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 2-8-4(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 Overall Source Limit [326 IAC 2-8]

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

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable;
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), potential to emit particulate matter (PM) from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period.

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

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

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

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

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

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

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

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

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

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

Testing Requirements [326 IAC 2-8-4(3)]

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

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

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (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.10 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 2-8-4][326 IAC 2-8-5(a)(1)]

C.11 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

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

**Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
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 an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

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

C.12 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.13 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(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 2-8-4][326 IAC 2-8-5(a)(1)]

C.14 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 prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

**Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality**

**100 North Senate Avenue
Indianapolis, Indiana 46204-2251**

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

The ERP does require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, 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.15 Risk Management Plan [326 IAC 2-8-4] [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.16 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
 - (1) initial inspection and evaluation
 - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records;

- (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
 - (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C – Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.18 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]

- (a) In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), starting in 2007 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
Indianapolis, Indiana 46204-2251

The emission statement does require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

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

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.20 General Reporting Requirements [326 IAC 2-8-4(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 an “authorized individual” as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
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 an “authorized individual” as defined by 326 IAC 2-1.1-1(1).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this

permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

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

Stratospheric Ozone Protection

C.21 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.

Change 4:

IDEM has determined that it is the Permittee's responsibility to include routine control device inspection requirements in the applicable preventive maintenance plan. Since the Permittee is in the best position to determine the appropriate frequency of control device inspections and the details regarding which components of the control device should be inspected, Conditions D.1.13 and D.2.9 requiring control device inspections have been removed from the permit. In addition, the requirement to keep records of the inspections in Conditions D.1.15 and D.2.10 have also been removed.

~~D.1.13 Scrubber Inspection~~

~~An inspection shall be performed each calendar quarter of the scrubber controlling the cupola, but only if the cupola was in operation during the quarter. Inspections required by this condition shall not be performed in consecutive months. All defective scrubber parts shall be replaced.~~

~~D.1.156 Record Keeping Requirements~~

- ~~(d) To document compliance with Condition D.1.13, the Permittee shall maintain records of the results of the inspections required under Condition D.1.13.~~
- (de) To document compliance with Condition D.1.145, the Permittee shall maintain the continuous temperature records (reduced to an hourly average basis) for the afterburner and the hourly average temperature used to demonstrate compliance during the most recent compliant stack test.
- ~~(f) To document compliance with Condition D.1.8, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.~~
- (eg) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

~~D.2.9 Baghouse Inspections~~

~~An inspection shall be performed each calendar quarter of all bags controlling the pouring/casting operation, the castings cooling operation, the castings shakeout, the cleaning and finishing operations, and the sand handling system. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.~~

~~D.2.104 Record Keeping Requirements~~

- ~~(c) To document compliance with Condition D.2.9, the Permittee shall maintain records of the results of the inspections required under Condition D.2.9.~~
- ~~(d) To document compliance with Condition D.2.4, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.~~
- (ce) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Change 5:

IDEM has determined that once per day monitoring of visible emission notations is generally sufficient to ensure proper operation of the facilities. IDEM has also determined that monitoring this parameter once per day is sufficient to satisfy the requirements of the FESOP rules at 326 IAC 2-8-4 and 326 IAC 2-8-5(a)(1). Conditions D.1.11 and D.2.7 have been changed as follows. In addition, the record keeping frequency in Conditions D.1.15 and D.2.10 has been updated:

D.1.11 Visible Emissions Notations

- (a) Visible emission notations of the cupola stack exhaust (Stack C1) and the cupola charge door shall be performed once per ~~shift~~ **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) ~~The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an~~ **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 - ~~Compliance Response Plan Preparation, Implementation, Records and Reports~~ **Response to Excursions or Exceedances** shall be considered a deviation from this permit.

D.2.7 Visible Emissions Notations

- (a) Visible emission notations of the pouring/casting operation, the castings cooling operation, the castings shakeout operation, the cleaning and finishing operations, and the sand handling system stack exhausts (Stacks B1, B2, B3 and B4) shall be performed once per ~~shift~~ **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) ~~The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an~~ **If abnormal emissions is 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 - ~~Compliance Response Plan — Preparation, Implementation, Records and Reports~~ **Response to Excursions or Exceedances** shall be considered a deviation from this permit.

D.1.15 Record Keeping Requirements

- (b) To document compliance with Condition D.1.11, the Permittee shall maintain records of once per ~~day shift~~ visible emission notations of the cupola stack exhaust (Stack C1) and the cupola charge door.

D.2.10 Record Keeping Requirements

- (a) To document compliance with Condition D.2.7, the Permittee shall maintain records of the pouring/casting operation, the castings cooling operation, the castings shakeout operation, the cleaning and finishing operations, and the sand handling system stack exhausts (Stacks B1, B2, B3 and B4) once per ~~day shift~~ during normal daylight operations.

Change 6:

IDEM has determined that once per day monitoring of the control device is generally sufficient to ensure proper operation of the control device. IDEM has also determined that monitoring this parameter once per day is sufficient to satisfy the requirements of the FESOP rules at 326 IAC 2-8-4 and 326 IAC 2-8-5(a)(1). Conditions D.1.12, D.1.14 and D.2.8 have been changed as follows. In addition, the record keeping frequency in Conditions D.1.15 and D.2.10 has been updated:

D.1.12 Parametric Monitoring

The Permittee shall record the flow rate and the ~~total static~~ pressure drop across the scrubber at least once per ~~shift~~ **day** when the one (1) cupola is in operation. When for any one (1) reading, the pressure drop across the scrubber is less than the minimum of 16.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - ~~Compliance Response Plan — Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**. When for any one (1) reading, the flow rate for the scrubbing liquor is less than the minimum of 198 gallons of water per minute or a flow rate established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - ~~Compliance Response Plan — Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**. A pressure reading or a flow rate less than the above mentioned minimums is not a deviation from this permit. Failure to take response steps in accordance with Section C - ~~Compliance Response Plan — Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**, shall be considered a deviation from this permit.

The instrument used for determining the flow rate and pressure drop shall comply with Section C -

~~Pressure Gauge and Other Instrument Specifications~~, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.145 Afterburner Temperature

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on the afterburner for measuring operating temperature. For the purpose of this condition, continuously means no less than once per minute. The output of this system shall be recorded as an hourly average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances** whenever the hourly average temperature of the afterburner is below 1400°F. An hourly average temperature that is below 1400°F is not a deviation from this permit. Failure to take response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**, shall be considered a deviation from this permit.
- (b) The Permittee shall determine the hourly average temperature from the most recent valid stack test that demonstrates compliance with limits in Conditions D.1.3, D.1.4(b), D.1.5(b), D.1.6 and D.1.7, as approved by IDEM.
- (c) On and after the date the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances** whenever the hourly average temperature of the afterburner is below the hourly average temperature as observed during the compliant stack test. An hourly average temperature that is below the hourly average temperature as observed during the compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**, shall be considered a deviation from this permit.

D.2.8 Parametric Monitoring

- (a) The Permittee shall record the ~~total static~~ pressure drop across the Main Baghouse (MBH) used in conjunction with the east castings cooling operation, the castings shakeout process and the sand handling process, at least once per ~~shift~~ **day** when any of the processes are in operation. When for any one reading, the pressure drop across the MBH is outside the normal range of 4.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **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 - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**, shall be considered a deviation from this permit.
- (b) The Permittee shall record the ~~total static~~ pressure drop across the Grinding Baghouse (GBH) used in conjunction with the cleaning and finishing operations, at least once per ~~shift~~ **day** when the cleaning and finishing operations are in operation. When for any one reading, the pressure drop across the GBH is outside the normal range of 1.0 and 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**. A pressure reading that is outside the above mentioned ranges is not a deviation from this permit. Failure to take response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**, shall be considered a deviation from this permit.

- (c) The Permittee shall record the ~~total static~~ pressure drop across the Wheelabrator Baghouse (WBH) used in conjunction with the cleaning and finishing operations, at least once per ~~shift~~ **day** when the cleaning and finishing operations are in operation. When for any one reading, the pressure drop across the WBH is outside the normal range of 4.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**. A pressure reading that is outside the above mentioned ranges is not a deviation from this permit. Failure to take response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**, shall be considered a deviation from this permit.
- (d) The Permittee shall record the ~~total static~~ pressure drop across the Mold/Dump Baghouse (MDBH) used in conjunction with the pouring/casting process and the south castings cooling operation, at least once per ~~shift~~ **day** when either of the processes are in operation. When for any one reading, the pressure drop across the MDBH is outside the normal range of 4.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**. Failure to take response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**, shall be considered a deviation from this permit.

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

D.1.15 Record Keeping Requirements

- (c) To document compliance with Condition D.1.12, the Permittee shall maintain once per **day** ~~shift~~ records of the ~~total static~~ pressure drop and flow rate.

D.2.10 Record Keeping Requirements

- (b) To document compliance with Condition D.2.8, the Permittee shall maintain records once per **day** ~~shift~~ of the ~~total static~~ pressure drop.

Change 7:

Paragraph (a) of Condition D.2.9 (Broken or Failed Baghouse) has been deleted. For multi-compartment baghouses, the permit will not specify what actions the Permittee needs to take in response to a broken bag. However, a requirement has been added to Condition D.2.5 requiring the Permittee to notify IDEM if a broken bag is detected and the control device will not be repaired for more than ten (10) days. This notification allows IDEM to take any appropriate actions if the emission unit will continue to operate for a long period of time while the control device is not operating in optimum condition.

Paragraph (b) of this condition has been revised for those processes that operate in batch mode. The condition required an emission unit to be shut down immediately in case of baghouse failure. However, IDEM is aware there can be safety issues with shutting down a process in the middle of a batch. IDEM also realizes that in some situations, shutting down an emissions unit mid-process can cause equipment damage. Therefore, since it is not always possible to shut down a process with material remaining in the equipment, IDEM has revised the condition to state that in the case of baghouse failure, the feed to the process must be shut off immediately, and the process shall be shut

down as soon as practicable.

D.2.5 Particulate Matter (PM)

In order to comply with Conditions D.2.1, D.2.2 and D.2.3:

- (a) The Main Baghouse (MBH) for PM and PM₁₀ control shall be in operation and control emissions from the east castings cooling (EU5B), the casting shakeout (EU6) and the sand handling operation (EU9) at all times that the facilities are in operation.
- (b) The Mold/Dump Baghouse (MDBH) for PM and PM₁₀ control shall be in operation and control emissions from the pouring/casting operation (EU4) and the south castings cooling operation (EU5A) at all times that the facilities are in operation.
- (c) The Grinding Baghouse (GBH) for PM and PM₁₀ control shall be in operation and control emissions from the grinding area (EU8A) at all times that the facility is in operation.
- (d) The Wheelabrator Baghouse (WBH) for PM and PM₁₀ control shall be in operation and control emissions from the Wheelabrator shot blast (EU8B) at all times that the facility is in operation.
- (e) **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.**

~~D.2.940~~ Broken or Failed Bag Detection

~~In the event that bag failure has been observed:~~

- ~~(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C—Compliance Response Plan—Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 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.~~
- ~~(b)~~ (a) For a single compartment baghouses **controlling emissions from a process operated continuously**, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then a failed units and the associated process **shall** be shut down immediately until the failed units have **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).

		Limited Potential to Emit (tons/year)							
Process/emission unit		PM	PM ₁₀	SO ₂	NO _x	VOC	CO	Lead	Other HAPs
EU8A	Cleaning and Finishing (grinding only)	0.291	0.074	0.00	0.00	0.00	0.00	0.001	0.006
EU8B	Cleaning and Finishing (shotblast only)	5.537	1.405	0.00	0.00	0.00	0.00	0.024	0.117
Stack B3 (Castings Shakeout EU6, Sand Handling EU9, East Castings Cooling EU5B)		34.604	25.052	0.00	0.00	6.78	33.9 0.00	0.068	0.023
Stack B4 (South Castings Cooling EU5A and Pouring/Casting EU4)		24.0	23.488	0.113	0.057	0.791			
EU10	Oil core oven	7.29	7.29	0.125	1.64	0.00	0.00	0.00	0.00
EU11	Shell core machines	0.00	0.00	1.05	1.64	0.00	0.00	0.00	5.32
EU12	Core wash/mold part	0.00	0.00	0.00	0.00	13.25	0.00	0.00	0.980
Insignificant combustion		0.017	0.070	0.005	0.920	0.051	0.773	0.00	0.017
Unpaved roads		0.910	0.280	0.00	0.00	0.00	0.00	0.00	0.00
Other insignificant		1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00
Total PTE After Issuance		99.99	99.99	8.07	4.83	22.89	99.77	9.32	7.41

Change 9:

Condition D.4.1 has been changed as shown to reflect the current title of state rule 326 IAC 6-3-2:

D.4.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (**Particulate Emission Limitations for Manufacturing Processes** ~~Process Operations~~), the allowable PM emission rate from the insignificant brazing equipment, cutting torches, soldering equipment and welding equipment shall not exceed the allowable PM emission rate based on the following equation:

Change 10:

IDEM, OAQ has determined that the following statements are unnecessary, and thus have been removed from Section D.4 of the permit:

Compliance Determination Requirements

~~There are no specific Compliance Determination Requirements applicable to these emission units.~~

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

~~There are no specific Compliance Monitoring Requirements applicable to these emission units.~~

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a
Federally Enforceable State Operating Permit (FESOP)

Source Background and Description

Source Name: Warsaw Foundry Company, Inc.
Source Location: 1212 North Detroit Street, Warsaw, Indiana 46580
County: Kosciusko
SIC Code: 3321
Operation Permit No.: F 085-14520-00006
Permit Reviewer: Edward A. Longenberger

The Office of Air Quality (OAQ) has reviewed a FESOP application from Warsaw Foundry Company, Inc. relating to the operation of a gray and ductile iron foundry.

Permitted Emission Units and Pollution Control Equipment

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

- (a) One (1) charge handling operation, identified as EU1, installed prior to 1960, capacity: 5.0 tons of metal per hour.
- (b) One (1) cupola, identified as EU2, installed prior to 1960, equipped with a natural gas-fired afterburner rated at 1.0 million British thermal units per hour, and a venturi scrubber, exhausted through Stack C1, capacity: 5.0 tons of metal per hour.
- (c) One (1) magnesium treatment process, identified as magnesium treatment process, installed in 2000, capacity: 1.5 tons of metal per hour.
- (d) One (1) inoculation process, identified as inoculation process, installed in 1960, capacity: 5.0 tons of metal per hour.
- (e) One (1) pouring/casting operation, identified as EU4, installed prior to 1979, controlled by Mold/Dump Baghouse (MDBH) and exhausted through Stack B4, capacity: 5.0 tons of metal per hour and 30 tons of sand per hour.
- (f) One (1) castings cooling operation, identified as EU5A and EU5B, installed prior to 1979, with south area EU5A controlled by Mold/Dump Baghouse (MDBH) and exhausted through Stack B4, and east area EU5B controlled by Main Baghouse (MBH) and exhausted through Stack B3, capacity: 5.0 tons of metal per hour and 30 tons of sand per hour.
- (g) One (1) castings shakeout operation, identified as EU6, installed prior to 1979, equipped with a baghouse, identified as Main Baghouse (MBH), installed in 1991, exhausted through Stack B3, capacity: 5.0 tons of metal per hour and 30 tons of sand per hour.
- (h) One (1) cleaning and finishing operation, identified as EU8A and EU8B, installed prior to 1979, consisting of the following:
 - (1) One (1) grinding area (EU8A), consisting of two (2) single station and two (2) double

station grinding machines, equipped with a baghouse, identified as Grinding Baghouse (GBH), exhausted through Stack B1, capacity: 4.5 tons of metal per hour.

- (2) One (1) Wheelabrator shot blast unit (EU8B), equipped with a baghouse, identified as Wheelabrator Baghouse (WBH), exhausted through Stack B2, capacity: 4.5 tons of metal per hour.
- (l) One (1) sand handling operation, identified as EU9, installed prior to 1979, equipped with a baghouse, identified as Main Baghouse (MBH), installed in 1991, exhausted through Stack B3, capacity: 30.0 tons of sand per hour.
- (j) One (1) natural gas-fired oil core oven, identified as EU10, installed in 1946, exhausted through Stack O1, rated at 0.5 million British thermal units per hour, capacity: 0.75 tons of sand per hour.
- (k) One (1) core wash and mold parting, identified as EU12, installed prior to 1987, capacity: 0.85 tons of cores per hour, 0.178 pounds of core wash per hour, 0.226 pounds of thinner per hour, and 2.76 pounds of liquid parting per hour.

Unpermitted Emission Units and Pollution Control Equipment

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

- (l) One (1) electric induction furnace, identified as EU3, installed in November 2000, capacity: 2.5 tons of metal per hour.
- (m) One (1) core making operation, consisting of fifteen (15) shell core machines, collectively identified as EU11, capacity: 0.75 tons of sand per hour, total, consisting of the following:
 - (1) Three (3) U180 Shalco machines, installed in 1998, capacity: 200 pounds per hour, each.
 - (2) One (1) U150 Shalco machine, installed in 1998, capacity: 100 pounds per hour.
 - (3) Three (3) Dependable 100 machines, installed between 1960 and 1980, capacity: 100 pounds per hour, each.
 - (4) Five (5) Dependable 200 machines, installed between 1960 and 1980, capacity: 150 pounds per hour, each.
 - (5) One (1) Dependable 300 machines, installed between 1960 and 1980, capacity: 200 pounds per hour.
 - (6) Two (2) Redford HP43 machines, installed between 1960 and 1980, capacity: 200 pounds per hour, each.

New Emission Units and Pollution Control Equipment Receiving Prior Approval

There are no new facilities proposed at this source during this review process.

Emission Units and Pollution Control Equipment Removed

The following facilities have been removed from the source and are not included in the proposed permit:

- (a) One (1) castings shakeout operation (10-C), identified as EU7, installed in 1995, equipped with a baghouse, identified as 10-C shakeout baghouse (now Wheelabrator Baghouse), capacity: 2.5 tons of metal per hour and 15 tons of sand per hour.
- (b) One (1) sand handling system, identified as 10-C sand handling system, equipped with a baghouse, identified as 10-C main baghouse (now Mold/Dump Baghouse), capacity: 15.0 tons of sand per hour.

Insignificant Activities

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour with a total rating of 1.20 million British thermal units per hour consisting of:
 - Two (2) ladle heating torches, identified as EU13, installed prior to 1987, capacity: 0.60 million British thermal units per hour, total.
- (b) The following VOC and HAP storage containers: vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.
- (c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]
- (d) 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]
- (e) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (f) Paved and unpaved roads and parking lots with public access.

Existing Approvals

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

- (a) R 085-2116-00006, issued on September 16, 1991;
- (b) Registered Construction and Operation Status letter, issued on August 11, 1989;
- (c) OP 43-06-87-0198, issued on December 13, 1983; and
- (d) OP 43-06-83-0175, issued on May 25, 1979.

All conditions from previous approvals were incorporated into this FESOP.

Enforcement Issue

- (a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the heading *Unpermitted Emission Units and Pollution Control Equipment*.

- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.
- (c) IDEM is aware that the source was not issued a FESOP by December 14, 1996 nor did they submit a Part 70 application by that date.
- (d) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the operation permit rules.

The following past Agreed Orders have been signed by Warsaw Foundry and require that the source take the agreed upon action:

- (a) Agreed Order Case No. 200-2-11606-A, signed March 17, 2003:
 - (1) The Permittee shall install a thermocouple activated alarm on the afterburner controlling emissions from the cupola furnace. The Permittee shall operate the alarm at all times that the cupola is operating. The alarm shall be set to sound when the afterburner temperature decreases below a temperature associated with proper and effective afterburner operations.
 - (2) The Permittee shall also develop a written standard operation procedure (SOP), for the cupola operators including, but not limited to, appropriate response and corrective action steps to take, when the afterburner alarm sounds. The Permittee shall post the SOP in the place of clear visibility in the vicinity of the cupola operators' workspace.
- (b) Agreed Order Case No. A-1864, signed February 27, 1992:

The Permittee shall add on to the existing scrubber stack height an increase of stack height to adequately disperse the plume into the atmosphere.

Recommendation

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

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

An administratively complete FESOP application for the purposes of this review was received on June 7, 2001. Additional information was received on February 11, 2002, June 15, 2004, September 30, 2004, and February 28, 2005.

There was no notice of completeness letter mailed to the source.

Emission Calculations

See pages 1 through 12 of Appendix A of this document for detailed emissions calculations.

Potential to Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including

air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	1,385
PM ₁₀	578
SO ₂	27.9
VOC	46.5
CO	3,176
NO _x	5.69

Note: For the purpose of determining Title V applicability for particulates, PM₁₀, not PM, is the regulated pollutant in consideration.

HAPs	Potential To Emit (tons/year)
Lead Compounds	25.9
Other HAPs	10.8
TOTAL	36.7

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM₁₀ and CO are equal to or greater than one hundred (100) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7. The source will be issued a FESOP because the source will limit its emissions below the Title V levels.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7. The source will be issued a FESOP because the source will limit its emissions below the Title V levels.
- (c) Fugitive Emissions
 This type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2. Therefore, the fugitive emissions are counted toward determination of PSD applicability.

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 enforceable only after issuance of this FESOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

		Limited Potential to Emit (tons/year)							
Process/emission unit		PM	PM ₁₀	SO ₂	NO _x	VOC	CO	Lead	Other HAPs
EU1	Charge handling	3.39	2.04	0.00	0.00	0.00	0.00	0.013	0.004
EU2	Worst case melting	23.04	53.59	6.78	0.565	1.02	99.0	9.12	0.915
EU3									
Inoculation or magnesium treatment		10.17	10.17	0.00	0.00	0.00	0.00	0.00	0.00
EU8A	Cleaning and Finishing (grinding only)	0.420	0.109	0.00	0.00	0.00	0.00	0.001	0.006
EU8B	Cleaning and Finishing (shotblast only)	7.99	2.07	0.00	0.00	0.00	0.00	0.024	0.117
Stack B3 (Castings Shakeout EU6, Sand Handling EU9, East Castings Cooling EU5B)		43.34	19.84	0.00	0.00	6.78	0.00	0.068	0.023
Stack B4 (South Castings Cooling EU5B and Pouring/Casting EU4)		2.424	3.534	0.113	0.057	0.791	0.00	0.090	0.030
EU10	Oil core oven	7.29	7.29	0.125	1.64	0.00	0.00	0.00	0.00
EU11	Shell core machines	0.00	0.00	1.05	1.64	0.00	0.00	0.00	5.32
EU12	Core wash/mold part	0.00	0.00	0.00	0.00	13.25	0.00	0.00	0.980
Insignificant combustion		0.017	0.070	0.005	0.920	0.051	0.773	0.00	0.017
Unpaved roads		0.910	0.280	0.00	0.00	0.00	0.00	0.00	0.00
Other insignificant		1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00
Total PTE After Issuance		99.99	99.99	8.07	4.83	22.89	99.77	9.32	7.41

The limits in the above table are based on an annual throughput limit of less than 11,300 tons of metal melted per twelve (12) consecutive month period. See the State Rule Applicability section of this document for more details.

County Attainment Status

The source is located in Kosciusko County.

Pollutant	Status
PM ₁₀	Attainment
SO ₂	Attainment
NO ₂	Attainment
1-Hour Ozone	Attainment
8-Hour Ozone	Attainment
CO	Attainment
Lead	Attainment

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

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) The source is not subject to the National Emissions Standards for Hazardous Air Pollutants for Iron and Steel Foundries (40 CFR Part 63.7700, Subpart EEEEE and 326 IAC 20) since the HAP emissions are limited to less than the major source thresholds defined in 40 CFR 63.2.
- (c) The insignificant degreasing operations are not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), Subpart T (40 CFR 63.460-469) since no halogenated HAP solvents are used.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This gray and ductile iron foundry, originally constructed in 1923, is one (1) of the twenty-eight (28) major PSD source categories (secondary metal production). Therefore, emissions of PM, PM₁₀ and CO are each limited to less than one hundred (100) tons per year, in order for the source to remain

a minor PSD source, pursuant to 326 IAC 2-2. Emissions of lead are also limited to less than twenty-five (25) tons per year in order to remain a minor PSD source pursuant to 326 IAC 2-2-1(w)(4).

The total amount of metal melted shall be limited to less than 11,300 tons per twelve (12) consecutive month period with compliance determined at the end of each month. This throughput limit, combined with the following after control emission limits, will render the requirements of 326 IAC 2-2 not applicable:

Process / Unit ID	PM Emission Limit (lbs/ton)	PM ₁₀ Emission Limit (lbs/ton)	CO Emission Limit (lbs/ton)	Lead Emission Limit (lbs/ton)
Charge Handling (EU1)	0.60	0.361	-	-
Cupola (EU2)	4.077	9.48	17.5	1.614
Electric Induction Furnace (EU3)	0.90	0.86	-	-
Inoculation	1.80	1.80	-	-
Magnesium Treatment	1.80	1.80	-	-
Cleaning and Finishing (grinding only) (EU8A)	0.0743	0.0193	-	-
Cleaning and Finishing (shotblast only) (EU8B)	1.414	0.366	-	-

The following pounds per hour limitations are needed for Stacks B3 and B4, which each exhaust emissions from two different processes:

Process / Unit ID	PM Limit (lbs/hour)	PM ₁₀ Limit (lbs/hour)
Stack B3 (Castings Shakeout EU6, Sand Handling EU9, East Castings Cooling EU5B)	9.89	4.53
Stack B4 (South Castings Cooling EU5B and Pouring/Casting EU4)	0.553	0.807

The above pound per hour limitations are based on potential operating hours of 8,760 hours per year.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting) because it has the potential to emit greater than five (5) tons per year of lead. In accordance with the compliance schedule in 326 IAC

2-6-3, an emission statement must be submitted by July 1, 2007, and triennially thereafter. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 2-8-4 (FESOP)

Pursuant to this rule, the potential to emit of PM₁₀ and CO shall be limited to less than one hundred (100) tons per year. In addition, the potential to emit of a single HAP shall be limited to less than ten (10) tons per year and the potential to emit of total HAPs shall be limited to less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 2-7 do not apply.

The total amount of metal melted shall be limited to less than 11,300 tons per twelve (12) consecutive month period with compliance determined at the end of each month. This throughput limit, combined with the following after control emission limits, will ensure that PM₁₀ and CO emissions are limited to less than one hundred (100) tons per year, and lead emissions are less than ten (10) tons per year, in order to satisfy the requirements of 326 IAC 2-8-4:

Process / Unit ID	PM ₁₀ Emission Limit (lbs/ton)	CO Emission Limit (lbs/ton)	Lead Emission Limit (lbs/ton)
Charge Handling (EU1)	0.361	-	-
Cupola (EU2)	9.48	17.5	1.614
Electric Induction Furnace (EU3)	0.86	-	-
Inoculation	1.80	-	-
Magnesium Treatment	1.80	-	-
Cleaning and Finishing (grinding only) (EU8A)	0.0193	-	-
Cleaning and Finishing (shotblast only) (EU8B)	0.366	-	-

The following pounds per hour limitations are needed for Stacks B3 and B4, which each exhaust emissions from two different processes:

Process / Unit ID	PM ₁₀ Limit (lbs/hour)
Stack B3 (Castings Shakeout EU6, Sand Handling EU9, East Castings Cooling EU5B)	4.53
Stack B4 (South Castings Cooling EU5B and Pouring/Casting EU4)	0.807

The above pound per hour limitations are based on potential operating hours of 8,760 hours per year.

Warsaw Foundry Company, Inc.
Warsaw, Indiana
Permit Reviewer:MES

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326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in 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 Part 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 2-4.1-1 (New source toxics control)

The unrestricted potential emissions from the equipment constructed after the July 27, 1997 applicability date of this rule are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year for total HAPs. Therefore, the requirements of 326 IAC 2-4.1 do not apply.

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

The particulate emission rate from each of the facilities listed in the following table shall not exceed the pound per hour value when operating at the specified process weight rate:

Unit ID/ Process	Process Weight Rate (tons/hr)	Allowable PM Emission Rate (lbs/hr)	Potential Emissions (lbs/hr)
Charge Handling (EU1)	5.0	12.1	3.00 uncontrolled
Electric Induction Furnace (EU3)	2.5	7.58	2.25 uncontrolled
Inoculation	5.0	12.1	9.00 uncontrolled
Magnesium Treatment	1.5	5.38	2.70 uncontrolled
Cleaning and Finishing (grinding only) (EU8A) (Stack B1)	4.5	11.2	0.153 controlled
Cleaning and Finishing (shotblast only) (EU8B) (Stack B2)	4.5	11.2	2.907 controlled
Oil Core Oven (EU10) (Stack O1)	0.75	3.38	1.67 uncontrolled
Stack B3 (Castings Shakeout EU6, Sand Handling EU9, East Castings Cooling EU5B)	35.0	41.3	5.10 controlled

Unit ID/ Process	Process Weight Rate (tons/hr)	Allowable PM Emission Rate (lbs/hr)	Potential Emissions (lbs/hr)
Stack B4 (South Castings Cooling EU5B and Pouring/Casting EU4)	35.0	41.3	28.0 uncontrolled

These limitations are based on 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:

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

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:

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

Based on the calculations in Appendix A of this document, all of the above emission units will comply with the requirements of 326 IAC 6-3. The baghouses shall be in operation at all times the main castings shakeout (EU6), the cleaning and finishing (EU8A and B), and the sand handling (EU9) processes are in operation, in order to comply with these limits.

Note that the cupola (EU2) is subject to the requirements of 326 IAC 11-1, and therefore is not subject to the requirements of 326 IAC 6-3.

326 IAC 8-1-6 (New facilities; general reduction requirements)

The potential to emit of VOC from the cupola (EU2), the pouring/casting process (EU4), the core making operation (EU11), and the core wash / mold parting (EU12) are each less than twenty-five (25) tons per year. Note that the core wash / mold parting (EU12) was the only emission unit constructed in 1987 which emits VOC, and the core making operation (EU11) was the only unit constructed in 1998 which emits VOC. Therefore, none of the emission units are currently subject to the requirements of 326 IAC 8-1-6.

326 IAC 9-1 (Carbon Monoxide Emission Limits)

The one (1) cupola (EU2) is not subject to the requirements 326 IAC 9-1, because it was constructed prior to the March 21, 1972 applicability date of this rule.

326 IAC 11-1 (Existing Foundries)

This existing foundry is subject to the requirements of 326 IAC 11-1 because it was constructed prior to December 6, 1968. Pursuant to 326 IAC 11-1-2, the particulate matter emissions from the one (1) cupola, shall not exceed 16.65 pounds per hour when operating at a process weight rate of 5.0 tons per hour. The controlled particulate matter emissions from the cupola are 9.32 pounds per hour,

which complies with the requirements of this rule. The afterburner and wet scrubber shall be in operation at all times the cupola is in operation, in order to comply with this limit.

State Rule Applicability - Insignificant Activities

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable particulate emission rate from the brazing equipment, cutting torches, soldering equipment and welding equipment shall not exceed the allowable particulate emission rate based on 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:

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

If the process weight rate of any of these operations is less than one hundred pounds per hour, then the allowable particulate emission rate shall be 0.551 pounds per hour.

326 IAC 8-3-2 (Cold Cleaner Operations)

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

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

326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for a cold cleaner degreaser without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));
 - (B) The solvent is agitated; or

- (C) The solvent is heated.
- (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^{EC}) (one hundred degrees Fahrenheit (100^{EF})), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
- (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^{EC}) (one hundred degrees Fahrenheit (100^{EF})), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^{EC}) (one hundred twenty degrees Fahrenheit (120^{EF})):
 - (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 or 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), for a cold cleaning facility construction of which commenced after July 1, 1990, 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.

326 IAC 15-1 (Lead Emission Limitations)

This source is not subject to the requirements of 326 IAC 15-1 because it is not specifically listed in 326 IAC 15-1-2.

Testing Requirements

(a) Previous Stack Tests

- (1) Per an agreed order, stack testing of the one (1) cupola (EU2) was performed on March 1 and 2, 1994, with the cupola operating at 4.3 tons per hour. The one (1) cupola was in compliance with the allowable particulate emission rate of 16.65 pounds per hour pursuant to 326 IAC 11-1 since the measured particulate emission rate was 7.8 pounds per hour.
- (2) Fugitive dust stack testing of the scrubber stack was performed on November 29, 1984. The scrubber stack was not in compliance with 326 IAC 6-4.

(b) Proposed Stack Tests

All stack tests were conducted more than five (5) years ago, therefore, stack testing is required for the following emission units:

- (1) PM, PM₁₀ and CO testing shall be performed for the one (1) cupola (EU2), in order to demonstrate compliance with 326 IAC 2-2, 326 IAC 11-1, and 326 IAC 2-8-4.
- (2) In order to demonstrate compliance with 326 IAC 2-2, 326 IAC 6-3-2 and 326 IAC 2-8-4, PM and PM₁₀ testing shall be performed for Stacks B1 through B4, which are associated with the pouring and cooling processes (EU4, EU5A and EU5B) the castings shakeout process (EU6), the cleaning and finishing operations (EU8), and the sand handling processes (EU9).

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

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

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

- (a) The one (1) cupola (EU2) has applicable compliance monitoring conditions as specified below:
 - (1) Visible emission notations of the cupola stack exhaust (Stack C1) and the cupola charge door shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal. For

processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan – Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.

- (2) The Permittee shall record the flow rate and the total static pressure drop across the scrubber at least once per shift when the one (1) cupola is in operation. When for any one (1) reading, the pressure drop across the scrubber is less than the minimum of 16.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. When for any one (1) reading, the flow rate for the scrubbing liquor is less than a minimum of 198 gallons of water per minute or a flow rate established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading or a flow rate less than the above mentioned minimums is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- (3) An inspection shall be performed each calendar quarter of the scrubber controlling the cupola. Inspections required by this condition shall not be performed in consecutive months. All defective scrubber parts shall be replaced.
- (4) In the event that a scrubber failure has been observed:

If failure is indicated by a significant drop in the scrubber's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if scrubber failure is determined by other means, such as flow rates, air infiltration, or leaks, failed units and the associated process will be shut down immediately until the failed units have 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).
- (5) The Permittee shall continuously record the afterburner temperature when the one (1) cupola is in operation. For the purpose of this condition, continuously means no less than once per minute. When for any one (1) reading, the afterburner temperature is less than 1,400 degrees Fahrenheit or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A temperature reading that is below the above mentioned minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

These monitoring conditions are necessary because the afterburner and wet scrubber for the cupola must operate properly to ensure compliance with 326 IAC 11-1 (Existing Foundries) 326 IAC 2-2 (PSD) and 326 IAC 2-8 (FESOP).

- (b) The east castings cooling operation (EU5B), the castings shakeout process (EU6) and the sand handling process (EU9) have applicable compliance monitoring conditions as specified below:
- (1) Visible emissions notations of the east castings cooling operation (EU5B), the castings shakeout process (EU6) and the sand handling process stack exhaust (Stack B3) shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan – Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.
 - (2) The Permittee shall record the total static pressure drop across the Main Baghouse (MBH) used in conjunction with the east castings cooling operation, the castings shakeout process and the sand handling process, at least once per shift when any of the processes are in operation. When for any one reading, the pressure drop across the MBH is outside the normal range of 4.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. 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 - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
 - (3) An inspection shall be performed each calendar quarter of all bags controlling the east castings cooling operation, the castings shakeout process and the sand handling process. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.
 - (4) In the event that bag failure has been observed:
 - (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation,

Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 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.

- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have 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).

These monitoring conditions are necessary because the baghouse for the east castings cooling operation, the castings shakeout process and the sand handling process must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) 326 IAC 2-2 (PSD) and 326 IAC 2-8 (FESOP).

- (c) The pouring/casting process (EU4) and the south castings cooling operation (EU5A) have applicable compliance monitoring conditions as specified below:
 - (1) Visible emissions notations of the pouring/casting process and the south castings cooling operation stack exhaust (Stack B4) shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan – Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.
 - (2) The Permittee shall record the total static pressure drop across the Mold/Dump Baghouse (MDBH) used in conjunction with the pouring/casting process and the south castings cooling operation, at least once per shift when either of the processes are in operation. When for any one reading, the pressure drop across the MDBH is outside the normal range of 4.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. 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 - Compliance Response Plan -

Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

- (3) An inspection shall be performed each calendar quarter of all bags controlling the pouring/casting process and the south castings cooling operation. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.
- (4) In the event that bag failure has been observed:
 - (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 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.
 - (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have 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).

These monitoring conditions are necessary because the baghouse for the pouring/casting process and the south castings cooling operation must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) 326 IAC 2-2 (PSD) and 326 IAC 2-8 (FESOP).

- (d) The cleaning and finishing operations (EU8A and EU8B) have applicable compliance monitoring conditions as specified below:
 - (1) Visible emissions notations of the cleaning and finishing operations stack exhausts (Stacks B1 and B2) shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee

who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan – Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.

- (2) The Permittee shall record the total static pressure drop across the Grinding Baghouse (GBH) and Wheelabrator Baghouse (WBH) used in conjunction with the cleaning and finishing operations, at least once per shift when the cleaning and finishing operations are in operation. When for any one reading, the pressure drop across the GBH is outside the normal range of 1.0 and 5.0 inches of water or a range established during the latest stack test, or the pressure drop across the WBH is outside the normal range of 4.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned ranges is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- (3) An inspection shall be performed each calendar quarter of all bags controlling the cleaning and finishing operations. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.
- (4) In the event that bag failure has been observed:
 - (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 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.
 - (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emer-

gency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

These monitoring conditions are necessary because the baghouses for the cleaning and finishing operations must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) 326 IAC 2-2 (PSD) and 326 IAC 2-8 (FESOP).

Conclusion

The operation of this gray and ductile iron foundry shall be subject to the conditions of the attached proposed FESOP No.: F 085-14520-00006.

**Appendix A: Potential Emission Calculations
Grey Iron Foundry Operations**

**Company Name: Warsaw Foundry Company, Inc.
Address City IN Zip: 1212 North Detroit Street, Warsaw, Indiana 46580
FESOP: F 085-14520
Plt ID: 085-00006
Reviewer: Edward A. Longenberger
Application Date: June 7, 2001**

annual melt limit	11,300	tons/yr
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Emission Unit	EU1 Charge Handling (Prior to 1960)							
	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	Limited* Emission Rate (tons/yr)
PM	5.000	0.600	3.000	13.140	0.00%	3.000	13.140	3.390
PM-10	5.000	0.360	1.800	7.884	0.00%	1.800	7.884	2.034
SO2	5.000	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
NOx	5.000	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
VOC	5.000	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
CO	5.000	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
Lead	5.000	2.3E-03	0.012	0.050	0.00%	0.012	0.050	0.013
chromium	5.000	2.3E-04	0.001	0.005	0.00%	0.001	0.005	0.001
cobalt	5.000	2.0E-05	0.000	0.000	0.00%	0.000	0.000	0.000
nickel	5.000	4.0E-04	0.002	0.009	0.00%	0.002	0.009	0.002
arsenic	5.000	8.0E-05	0.000	0.002	0.00%	0.000	0.002	0.000
cadmium	5.000	4.0E-05	0.000	0.001	0.00%	0.000	0.001	0.000
selenium	5.000	1.0E-05	0.000	0.000	0.00%	0.000	0.000	0.000

Emission factors from FIRES 6.23 (SCC 3-04-003-15)

Emission Unit	EU2 Cupola (Prior to 1960)							
	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	Limited* Emission Rate (tons/yr)
PM	5.000	13.800	69.000	302.220	86.50%	9.315	302.220	10.526
PM-10	5.000	12.400	62.000	271.560	86.50%	8.370	36.661	9.458
SO2	5.000	1.200	6.000	26.280	0.00%	6.000	26.280	6.780
NOx	5.000	0.100	0.500	2.190	0.00%	0.500	2.190	0.565
VOC	5.000	0.180	0.900	3.942	0.00%	0.900	3.942	1.017
CO	5.000	145.000	725.000	3175.500	90.00%	72.500	317.550	81.925
Lead	5.000	1.100	5.500	24.090	85.00%	0.825	3.614	0.932
chromium	5.000	7.2E-03	0.036	0.157	0.00%	0.036	0.157	0.041
cobalt	5.000	5.5E-04	0.003	0.012	0.00%	0.003	0.012	0.003
nickel	5.000	4.8E-03	0.024	0.106	0.00%	0.024	0.106	0.027
arsenic	5.000	1.8E-03	0.009	0.039	0.00%	0.009	0.039	0.010
cadmium	5.000	9.5E-04	0.005	0.021	0.00%	0.005	0.021	0.005
manganese	5.000	2.4E-02	0.121	0.530	0.00%	0.121	0.530	0.137
selenium	5.000	2.8E-04	0.001	0.006	0.00%	0.001	0.006	0.002
phenol	5.000	1.2E-02	0.058	0.252	0.00%	0.058	0.252	0.065
benzene	5.000	6.2E-02	0.312	1.368	0.00%	0.312	1.368	0.353
formaldehyde	5.000	1.3E-03	0.006	0.028	0.00%	0.006	0.028	0.007
xylene	5.000	2.2E-02	0.108	0.473	0.00%	0.108	0.473	0.122
toluene	5.000	2.5E-02	0.127	0.556	0.00%	0.127	0.556	0.143

Emission factors from FIRES 6.23 (SCC 3-04-003-01)

Emission Unit	EU3 Electric Induction Furnace (2000)							
	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	Limited* Emission Rate (tons/yr)
Pollutant								
PM	2.500	0.900	2.250	9.855	0.00%	2.250	9.855	5.085
PM-10	2.500	0.860	2.150	9.417	0.00%	2.150	9.417	4.859
SO2	2.500	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
NOx	2.500	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
VOC	2.500	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
CO	2.500	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
Lead	2.500	0.100	0.250	1.095	0.00%	0.250	1.095	0.565
chromium	2.500	2.3E-04	0.001	0.003	0.00%	0.001	0.003	0.001
cobalt	2.500	2.0E-05	0.000	0.000	0.00%	0.000	0.000	0.000
nickel	2.500	4.0E-04	0.001	0.004	0.00%	0.001	0.004	0.002
arsenic	2.500	8.0E-05	0.000	0.001	0.00%	0.000	0.001	0.000
cadmium	2.500	4.0E-05	0.000	0.000	0.00%	0.000	0.000	0.000
manganese	2.500	2.3E-02	0.056	0.246	0.00%	0.056	0.246	0.127
selenium	2.500	1.0E-05	0.000	0.000	0.00%	0.000	0.000	0.000

Emission factors from FIRES 6.23 (SCC 3-04-003-03)

Emission Unit	EU4 Pouring/Casting (prior to 1979) Stack B4							
	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	Limited* Emission Rate (tons/yr)
Pollutant								
PM	5.000	4.200	21.000	91.980	96.00%	0.840	3.679	0.949
PM-10	5.000	2.060	10.300	45.114	96.00%	0.412	1.805	0.466
SO2	5.000	0.020	0.100	0.438	0.00%	0.100	0.438	0.113
NOx	5.000	0.010	0.050	0.219	0.00%	0.050	0.219	0.057
VOC	5.000	0.140	0.700	3.066	0.00%	0.700	3.066	0.791
CO	5.000	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
Lead	5.000	0.016	0.080	0.350	0.00%	0.080	0.350	0.090
chromium	5.000	1.6E-03	0.008	0.035	0.00%	0.008	0.035	0.009
cobalt	5.000	1.3E-04	0.001	0.003	0.00%	0.001	0.003	0.001
nickel	5.000	2.8E-03	0.014	0.062	0.00%	0.014	0.062	0.016
arsenic	5.000	5.5E-04	0.003	0.012	0.00%	0.003	0.012	0.003
cadmium	5.000	2.5E-04	0.001	0.005	0.00%	0.001	0.005	0.001
selenium	5.000	4.0E-05	0.000	0.001	0.00%	0.000	0.001	0.000

Emission factors from FIRES 6.23 (SCC 3-04-003-20)

Emission Unit	EU5 Castings Cooling (Prior to 1979) Stacks B3, B4							
	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	Limited* Emission Rate (tons/yr)
Pollutant								
PM	5.000	1.400	7.000	30.660	96.00%	0.280	1.226	0.316
PM-10	5.000	1.400	7.000	30.660	96.00%	0.280	1.226	0.316
SO2	5.000	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
NOx	5.000	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
VOC	5.000	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
CO	5.000	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
Lead	5.000	0.000	0.000	0.000	0.00%	0.000	0.000	0.000

Emission factors from FIRES 6.23 (SCC 3-04-003-25)

Emission Unit	EU6 Main Castings Shakeout (prior to 1979)							
	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	Limited* Emission Rate (tons/yr)
Stack B3								
Pollutant								
PM	5.000	3.200	16.000	70.080	96.00%	0.640	2.803	0.723
PM-10	5.000	2.240	11.200	49.056	96.00%	0.448	1.962	0.506
SO ₂	5.000	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
NO _x	5.000	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
VOC	5.000	1.200	6.000	26.280	0.00%	6.000	26.280	6.780
CO	5.000	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
Lead	5.000	0.012	0.060	0.263	0.00%	0.060	0.263	0.068
chromium	5.000	1.2E-03	0.006	0.027	0.00%	0.006	0.027	0.007
cobalt	5.000	1.0E-04	0.001	0.002	0.00%	0.001	0.002	0.001
nickel	5.000	2.1E-03	0.011	0.047	0.00%	0.011	0.047	0.012
arsenic	5.000	4.2E-04	0.002	0.009	0.00%	0.002	0.009	0.002
cadmium	5.000	1.9E-04	0.001	0.004	0.00%	0.001	0.004	0.001
selenium	5.000	3.0E-05	0.000	0.001	0.00%	0.000	0.001	0.000

Emission factors from FIRES 6.23 (SCC 3-04-003-31)

Emission Unit	EU7 10-C Castings Shakeout (1995) - REMOVED FROM SERVICE							
	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	Limited* Emission Rate (tons/yr)
Stack B2								
Pollutant								
PM	0.000	3.200	0.000	0.000	96.00%	0.000	0.000	0.000
PM-10	0.000	2.240	0.000	0.000	96.00%	0.000	0.000	0.000
SO ₂	0.000	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
NO _x	0.000	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
VOC	0.000	1.200	0.000	0.000	0.00%	0.000	0.000	0.000
CO	0.000	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
Lead	0.000	0.012	0.000	0.000	0.00%	0.000	0.000	0.000
chromium	0.000	1.2E-03	0.000	0.000	0.00%	0.000	0.000	0.000
cobalt	0.000	1.0E-04	0.000	0.000	0.00%	0.000	0.000	0.000
nickel	0.000	2.1E-03	0.000	0.000	0.00%	0.000	0.000	0.000
arsenic	0.000	4.2E-04	0.000	0.000	0.00%	0.000	0.000	0.000
cadmium	0.000	1.9E-04	0.000	0.000	0.00%	0.000	0.000	0.000
selenium	0.000	3.0E-05	0.000	0.000	0.00%	0.000	0.000	0.000

Emission factors from FIRES 6.23 (SCC 3-04-003-31)

Emission Unit	EU8 Cleaning and Finishing Grinding and Wheelabrator shot blast (both prior to 1979)							
	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	Limited* Emission Rate (tons/yr)
Stacks B1, B2								
Pollutant								
PM	4.500	17.000	76.500	335.070	96.00%	3.060	13.403	3.842
PM-10	4.500	1.700	7.650	33.507	96.00%	0.306	1.340	0.384
SO ₂	4.500	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
NO _x	4.500	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
VOC	4.500	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
CO	4.500	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
Lead	4.500	0.005	0.020	0.089	0.00%	0.020	0.089	0.025
chromium	4.500	6.5E-03	0.029	0.127	0.00%	0.029	0.127	0.036
cobalt	4.500	5.1E-04	0.002	0.010	0.00%	0.002	0.010	0.003
nickel	4.500	1.1E-02	0.051	0.224	0.00%	0.051	0.224	0.064
arsenic	4.500	2.2E-03	0.010	0.044	0.00%	0.010	0.044	0.012
cadmium	4.500	1.0E-03	0.005	0.020	0.00%	0.005	0.020	0.006
selenium	4.500	1.7E-04	0.001	0.003	0.00%	0.001	0.003	0.001

Emission factors from FIRES 6.23 (SCC 3-04-003-40)

Emission Unit	EU9 Main Sand Handling (prior to 1979)							
	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	Limited* Emission Rate (tons/yr)
Stack B3								
Pollutant								
PM	30.0	3.600	108.000	473.040	96.00%	4.320	18.922	18.922
PM-10	30.0	0.540	16.200	70.956	96.00%	0.648	2.838	2.838
SO2	30.0	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
NOx	30.0	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
VOC	30.0	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
CO	30.0	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
Lead	30.0	0.000	0.000	0.000	0.00%	0.000	0.000	0.000

Emission factors from FIRES 6.23 (SCC 3-04-003-50)

Emission Unit	EU9 (continued) 10-C Sand Handling (prior to 1979) - REMOVED FROM SERVICE							
	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	Limited* Emission Rate (tons/yr)
Stack B4								
Pollutant								
PM	0.0	3.600	0.000	0.000	96.00%	0.000	0.000	0.000
PM-10	0.0	0.540	0.000	0.000	96.00%	0.000	0.000	0.000
SO2	0.0	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
NOx	0.0	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
VOC	0.0	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
CO	0.0	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
Lead	0.0	0.000	0.000	0.000	0.00%	0.000	0.000	0.000

Emission factors from FIRES 6.23 (SCC 3-04-003-50)

Emission Unit	EU10 Oil Core Oven (prior to 1987)							
	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	Limited* Emission Rate (tons/yr)
Stack O1								
Pollutant								
PM	0.750	2.220	1.665	7.293	0.00%	1.665	7.293	7.293
PM-10	0.750	2.220	1.665	7.293	0.00%	1.665	7.293	7.293
SO2	0.750	0.038	0.029	0.125	0.00%	0.029	0.125	0.125
NOx	0.750	0.500	0.375	1.643	0.00%	0.375	1.643	1.643
VOC	0.750	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
CO	0.750	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
Lead	0.750	0.000	0.000	0.000	0.00%	0.000	0.000	0.000

Emission factors from FIRES 6.23 (SCC 3-04-003-53)

Emission Unit	EU11 Shell Core Machines (March and July 1998)							
	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	Limited* Emission Rate (tons/yr)
Stack O1								
Pollutant								
PM	0.750	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
PM-10	0.750	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
SO2	0.750	0.320	0.240	1.051	0.00%	0.240	1.051	1.051
NOx	0.750	0.500	0.375	1.643	0.00%	0.375	1.643	1.643
VOC	0.750	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
CO	0.750	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
Lead	0.750	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
Total HAPs	See Page 12 of TSD App A			5.320	0.00%	N/A	5.320	5.320

Emission factors from FIRES 6.23 (SCC 3-04-003-70)

Emission Unit		EU12 Core Wash/Mold Parting (prior to 1987)						
Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled	Uncontrolled	Control Efficiency (%)	Controlled	Controlled	Limited* Emission Rate (tons/yr)
			Emission Rate (lbs/hr)	Emission Rate (tons/yr)		Emission Rate (lbs/hr)	Emission Rate (tons/yr)	
PM				0.000	0.00%	N/A	0.000	0.000
PM-10				0.000	0.00%	N/A	0.000	0.000
SO2				0.000	0.00%	N/A	0.000	0.000
NOx	See Page 9 of TSD App A			0.000	0.00%	N/A	0.000	0.000
VOC				13.248	0.00%	N/A	13.248	13.248
CO				0.000	0.00%	N/A	0.000	0.000
Lead				0.000	0.00%	N/A	0.000	0.000
Total HAPs				0.980	0.00%	N/A	0.980	0.980

Emission Unit		Inoculation (Prior to 1960)						
Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled	Uncontrolled	Control Efficiency (%)	Controlled	Controlled	Limited* Emission Rate (tons/yr)
			Emission Rate (lbs/hr)	Emission Rate (tons/yr)		Emission Rate (lbs/hr)	Emission Rate (tons/yr)	
PM	5.000	1.800	9.000	39.420	0.00%	9.000	39.420	10.170
PM-10	5.000	1.800	9.000	39.420	0.00%	9.000	39.420	10.170
SO2	5.000	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
NOx	5.000	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
VOC	5.000	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
CO	5.000	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
Lead	5.000	0.000	0.000	0.000	0.00%	0.000	0.000	0.000

Emission factors from FIRES 6.23 (SCC 3-04-003-21)

Emission Unit		Magnesium Treatment (2000)						
Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled	Uncontrolled	Control Efficiency (%)	Controlled	Controlled	Limited* Emission Rate (tons/yr)
			Emission Rate (lbs/hr)	Emission Rate (tons/yr)		Emission Rate (lbs/hr)	Emission Rate (tons/yr)	
PM	1.500	1.800	2.700	11.826	0.00%	2.700	11.826	10.170
PM-10	1.500	1.800	2.700	11.826	0.00%	2.700	11.826	10.170
SO2	1.500	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
NOx	1.500	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
VOC	1.500	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
CO	1.500	0.000	0.000	0.000	0.00%	0.000	0.000	0.000
Lead	1.500	0.000	0.000	0.000	0.00%	0.000	0.000	0.000

Emission factors from FIRES 6.23 (SCC 3-04-003-21)

		Original Equipment (prior to 1979)							
		PM	PM-10	SO2	NOx	VOC	CO	Lead	Other HAPs
		(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
EU1	Charge Handling (Prior to 1960)	13.140	7.884	0.000	0.000	0.000	0.000	0.050	0.004
EU2	Cupola (Prior to 1960)	302.220	271.560	26.280	2.190	3.942	3175.500	24.090	3.547
	Inoculation (Prior to 1960)	39.420	39.420	0.000	0.000	0.000	0.000	0.000	0.000
EU4	Pouring/Casting (prior to 1979)	91.980	45.114	0.438	0.219	3.066	0.000	0.350	0.118
EU5	Castings Cooling (Prior to 1979)	30.660	30.660	0.000	0.000	0.000	0.000	0.000	0.000
EU6	Main Castings Shakeout (prior to 1979)	70.080	49.056	0.000	0.000	26.280	0.000	0.263	0.090
EU8	Cleaning and Finishing	335.070	33.507	0.000	0.000	0.000	0.000	0.089	0.429
EU9	Main Sand Handling (prior to 1979)	473.040	70.956	0.000	0.000	0.000	0.000	0.000	0.000
EU9	10-C Sand Handling (prior to 1979) - REMOVED FROM SERVICE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total		1355.610	548.157	26.718	2.409	33.288	3175.500	24.842	4.188
		1987 Equipment							
		PM	PM-10	SO2	NOx	VOC	CO	Lead	Other HAPs
		(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
EU10	Oil Core Oven (prior to 1987)	7.293	7.293	0.125	1.643	0.000	0.000	0.000	0.000
EU12	Core Wash/Mold Parting (prior to 1987)	0.000	0.000	0.000	0.000	13.248	0.000	0.000	0.980
Total		7.293	7.293	0.125	1.643	13.248	0.000	0.000	0.980
		1995 Equipment							
		PM	PM-10	SO2	NOx	VOC	CO	Lead	Other HAPs
		(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
EU7	10-C Castings Shakeout (1995) - REMOVED FROM SERVICE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		1998 Equipment							
		PM	PM-10	SO2	NOx	VOC	CO	Lead	Other HAPs
		(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
EU11	Shell Core Machines (March and July 1998)	0.000	1.051	1.051	1.643	0.000	0.000	0.000	5.320
		2000 Equipment							
		PM	PM-10	SO2	NOx	VOC	CO	Lead	Other HAPs
		(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
EU3	Electric Induction Furnace (2000)	9.855	9.417	0.000	0.000	0.000	0.000	1.095	0.255
	Magnesium Treatment (2000)	11.826	11.826	0.000	0.000	0.000	0.000	0.000	0.000
Total		21.681	21.243	0.000	0.000	0.000	0.000	1.095	0.255
		Total Unrestricted PTE							
		PM	PM-10	SO2	NOx	VOC	CO	Lead	Other HAPs
		(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
Entire Source		1384.58	577.74	27.89	5.69	46.54	3175.50	25.94	10.74

Limited Emissions

		Original Equipment (prior to 1979)							
		PM	PM-10	SO2	NOx	VOC	CO	Lead	Other HAPs
		(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
EU1	Charge Handling (Prior to 1960)	3.390	2.034	0.000	0.000	0.000	0.000	0.013	0.004
EU2	Cupola (Prior to 1960)	10.526	9.458	6.780	0.565	1.017	81.925	0.932	0.915
	Inoculation (Prior to 1960)	10.170	10.170	0.000	0.000	0.000	0.000	0.000	0.000
EU4	Pouring/Casting (prior to 1979)	0.949	0.466	0.113	0.057	0.791	0.000	0.090	0.030
EU5	Castings Cooling (Prior to 1979)	0.316	0.316	0.000	0.000	0.000	0.000	0.000	0.000
	Main Castings Shakeout (prior to 1979)	0.723	0.506	0.000	0.000	6.780	0.000	0.068	0.023
EU8	Cleaning and Finishing	3.842	0.384	0.000	0.000	0.000	0.000	0.025	0.123
EU9	Main Sand Handling (prior to 1979)	18.922	2.838	0.000	0.000	0.000	0.000	0.000	0.000
EU9	10-C Sand Handling (prior to 1979) - REMOVED FROM SERVICE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total		48.838	26.173	6.893	0.622	8.588	81.925	1.129	1.096
		1987 Equipment							
		PM	PM-10	SO2	NOx	VOC	CO	Lead	Other HAPs
		(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
EU10	Oil Core Oven (prior to 1987)	7.293	7.293	0.125	1.643	0.000	0.000	0.000	0.000
EU12	Core Wash/Mold Parting (prior to 1987)	0.000	0.000	0.000	0.000	13.248	0.000	0.000	0.980
Total		7.293	7.293	0.125	1.643	13.248	0.000	0.000	0.980
		1995 Equipment							
		PM	PM-10	SO2	NOx	VOC	CO	Lead	Other HAPs
		(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
EU7	10-C Castings Shakeout (1995) - REMOVED FROM SERVICE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		1998 Equipment							
		PM	PM-10	SO2	NOx	VOC	CO	Lead	Other HAPs
		(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
EU11	Shell Core Machines (March and July 1998)	0.000	0.000	1.051	1.643	0.000	0.000	0.000	5.320
		2000 Equipment							
		PM	PM-10	SO2	NOx	VOC	CO	Lead	Other HAPs
		(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
EU3	Electric Induction Furnace (2000)	5.085	4.859	0.000	0.000	0.000	0.000	0.565	0.132
	Magnesium Treatment (2000)	10.170	10.170	0.000	0.000	0.000	0.000	0.000	0.000
Total		15.255	15.029	0.000	0.000	0.000	0.000	0.565	0.132

Total Limited and Controlled Emissions

Process/emission unit	PM	PM-10	SO ₂	NO _x	VOC	CO	Lead	Other HAPs
EU1 Charge handling	3.390	2.034	0.000	0.000	0.000	0.000	0.013	0.004
EU2 Worst case melting	10.526	9.458	6.780	0.565	1.017	81.925	0.932	0.915
EU3								
EU4 Pouring/ casting	0.949	0.466	0.113	0.057	0.791	0.000	0.090	0.030
EU5 Castings cooling	0.316	0.316	0.000	0.000	0.000	0.000	0.000	0.000
EU6 Castings shakeout	0.723	0.506	0.000	0.000	6.780	0.000	0.068	0.023
EU7 10-C shakeout	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EU8 Cleaning/ finishing	3.842	0.384	0.000	0.000	0.000	0.000	0.025	0.123
EU9 Sand handling	18.922	2.838	0.000	0.000	0.000	0.000	0.000	0.000
EU9 10-C sand handling	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EU10 Oil core oven	7.293	7.293	0.125	1.643	0.000	0.000	0.000	0.000
EU11 Shell core machines	0.000	0.000	1.051	1.643	0.000	0.000	0.000	5.320
EU12 Core wash/ mold part	0.000	0.000	0.000	0.000	13.248	0.000	0.000	0.980
Inoculation or	10.170	10.170	0.000	0.000	0.000	0.000	0.000	0.000
Mag treatment	10.170	10.170	0.000	0.000	0.000	0.000	0.000	0.000
Insignificant combustion	0.017	0.070	0.006	0.920	0.051	0.773	0.000	0.017
Unpaved roads	0.910	0.280	0.000	0.000	0.000	0.000	0.000	0.000
Other insignificant	1.000	1.000	0.000	0.000	1.000	0.000	0.000	0.000
Total	58.06	34.82	8.07	4.83	22.89	82.70	1.13	7.41

METHODOLOGY

Uncontrolled Emission Rate (lbs/hr) = Throughput (tons/hr) x EF (lbs/ton)

Uncontrolled Emission Rate (tons/yr) = Throughput (tons/hr) x EF (lbs/ton) x 8760 (hrs/yr) / 2000 (lbs/ton)

Controlled Emission Rate (lbs/hr) = Throughput (tons/hr) x EF (lbs/ton) x (1-Control Eff)

Controlled Emission Rate (tons/yr) = Throughput (tons/hr) x EF (lbs/ton) x (1-Control Eff) x 8760 (hrs/yr) / 2000 (lbs/ton)

Limited Emission Rate (tons/yr) = Annual limit (tons/yr) x EF (lbs/ton) / 2000 (lbs/ton) x (1-Control Eff)

Control efficiencies represent minimum control efficiency needed to comply with 326 IAC 2-8 and to limit PM emissions from the entire source to less than 100 tons per year in order to remain a minor PSD source pursuant to 326 IAC 2-2.

* Limited emission rates represent emissions after expected control, and melt and/or sand throughput limits.

All emission factors taken from AP-42 Ch12 Sec10, and/or FIRES Version 6.23.

**Appendix A: Potential Emission Calculations
Miscellaneous Processes - EU12**

Company Name: Warsaw Foundry Company, Inc.
Address City IN Zip: 1212 North Detroit Street, Warsaw, Indiana 46580
FESOP: F 085-14520
Plt ID: 085-00006
Reviewer: Edward A. Longenberger
Date: June 7, 2001

Product	Maximum Usage (lbs/yr)	Weight % VOC	VOC Emissions (tons/yr)	Weight % Trichloroethylene	Trichloroethylene Emissions (tons/yr)
Core and Mold Coating					
Hill and Griffith Core Wash	1560	50.00%	0.39	0.00%	0.00
Trichloroethylene Thinner	1980	100.00%	0.99	99.00%	0.98
Liquid Parting					
Hill and Griffith Super Slik	24219.4	98.00%	11.87	0.00%	0.00
		Total	13.2		0.980

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

Company Name: Warsaw Foundry Company, Inc.
Address City IN Zip: 1212 North Detroit Street, Warsaw, Indiana 46580
FESOP: F 085-14520
Plt ID: 085-00006
Reviewer: Edward A. Longenberger
Date: June 7, 2001

Cupola Afterburner (EU2)	1.000
Core Oven (EU10)	0.500
Ladle Heaters (EU13)	0.600
Total	2.100

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
2.1000	18.40

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.017	0.070	0.0055	0.920	0.051	0.773

*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

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

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

See page 11 for HAPs emissions calculations.

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

HAPs Emissions

**Company Name: Warsaw Foundry Company, Inc.
Address City IN Zip: 1212 North Detroit Street, Warsaw, Indiana 46580
FESOP: F 085-14520
Plt ID: 085-00006
Reviewer: Edward A. Longenberger
Date: June 7, 2001**

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	1.93E-05	1.10E-05	6.90E-04	1.66E-02	3.13E-05

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	Total HAPs
Potential Emission in tons/yr	4.60E-06	1.01E-05	1.29E-05	3.50E-06	1.93E-05	0.017

Methodology is the same as page 10.

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

**HAP Emission Calculations
from Pouring-Cooling-Shakeout
Binder Systems
for Grey Iron Foundries**

**Company Name: Warsaw Foundry Company, Inc.
Address City IN Zip: 1212 North Detroit Street, Warsaw, Indiana 46581
FESOP: F 085-14520
Pit ID: 085-00006
Reviewer: Edward A. Longenberger
Date: June 7, 2001**

EU11

Annual Usage of Index Material (lbs/yr)	Binder System
291,051	Green Sand
394,200	Shell Core

Pollutant	Binder System Type Emission Factors => Lbs. of Chemical Released to Air per Lbs. of Index											Pollutant Emissions (lbs/yr)
	Phenolic Nobake (Resin)	Phenolic Urethane (Resin)	Phenolic Hotbox (Resin)	Green Sand (Seacoal)	Core Oil (Core Oil)	Shell (Resin)	Low Nitrogen Furan (Resin)	Med Nitrogen Furan TSA Catalyst (Resin)	Furan Hotbox (Resin)	Alkyd Isocyanate (Resin & Isocyanate)	Sodium Silicate & Ester (Sugar & Ester)	
Ammonia	0.000039	0.000083	0.010931	0.000065	0.000038	0.003860	0.000040	0.000202	0.019579	0.000037	0.000038	1540.530
Hydrogen Sulfide	0.001462	0.000057	0.000009	0.000832	0.000057	0.000094	0.000405	0.000486	0.000060	0.000007	0.000197	279.209
Nitrogen Oxides	0.000029	0.000044	0.000638	0.000562	0.000081	0.000994	0.000012	0.000312	0.000411	0.000355	0.000028	555.405
Sulfur Dioxide	0.015107	0.000061	0.000036	0.000253	0.000115	0.003509	0.000607	0.004858	0.000088	0.000040	0.000244	1456.884
Total Hydrocarbons	0.012159	0.023377	0.005165	0.011941	0.028737	0.022421	0.007814	0.017178	0.006259	0.035567	0.022782	12313.798
Acrolein	0.000005	0.000031	0.000009	0.000002	0.000077	0.000047	0.000028	0.000016	0.000013	0.000088	0.000028	19.110
Benzene	0.011209	0.005351	0.001002	0.000611	0.002344	0.006667	0.000648	0.004534	0.000537	0.005336	0.001410	2805.964
Formaldehyde	0.000010	0.000022	0.000006	0.000004	0.000096	0.000035	0.000267	0.000065	0.000009	0.000106	0.000169	14.961
Hydrogen Cyanide	0.000029	0.001053	0.001184	0.000118	0.000086	0.010526	0.000368	0.000607	0.003474	0.000175	0.000179	4183.693
M-Xylene	0.000097	0.000439	0.000121	0.000021	0.000239	0.000585	0.002227	0.000243	0.000032	0.002522	0.000094	236.719
Napthalene	0.000049	0.000022	0.000030	0.000021	0.000048	0.000058	0.000040	0.000040	0.000032	0.000037	0.000005	28.976
O-Xylene	0.000049	0.000132	0.000030	0.000021	0.000287	0.000117	0.000729	0.000040	0.000032	0.003838	0.000094	52.233
Phenol	0.000975	0.003904	0.000203	0.000131	0.000057	0.002456	0.000024	0.000101	0.000016	0.000110	0.000273	1006.283
Toluene	0.000634	0.000833	0.000182	0.000063	0.000478	0.002807	0.000210	0.008826	0.000032	0.001535	0.000282	1124.856
Total Aromatic Amines	0.000049	0.000351	0.001275	0.000021	0.000096	0.002339	0.000081	0.000364	0.003032	0.000037	0.000094	928.146
Total C2 to C5 Aldehydes	0.003070	0.000219	0.000273	0.000063	0.000766	0.000585	0.000243	0.017004	0.000158	0.002156	0.001316	248.943
Total HAPs	0.016174	0.012355	0.004318	0.001076	0.004574	0.026222	0.004777	0.031842	0.007364	0.015939	0.003943	10649.883

Total State Potential Emissions

Total HAPs	5.32	tons/yr
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METHODOLOGY

HAPS emission rate (tons/yr) = Annual Usage (lbs/yr) * Emission Factor (lbs Chemical/lbs Index) * 1 ton/2000 lbs