INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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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: November 15, 2007

RE: Casting Service / 091-24674-00018

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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Mr. Mark Swan
Casting Service
300 Philadelphia Street
LaPorte, IN 46350

November 15, 2007

Re: 091-24674-00018
Significant Source Modification to:
Part 70 permit No.: T091-6141-00018

Dear Mr. Swan

Casting Service was issued Part 70 operating permit T091-6141-00018 on May 11, 2006 for a stationary gray and ductile iron foundry. An application to modify the source was received on April 24, 2007. Pursuant to 326 IAC 2-7-10.5 the revisions to the VOC limitation pursuant to 326 IAC 8-1-6 (BACT) for the mold making operations, referred to as P16, and the core making operations, referred to as P17 are approved. The revised emission unit descriptions for the units in question are as follows:

(a) mold making operations, referred to as process P16, constructed prior to 1972, using a phenolic nobake binder system with a maximum capacity of 68.8 tons of sand per hour, with emissions uncontrolled and exhausting inside the building;

(b) core making operations, referred to as process P17, constructed prior to 1972 and modified in 1985 and in 2005 with the addition of a High Bay Core Mixer, using phenolic nobake, phenolic urethane nobake, furan nobake, and SO_2 binder systems with a maximum capacity of 68.8 tons of sand per hour, with SO_2 emissions controlled by a packed tower scrubber, referred to as C10, which exhausts to stack S10, and with particulate emissions controlled by the core room dust collector, referred to as C08,

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).

2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

This significant source modification authorizes changes to these units. Operating conditions shall be incorporated into the Part 70 operating permit as a significant permit modification in accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12. Operation is not approved until the significant permit modification has been issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, and ask for Julia Handley at (973) 575-2555, ext. 3269, or dial (800) 451-6027, and ask for extension 3-6878.

Original signed by,

Nisha Sizemore, Chief
Permits Branch
Office of Air Quality

Attachments
Technical Support Document (TSD)
Appendix A: BACT Analysis

JH/EVP

cc: File - LaPorte County
LaPorte County Health Department
IDEM Northwestern Regional Office
Air Compliance Section Inspector - Letty Zepeda
Compliance Data Section
Administrative and Development
Technical Support and Modeling

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PART 70 SIGNIFICANT SOURCE MODIFICATION
OFFICE OF AIR QUALITY

Casting Service
300 Philadelphia Street
LaPorte, Indiana 46350

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

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-2 and 326 IAC 2-7-10.5, applicable to those conditions.

Significant Source Modification No.: 091-24674-00018	Pages revised: Entire permit
Original signed by: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: November 15, 2007

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SECTION A SOURCE SUMMARY

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

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

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

Source Address:	300 Philadelphia Street, LaPorte, Indiana 46350
Mailing Address:	300 Philadelphia Street, LaPorte, Indiana 46350
General Source Phone Number:	(219) 362-1000
SIC Code:	3321
County Location:	LaPorte
Source Location Status:	Nonattainment for 8-hour ozone standard Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules; Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

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

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

(a) one (1) electric induction furnace, referred to as F1, constructed in 1977, with a maximum capacity of 1.67 tons of iron per hour, with emissions controlled by the melt shop dust collector, referred to as C06, and exhausting to stack S06;

(b) one (1) electric induction furnace, referred to as F2, constructed in 1982, with a maximum capacity of 2.92 tons of iron per hour, with emissions controlled by the melt shop dust collector, referred to as C06, and exhausting to stack S06;

(c) one (1) electric induction furnace, referred to as F3, constructed in 1982, with a maximum capacity of 2.92 tons of iron per hour, with emissions controlled by the melt shop dust collector, referred to as C06, and exhausting to stack S06;

(d) one (1) electric induction furnace, referred to as F4, constructed in 1985, with a maximum capacity of 2.92 tons of iron per hour, with emissions controlled by the melt shop dust collector, referred to as C06, and exhausting to stack S06;

(e) one (1) electric induction furnace, referred to as F5, constructed in 1990, with a maximum capacity of 3.33 tons of iron per hour, with emissions controlled by the melt shop dust collector, referred to as C06, and exhausting to stack S06;

(f) one (1) scrap and charge handling process, referred to as process P01, constructed prior to 1972, with a maximum capacity of 13.76 tons of metal per hour, with emissions controlled by the melt shop dust collector, referred to as C06 and exhausting to stack S06;

(g) one (1) natural gas-fired scrap preheater, referred to as emission unit P02, constructed in 1996, with a maximum heat input capacity of 17.8 million Btu per hour, with emissions uncontrolled and exhausting to stack S12;

(h) one (1) inoculation process, referred to as process P04, constructed prior to 1972, with a maximum capacity of 13.76 tons of metal per hour, consisting of two methods of operation described as follows:

(1) Inoculation is periodically done in the furnace before discharge. Emissions are controlled by the melt shop dust collector, referred to as C06, exhausting to stack S06.

(2) Inoculation is generally done in molten metal transfer ladles, where emissions are currently uncontrolled and exhaust through Vent 24.

Note: Casting Service will re-direct inoculation emissions exhausting through Vent 24 to the melt shop dust collector, C06, within six (6) months after issuance of the Part 70 permit.

(i) one (1) pouring and casting operation, referred to as process P06, and one (1) castings cooling operation, referred to as process P07, both constructed prior to 1972, with a maximum combined capacity of 13.76 tons of metal per hour and 68.8 tons of sand per hour, with emissions uncontrolled and exhausting inside the building;

(j) one (1) magnesium treatment process station using wire injection, referred to as process P05a, constructed in 1998, with a maximum capacity of 13.76 tons of iron per hour, with emissions controlled by dust collector C14, and exhausting to stack S14;

(k) one (1) magnesium treatment process station using wire injection, referred to as process P05b, constructed in 1994, with a maximum capacity of 13.76 tons of metal per hour, with emissions controlled by dust collector C09, exhausting to stack S09;

(l) expendable pattern casting, referred to as process P08, constructed in 1978, with a maximum capacity of 68.75 pounds of foam per hour, with emissions uncontrolled and exhausting inside the building;

(m) One (1) shakeout system, consisting of the following:

(1) one (1) high bay shakeout system, referred to as process P09a, constructed in 1991, with a maximum throughput capacity of 13.76 tons of metal per hour and 68.8 tons of sand per hour, with emissions controlled by the high bay shakeout dust collector, referred to as C01, and exhausting to stack S01;

(2) one (1) center bay shakeout system, referred to as process P09b, constructed in 1990, with a maximum throughput capacity of 13.76 tons of metal per hour and 68.8 tons of sand per hour, with emissions controlled by the center bay shakeout dust collector, referred to as C02, and exhausting to stack S02;

(n) one (1) mechanical reclamation system, referred to as process P10, constructed in 1991 and modified in 1999, with a maximum capacity of 68.8 tons of sand per hour, including one (1) Didion rotary lump crusher and one (1) rotoconditioner with emissions controlled by the mechanical reclaim dust collector, referred to as C04, and exhausting to stack S04;

(o) two (2) pneumatic sand transporters for the mechanical reclamation system, constructed in 1999, each with a maximum capacity of 15 tons of sand per hour, with emissions controlled by dust collector C04, exhausting to stack S04;

(p) one (1) thermal sand reclamation system including a natural gas-fired calcining unit, with a maximum heat input capacity of 6.4 million British thermal units (MMBtu) per hour, referred to as process P11, constructed in 2005, with a maximum capacity of 3.125 tons of sand per hour, with emissions controlled by the thermal dust collector, referred to as C05, and exhausting to stack S05;

(q) Shotblasting operation consisting of the following:

(1) one (1) pneumatic room blast operation, referred to as process P12a, constructed prior to 1972, with a maximum capacity of 1.376 tons of metal per hour, with emissions controlled by the room blast dust collector, referred to as C09, and exhausting through stack S09;

(2) Process 12b, consisting of the following:

(A) one (1) small shotblast machine, referred to as the small castings blaster, constructed prior to 1972, and one (1) BCP shot blast machine, constructed in 1991, with a maximum combined capacity of 13.76 tons of metal per hour, with emissions controlled by the blast operations dust collector, referred to as C03, and exhausting to stack S03;

(B) One (1) table shotblaster, approved for construction in 2007, with a maximum capacity of 13.76 tons of metal per hour, with emissions controlled by a dust collector, referred to as C16, and exhausting to stack S16;

(r) cleaning and grinding operations, referred to as process P13, constructed prior to 1972 and modified in 2001, with a maximum capacity of 13.76 tons of metal per hour, consisting of two (2) grinding areas with emissions from one (1) area controlled by a dust collector, referred to as C15, exhausting to stack S15, and emissions from the other area controlled by a dust collector, referred to as C07, exhausting to stack S07;

(s) casting painting operation, referred to as process P14, utilizing air atomization spray, constructed in 1975, using a maximum of 7.25 pounds of coating per hour and 2.0 pounds of thinner per hour, with a dry filter for overspray control, and emissions exhausting to stack S11;

(t) mold making operations, referred to as process P16, constructed prior to 1972, using a phenolic nobake binder system with a maximum capacity of 68.8 tons of sand per hour, with emissions uncontrolled and exhausting inside the building;

(u) core making operations, referred to as process P17, constructed prior to 1972 and modified in 1985 and in 2005 with the addition of a High Bay Core Mixer, using phenolic nobake, phenolic urethane nobake, furan nobake, and SO_2 binder systems with a maximum capacity of 68.8 tons of sand per hour, with SO_2 emissions controlled by a packed tower scrubber, referred to as C10, which exhausts to stack S10, and with particulate emissions controlled by the core room dust collector, referred to as C08, exhausting to stack S08;

Note: The SO_2 scrubber is voluntarily installed and operated.

(v) core and mold refractory wash coating operation, constructed prior to 1972, referred to as process P18, utilizing dip and flow coating, with emissions exhausting to stack S13;

(w) one (1) pattern repair shop, referred to as process P20, constructed prior to 1972, including woodworking equipment for routine maintenance and repair of wood patterns, with emissions controlled by a dust collector, referred to as C07, and exhausting to stack S07; and

(x) pattern and core box release agent coating operation, referred to as process P20a, utilizing air atomization spray, constructed prior to 1972, with emissions exhausting inside the building.

(y) one (1) pneumatic sand transport system for the mold making operations, constructed in 2005, with a maximum capacity of 68.8 tons of sand per hour, with emissions uncontrolled and exhausting into the building.

Under 40 CFR 63, Subpart EEEEE, the five (5) electric induction furnaces, the scrap preheater, and the fugitive emissions from the foundry operations are considered an existing affected source.

Under 40 CFR 63, Subpart MMMM, the casting painting operation, referred to as process P14, all storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed, all manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials, and all storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation are considered an existing affected source.

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

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

(a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6: one (1) Safety Kleen maintenance parts washer with a remote solvent reservoir. [326 IAC 8-3-2]

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

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

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

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

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

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

SECTION B GENERAL CONDITIONS

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

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

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

(a) This permit, T091-6141-00018, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

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

B.3 Enforceability [326 IAC 2-7-7]

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. 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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

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

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

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

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

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

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

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

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

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

(a) The Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, for the source as described in 326 IAC 1-6-3. At a minimum, the PMPs shall include:

(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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

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

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

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

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

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

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

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

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

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

and

IDEM Northwest Regional Office
Telephone Number: 1-888-209-8892 or
Telephone Number: 219-757-0265
Facsimile Number: 219-757-0267

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

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

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

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

(A) A description of the emergency;

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

(C) Corrective actions taken.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(a) All terms and conditions of permits established prior to T091-6141-00018 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

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

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

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

B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

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

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

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

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

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

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

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

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

(1) That this permit contains a material mistake.

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

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

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

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

B.16 Permit Renewal [326 IAC 2-7-3] [326 IAC 2-7-4] [326 IAC 2-7-8(e)]

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

Request for renewal shall be submitted to:

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

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

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

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

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

B.17 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

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

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

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

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

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

B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

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

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

B.19 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

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

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

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

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

(4) The Permittee notifies the:

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

and

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

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

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

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

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

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

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

(3) Any change in emissions; and

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

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

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

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

B.20 Source Modification Requirement [326 IAC 2-7-10.5] [326 IAC 2-2-2]

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

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

B.21 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC 13-30-3-1] [IC 13-17-3-2]

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

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

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

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

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

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

B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

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

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

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

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

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

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

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

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

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

B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

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

B.25 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.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

C.2 Opacity [326 IAC 5-1]

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

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

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

All required notifications shall be submitted to:

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

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

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

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

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

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

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

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

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

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

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

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

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

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(a) The Permittee 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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

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

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

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

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

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

(1) initial inspection and evaluation;

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

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

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

(1) monitoring results;

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

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

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

(e) The Permittee shall maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

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

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

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

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

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

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

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

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

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

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

The statement must be submitted to:

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

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

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

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

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

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

(c) If there is a reasonable possibility that a “project” (as defined in 326 IAC 2-2-1 (qq) and 326 IAC 2-3-1 (ll)) at an existing emissions unit, other than projects at a Clean Unit, which is not part of a “major modification” (as defined in 326 IAC 2-2-1 (ee) and 326 IAC 2-3-1 (z)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1 (rr) and 326 IAC 2-3-1 (mm)), the Permittee shall comply with following:

(1) Prior to commencing the construction of the “project” (as defined in 326 IAC 2-2-1 (qq) and 326 IAC 2-3-1 (ll)) at an existing emissions unit, document and maintain the following records:
- (A) A description of the project.
- (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
- (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
  - (i) Baseline actual emissions;
  - (ii) Projected actual emissions;
  - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and 326 IAC 2-3-1(mm)(2)(A)(iii); and
  - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Reports required in this part shall be submitted to:

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

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

Stratospheric Ozone Protection

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

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

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

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

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

SECTION D.1 FACILITY OPERATION CONDITIONS

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

(a) one (1) electric induction furnace, referred to as F1, constructed in 1977, with a maximum capacity of 1.67 tons of iron per hour, with emissions controlled by the melt shop dust collector, referred to as C06, and exhausting to stack S06;

(b) one (1) electric induction furnace, referred to as F2, constructed in 1982, with a maximum capacity of 2.92 tons of iron per hour, with emissions controlled by the melt shop dust collector, referred to as C06, and exhausting to stack S06;

(c) one (1) electric induction furnace, referred to as F3, constructed in 1982, with a maximum capacity of 2.92 tons of iron per hour, with emissions controlled by the melt shop dust collector, referred to as C06, and exhausting to stack S06;

(d) one (1) electric induction furnace, referred to as F4, constructed in 1985, with a maximum capacity of 2.92 tons of iron per hour, with emissions controlled by the melt shop dust collector, referred to as C06, and exhausting to stack S06;

(e) one (1) electric induction furnace, referred to as F5, constructed in 1990, with a maximum capacity of 3.33 tons of iron per hour, with emissions controlled by the melt shop dust collector, referred to as C06, and exhausting to stack S06;

(f) one (1) scrap and charge handling process, referred to as process P01, constructed prior to 1972, with a maximum capacity of 13.76 tons of metal per hour, with emissions controlled by the melt shop dust collector, referred to as C06 and exhausting to stack S06;

(g) one (1) natural gas-fired scrap preheater, referred to as emission unit P02, constructed in 1996, with a maximum heat input capacity of 17.8 million Btu per hour, with emissions uncontrolled and exhausting to stack S12;

(h) one (1) inoculation process, referred to as process P04, constructed prior to 1972, with a maximum capacity of 13.76 tons of metal per hour, consisting of two methods of operation described as follows:

(1) Inoculation is periodically done in the furnace before discharge. Emissions are controlled by the melt shop dust collector, referred to as C06, exhausting to stack S06.

(2) Inoculation is generally done in molten metal transfer ladles, where emissions are currently uncontrolled and exhaust through Vent 24.

Note: Casting Service will re-direct inoculation emissions exhausting through Vent 24 to the melt shop dust collector, C06, within six (6) months after issuance of the Part 70 permit.

(i) one (1) pouring and casting operation, referred to as process P06, and one (1) castings cooling operation, referred to as process P07, both constructed prior to 1972, with a maximum combined capacity of 13.76 tons of metal per hour and 68.8 tons of sand per hour, with emissions uncontrolled and exhausting inside the building;

Under 40 CFR 63, Subpart EEEEE, the five (5) electric induction furnaces, the scrap preheater, and the fugitive emissions from the foundry operations, which include any emission source housed in a building or structure, are considered an existing affected source.

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

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

D.1.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2-3]

Pursuant to 326 IAC 2-2-3 (PSD), BACT shall include the following conditions:

(a) The melt furnaces F1, F2, F3, F4, and F5 shall be controlled by a dust collector at all times that the melt furnaces F1, F2, F3, F4, and F5 are in operation.

(b) Filterable PM emissions from dust collector C06 controlling the melt furnaces, the scrap and charge handling process, and the inoculation process shall not exceed 0.002 grains per dry standard cubic foot, 1.48 pounds per hour, and 0.216 pound per ton of metal throughput.

(c) Total (filterable and condensable) PM/PM10 emissions from dust collector C06 controlling the melt furnaces, the scrap and charge handling process, and the inoculation process shall not exceed 0.005 grains per dry standard cubic foot, 3.71 pounds per hour and 0.54 pound per ton of metal throughput.

(d) The throughput of metal from the electric induction furnaces, from the scrap and charge handling process, and to the inoculation process, shall not exceed 60,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(e) The opacity from the melt shop dust collector, exhausting to stack S06, shall not exceed ten percent (10%) opacity based on a six-minute average (24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9).

(f) The opacity from any building opening where melting occurs shall not exceed three percent (3%) opacity based on a six-minute average (24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9).

The following limits shall also apply pursuant to 326 IAC 2-2 as a result of the air dispersion modeling analysis performed:

(g) Total PM emissions from the pouring and casting operation and the casting cooling operation shall not exceed 4.2 pounds per ton of metal throughput;

(h) Total PM10 emissions from the pouring and casting operation and the casting cooling operation shall not exceed 2.06 pounds per ton of metal throughput;

(i) The throughput of metal to the pouring and casting operation and the casting cooling operation shall not exceed 60,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(j) The Permittee shall re-direct inoculation emissions exhausting through Vent 24 to the melt shop dust collector, C06, within six (6) months after issuance of the Part 70 permit. The PM and PM10 emission limits for the melt shop dust collector, C06, stated above will continue to apply after all inoculation emissions are vented to the melt shop dust collector.

D.1.2 PSD Minor Limit [326 IAC 2-2]

(a) The throughput of metal from the electric induction furnaces, from the scrap and charge handling process, and to the inoculation process shall not exceed 60,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(b) Total lead emissions from dust collector C06 controlling the five (5) electric induction furnaces, the scrap and charge handling operation, and the inoculation operation shall not exceed 0.022 pound per ton of metal throughput.

Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable for lead emissions.

D.1.3 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 facilities listed in the table below shall be as follows:

Facility	Control Device	Process Weight Rate (tons/hr)	Emission Limit (lbs PM/hr)
Inoculation process P04	Uncontrolled	13.76	23.75
Pouring/casting P06 and Castings cooling P07	Uncontrolled	82.56	49.37

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

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

or

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

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

(b) The Permittee shall re-direct inoculation emissions exhausting through Vent 24 to the melt shop dust collector, C06, within six (6) months after issuance of the Part 70 permit. Upon completion of this requirement, the limit pursuant to 326 IAC 6-3-2 for the inoculation process shall no longer apply.

Compliance Determination Requirements

D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) After the inoculation process has been re-directed to the meltshop baghouse, but no later than 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Conditions D.1.1, D.1.2, and D.1.3, the Permittee shall perform PM, PM10, lead, and opacity testing on stack S06, using methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of these valid compliance demonstrations. PM10 includes filterable and condensable PM10. Testing shall be conducted in accordance with Section C - Performance Testing.

(b) Within 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Conditions D.1.1 and D.1.3, the Permittee shall perform PM and PM10 testing for the pouring/casting and casting cooling operation using methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM10 includes filterable and condensable PM10. Testing shall be conducted in accordance with Section C - Performance Testing.

D.1.5 Particulate Control [326 IAC 2-7-6(6)]

(a) In order to comply with conditions D.1.1, D.1.2, and D.1.3, the melt shop dust collector, referred to as C06, for particulate control shall be in operation and control emissions from the five (5) electric induction furnaces, the scrap and charge handling process, and the inoculation process at all times that these facilities are in operation.

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

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

D.1.6 Visible Emissions Notations

(a) Visible emission notations of the melt shop dust collector (C06) stack exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

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

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

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

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

D.1.7 Parametric Monitoring

The Permittee shall record the pressure drop across the dust collector used in conjunction with the five (5) electric induction furnaces, the scrap and charge handling process, and the inoculation process, at least once per day when the five (5) electric induction furnaces, the scrap and charge handling process, and the inoculation process are in operation. When for any one reading, the pressure drop across the dust collector is outside the normal range of 2.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.1.8 Broken or Failed Bag Detection

(a) For a single compartment dust collector 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 dust collector 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 dust collector=s pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.1.9 Record Keeping Requirements

(a) To document compliance with Conditions D.1.1(d), D.1.1(i) and D.1.2(a), the Permittee shall maintain records of the throughput of metal from the electric induction furnaces, from the scrap and charge handling, to the inoculation operation, to the pouring and casting operation, and to the casting cooling operation for each month. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(b) To document compliance with Condition D.1.1(j) and D.1.3(b), the Permittee shall maintain records of the date that inoculation emissions were re-directed to the melt shop dust collector C06.

(c) To document compliance with Condition D.1.6, the Permittee shall maintain records of visible emission notations of the melt shop dust collector (C06) stack exhaust once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(d) To document compliance with Condition D.1.7, the Permittee shall maintain records once per day of the pressure drop across the melt shop dust collector (C06) during normal operation when venting to the atmosphere. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

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

D.1.10 Reporting Requirements

(a) A quarterly summary of the information to document compliance with Conditions D.1.1(d), D.1.1(i) and D.1.2(a) 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 “responsible official” as defined by 326 IAC 2-7-1(34).

(b) A notification of the date that inoculation emissions were re-directed to the melt shop dust collector C06 shall be submitted to the address listed in Section C – General Reporting Requirements, of this permit, within thirty (30) days of re-directing inoculation emissions to the melt shop dust collector C06.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

D.1.11 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.7760, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the five (5) electric induction furnaces, the scrap preheater, and the fugitive emissions from the foundry operations as specified in Table 1 of 40 CFR 63, Subpart EEEEE in accordance with schedule in 40 CFR 63 Subpart EEEEE.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

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

D.1.12 National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Requirements [40 CFR Part 63, Subpart EEEEE] [326 IAC 20-92]

Pursuant to CFR Part 63, Subpart EEEEE, the Permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries, which are incorporated by reference as 326 IAC 20-92 for the five (5) electric induction furnaces, the scrap preheater, and the fugitive emissions from the foundry operations as specified as follows.

What this Subpart Covers

§ 63.7680 What is the purpose of this subpart?
This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for iron and steel foundries. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart.

§ 63.7681 Am I subject to this subpart?
You are subject to this subpart if you own or operate an iron and steel foundry that is (or is part of) a major source of hazardous air pollutant (HAP) emissions. Your iron and steel foundry is a major source of HAP for purposes of this subpart if it emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year or if it is located at a facility that emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

§ 63.7682 What parts of my foundry does this subpart cover?
(a) The affected source is each new or existing iron and steel foundry.
(b) This subpart covers emissions from metal melting furnaces, scrap preheaters, pouring areas, pouring stations, automated conveyor and pallet cooling lines, automated shakeout lines, and mold and core making lines. This subpart also covers fugitive emissions from foundry operations.
(c) An affected source is existing if you commenced construction or reconstruction of the affected source before December 23, 2002.

(d) An affected source is new if you commenced construction or reconstruction of the affected source on or after December 23, 2002. An affected source is reconstructed if it meets the definition of "reconstruction" in §63.2.

§ 63.7683 When do I have to comply with this subpart?
(a) Except as specified in paragraph (b) of this section, if you have an existing affected source, you must comply with each emissions limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you no later than April 23, 2007. Major source status for existing affected sources must be determined no later than April 23, 2007.
(b) If you have an existing affected source, you must comply with the work practice standards in §63.7700(b) or (c), as applicable, no later than April 22, 2005.
(f) You must meet the notification and schedule requirements in §63.7750. Note that several of these notifications must be submitted before the compliance date for your affected source.

Emissions Limitations

§ 63.7690 What emissions limitations must I meet?
(a) You must meet each emissions limit or standard in paragraphs (a)(1) through (11) of this section that applies to you.
(1) For each electric arc metal melting furnace, electric induction metal melting furnace, or scrap preheater at an existing iron and steel foundry, you must not discharge emissions through a conveyance to the atmosphere that exceed either the limit for particulate matter (PM) in paragraph (a)(1)(i) of this section or, alternatively the limit for total metal HAP in paragraph (a)(1)(ii) of this section:
(i) 0.005 grains of PM per dry standard cubic foot (gr/dscf)
(7) For each building or structure housing any emissions source at the iron and steel foundry, you must not discharge any fugitive emissions to the atmosphere that exhibit opacity greater than 20 percent (6-minute average), except for one 6-minute average per hour that does not exceed 27 percent opacity.

Work Practice Standards

§ 63.7700 What work practice standards must I meet?
(a) For each segregated scrap storage area, bin or pile, you must either comply with the certification requirements in paragraph (b) of this section, or prepare and implement a plan for the selection and inspection of scrap according to the requirements in paragraph (c) of this section. You may have certain scrap subject to paragraph (b) of this section and other scrap subject to paragraph (c) of this section at your facility provided the scrap remains segregated until charge make-up.
(b) You must prepare and operate at all times according to a written certification that the foundry purchases and uses only metal ingots, pig iron, slitter, or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, post-consumer oil filters, oily turnings, lead components, mercury switches, plastics, or free organic liquids. For the purpose of this paragraph (b), "free organic liquids" is defined as material that fails the paint filter test by EPA Method 9095A, "Paint Filter Liquids Test" (Revision 1, December 1996), as published in EPA Publication SW–846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (incorporated by reference—see §63.14). Any post-consumer engine blocks, post-consumer oil filters, or oily turnings that are processed and/or cleaned to the extent practicable such that the materials do not include lead components, mercury switches, plastics, or free organic liquids can be included in this certification.
(c) You must prepare and operate at all times according to a written plan for the selection and inspection of iron and steel scrap to minimize, to the extent practicable, the amount of organics and HAP metals in the charge materials used by the iron and steel foundry. This scrap selection and inspection plan is subject to approval by the Administrator. You must keep a copy of the plan onsite and readily available to all plant personnel with materials acquisition or inspection duties.

You must provide a copy of the material specifications to each of your scrap vendors. Each plan must include the information specified in paragraphs (c)(1) through (3) of this section.
(1) A materials acquisition program to limit organic contaminants according to the requirements in paragraph (c)(1)(i) or (ii) of this section, as applicable.
(i) For scrap charged to a scrap preheater, electric arc metal melting furnace, or electric induction metal melting furnaces, specifications for scrap materials to be depleted (to the extent practicable) of the presence of used oil filters, plastic parts, organic liquids, and a program to ensure the scrap materials are drained of free liquids; or
(2) A materials acquisition program specifying that the scrap supplier remove accessible mercury switches from the trunks and hoods of any automotive bodies contained in the scrap and remove accessible lead components such as batteries and wheel weights. You must obtain and maintain onsite a copy of the procedures used by the scrap supplier for either removing accessible mercury switches or for purchasing automobile bodies that have had mercury switches removed, as applicable.
(3) Procedures for visual inspection of a representative portion, but not less than 10 percent, of all incoming scrap shipments to ensure the materials meet the specifications.
(i) The inspection procedures must identify the location(s) where inspections are to be performed for each type of shipment. Inspections may be performed at the scrap supplier's facility. The selected location(s) must provide a reasonable vantage point, considering worker safety, for visual inspection.
(ii) The inspection procedures must include recordkeeping requirements that document each visual inspection and the results.
(iii) The inspection procedures must include provisions for rejecting or returning entire or partial scrap shipments that do not meet specifications and limiting purchases from vendors whose shipments fail to meet specifications for more than three inspections in one calendar year.
(iv) If the inspections are performed at the scrap supplier's facility, the inspection procedures must include an explanation of how the periodic inspections ensure that not less than 10 percent of scrap purchased from each supplier is subject to inspection.
(e) For each scrap preheater at an existing iron and steel foundry, you must meet either the requirement in paragraph (e)(1) or (2) of this section. As an alternative to the requirement in paragraph (e)(1) or (2) of this section, you must meet the VOHAP emissions limit in §63.7690(a)(9).
(1) You must install, operate, and maintain a gas-fired preheater where the flame directly contacts the scrap charged; or
(2) You must charge only material that is subject to and in compliance with the scrap certification requirement in paragraph (b) of this section.

Operation and Maintenance Requirements

§ 63.7710 What are my operation and maintenance requirements?
(a) As required by §63.6(e)(1)(i), you must always operate and maintain your iron and steel foundry, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.
(b) You must prepare and operate at all times according to a written operation and maintenance plan for each capture and collection system and control device for an emissions source subject to an emissions limit in §63.7690(a). Your operation and maintenance plan also must include procedures for igniting gases from mold vents in pouring areas and pouring stations that use a sand mold system. This operation and maintenance plan is subject to approval by the Administrator. Each plan must contain the elements described in paragraphs (b)(1) through (6) of this section.
(1) Monthly inspections of the equipment that is important to the performance of the total capture system (*i.e.,* pressure sensors, dampers, and damper switches). This inspection must include observations of the physical appearance of the equipment (*e.g.,* presence of holes in the ductwork or hoods, flow constrictions caused by dents or accumulated dust in the ductwork, and fan

erosion). The operation and maintenance plan must also include requirements to repair the defect or deficiency as soon as practicable.
(3) Preventative maintenance plan for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
(4) A site-specific monitoring plan for each bag leak detection system. For each bag leak detection system that operates on the triboelectric effect, the monitoring plan must be consistent with the recommendations contained in the U.S. Environmental Protection Agency guidance document "Fabric Filter Bag Leak Detection Guidance" (EPA–454/R–98–015). This baghouse monitoring plan is subject to approval by the Administrator. The owner or operator shall operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan must address all of the items identified in paragraphs (b)(4)(i) through (v) of this section.
(i) Installation of the bag leak detection system.
(ii) Initial and periodic adjustment of the bag leak detection system including how the alarm set-point will be established.
(iii) Operation of the bag leak detection system including quality assurance procedures.
(iv) How the bag leak detection system will be maintained including a routine maintenance schedule and spare parts inventory list.
(v) How the bag leak detection system output will be recorded and stored.
(5) Corrective action plan for each baghouse. The plan must include the requirement that, in the event a bag leak detection system alarm is triggered, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Corrective actions taken may include, but are not limited to:
(i) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.
(ii) Sealing off defective bags or filter media.
(iii) Replacing defective bags or filter media or otherwise repairing the control device.
(iv) Sealing off a defective baghouse compartment.
(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system.
(vi) Making process changes.
(vii) Shutting down the process producing the PM emissions.

General Compliance Requirements

§ 63.7720 What are my general requirements for complying with this subpart?
(a) You must be in compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, or malfunction.
(b) During the period between the compliance date specified for your iron and steel foundry in §63.7683 and the date when applicable operating limits have been established during the initial performance test, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.
(c) You must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3). The startup, shutdown, and malfunction plan also must specify what constitutes a shutdown of a cupola and how to determine that operating conditions are normal following startup of a cupola.

Initial Compliance Requirements

§ 63.7730 By what date must I conduct performance tests or other initial compliance demonstrations?
(a) As required by §63.7(a)(2), you must conduct a performance test no later than 180 calendar days after the compliance date that is specified in §63.7683 for your iron and steel foundry to demonstrate initial compliance with each emissions limitation in §63.7690 that applies to you.

(b) For each work practice standard in §63.7700 and each operation and maintenance requirement in §63.7710 that applies to you where initial compliance is not demonstrated using a performance test, you must demonstrate initial compliance no later than 30 calendar days after the compliance date that is specified for your iron and steel foundry in §63.7683.

§ 63.7731 When must I conduct subsequent performance tests?
(a) You must conduct subsequent performance tests to demonstrate compliance with all applicable PM or total metal HAP, VOHAP, and TEA emissions limitations in §63.7690 for your iron and steel foundry no less frequently than every 5 years. The requirement to conduct performance tests every 5 years does not apply to an emissions source for which a continuous emissions monitoring system (CEMS) is used to demonstrate continuous compliance.
(b) You must conduct subsequent performance tests to demonstrate compliance with the opacity limit in §63.7690(a)(7) for your iron and steel foundry no less frequently than once every 6 months.

§ 63.7732 What test methods and other procedures must I use to demonstrate initial compliance with the emissions limitations?
(a) You must conduct each performance test that applies to your iron and steel foundry according to the requirements in §63.7(e)(1) and the conditions specified in paragraphs (b) through (h) of this section.
(b) To determine compliance with the applicable emissions limit for PM in §63.7690(a)(1) through (6) for a metal melting furnace, scrap preheater, pouring station, or pouring area, follow the test methods and procedures in paragraphs (b)(1) through (5) of this section.
(1) Determine the concentration of PM according to the test methods in 40 CFR part 60, appendix A that are specified in paragraphs (b)(1)(i) through (v) of this section.
(i) Method 1 or 1A to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.
(ii) Method 2, 2A, 2C, 2D, 2F, or 2G to determine the volumetric flow rate of the stack gas.
(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.
(iv) Method 4 to determine the moisture content of the stack gas.
(v) Method 5, 5B, 5D, 5F, or 5I, as applicable, to determine the PM concentration. The PM concentration is determined using only the front-half (probe rinse and filter) of the PM catch.
(2) Collect a minimum sample volume of 60 dscf of gas during each PM sampling run. A minimum of three valid test runs are needed to comprise a performance test.
(3) For cupola metal melting furnaces, sample only during times when the cupola is on blast.
(4) For electric arc and electric induction metal melting furnaces, sample only when metal is being melted.
(5) For scrap preheaters, sample only when scrap is being preheated.
(d) To determine compliance with the opacity limit in §63.7690(a)(7) for fugitive emissions from buildings or structures housing any emissions source at the iron and steel foundry, follow the procedures in paragraphs (d)(1) and (2) of this section.
(1) Using a certified observer, conduct each opacity test according to the requirements in EPA Method 9 (40 CFR part 60, appendix A) and §63.6(h)(5).
(2) Conduct each test such that the opacity observations overlap with the PM performance tests.
(h) To determine compliance with the PM or total metal HAP emissions limits in §63.7690(a)(1) through (6) when one or more regulated emissions sources are combined with either another regulated emissions source subject to a different emissions limit or other non-regulated emissions sources, you may demonstrate compliance using one of the procedures in paragraphs (h)(1) through (3) of this section.
(1) Meet the most stringent applicable emissions limit for the regulated emissions sources included in the combined emissions stream for the combined emissions stream.
(2) Use the procedures in paragraphs (h)(2)(i) through (iii) of this section.
(i) Determine the volumetric flow rate of the individual regulated streams for which emissions limits apply.
(ii) Calculate the flow-weighted average emissions limit, considering only the regulated streams, using Equation 3 of this section, except C_w is the flow-weighted average emissions limit for PM or

total metal HAP in the exhaust stream, gr/dscf; and C_i is the concentration of PM or total metal HAP in exhaust stream "i", gr/dscf.
(iii) Meet the calculated flow-weighted average emissions limit for the regulated emissions sources included in the combined emissions stream for the combined emissions stream.
(3) Use the procedures in paragraphs (h)(3)(i) through (iii) of this section.
(i) Determine the PM or total metal HAP concentration of each of the regulated streams prior to the combination with other exhaust streams or control device.
(ii) Measure the flow rate and PM or total metal HAP concentration of the combined exhaust stream both before and after the control device and calculate the mass removal efficiency of the control device using Equation 4 of this section, except E_i is the mass emissions rate of PM or total metal HAP at the control device inlet, lb/hr and E_o is the mass emissions rate of PM or total metal HAP at the control device outlet, lb/hr
(iii) Meet the applicable emissions limit based on the calculated PM or total metal HAP concentration for the regulated emissions source using Equation 5 of this section:

$$C_{released} = C_i \times \left(1 - \frac{\%\ \text{reduction}}{100}\right) \qquad (Eq.\ 5)$$

Where:
$C_{released}$ = Calculated concentration of PM (or total metal HAP) predicted to be released to the atmosphere from the regulated emissions source, in gr/dscf; and
C_i = Concentration of PM (or total metal HAP) in the uncontrolled regulated exhaust stream, in gr/dscf.

§ 63.7734 How do I demonstrate initial compliance with the emissions limitations that apply to me?
(a) You have demonstrated initial compliance with the emissions limits in §63.7690(a) if:
(1) For each electric arc metal melting furnace, electric induction metal melting furnace, or scrap preheater at an existing iron and steel foundry,
(i) The average PM concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(b), did not exceed 0.005 gr/dscf;
(7) For each building or structure housing any emissions source at the iron and steel foundry, the opacity of fugitive emissions discharged to the atmosphere, determined according to the performance test procedures in §63.7732(d), did not exceed 20 percent (6-minute average), except for one 6-minute average per hour that did not exceed 27 percent opacity.

§ 63.7735 How do I demonstrate initial compliance with the work practice standards that apply to me?
(a) For each iron and steel foundry subject to the certification requirement in §63.7700(b), you have demonstrated initial compliance if you have certified in your notification of compliance status that: "At all times, your foundry will purchase and use only metal ingots, pig iron, slitter, or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, post-consumer oil filters, oily turnings, lead components, mercury switches, plastics, or free organic liquids."
(b) For each iron and steel foundry subject to the requirements in §63.7700(c) for a scrap inspection and selection plan, you have demonstrated initial compliance if you have certified in your notification of compliance status that:
(1) You have submitted a written plan to the Administrator for approval according to the requirements in §63.7700(c); and
(2) You will operate at all times according to the plan requirements.
(d) For each scrap preheater at an existing iron and steel foundry subject to the work practice standard in §63.7700(e)(1) or (2), you have demonstrated initial compliance if you have certified in your notification of compliance status that:
(1) You have installed a gas-fired preheater where the flame directly contacts the scrap charged, you will operate and maintain each gas-fired scrap preheater such that the flame directly contacts

the scrap charged, and you have records documenting your certification of compliance that are onsite and available for inspection; or
(2) You will charge only material that is subject to and in compliance with the scrap certification requirements in §63.7700(b) and you have records documenting your certification of compliance that are onsite and available for inspection.

§ 63.7736 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?

(c) For each bag leak detection system, you have demonstrated initial compliance if you have certified in your notification of compliance status that:
(1) You have submitted the bag leak detection system monitoring plan to the Administrator for approval according to the requirements of §63.7710(b);
(2) You will inspect, operate, and maintain each bag leak detection system according to the procedures in the plan; and
(3) You will follow the corrective action procedures for bag leak detection system alarms according to the requirements in the plan.

Continuous Compliance Requirements

§ 63.7740 What are my monitoring requirements?

(b) For each negative pressure baghouse or positive pressure baghouse equipped with a stack that is applied to meet any PM or total metal HAP emissions limitation in this subpart, you must at all times monitor the relative change in PM loadings using a bag leak detection system according to the requirements in §63.7741(b) and conduct inspections at their specified frequencies according to the requirements specified in paragraphs (b)(1) through (8) of this section.
(1) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual.
(2) Confirm that dust is being removed from hoppers through weekly visual inspections or other means of ensuring the proper functioning of removal mechanisms.
(3) Check the compressed air supply for pulse-jet baghouses each day.
(4) Monitor cleaning cycles to ensure proper operation using an appropriate methodology.
(5) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means.
(6) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or bent) or lying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices.
(7) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks.
(8) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.

§ 63.7741 What are the installation, operation, and maintenance requirements for my monitors?

(b) You must install, operate, and maintain a bag leak detection system according to the requirements in paragraphs (b)(1) through (7) of this section.
(1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
(2) The bag leak detection system sensor must provide output of relative particulate matter loadings and the owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (*e.g.,* using a strip chart recorder or a data logger).
(3) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over the alarm set point established in the operation and maintenance plan, and the alarm must be located such that it can be heard by the appropriate plant personnel.

(4) The initial adjustment of the system must, at minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time (if applicable).
(5) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set point, or alarm delay time without approval from the Administrator. Except, once per quarter, you may adjust the sensitivity of the bag leak detection system to account for seasonable effects including temperature and humidity according to the procedures in the operation and maintenance plan required by §63.7710(b).
(6) For negative pressure, induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detector sensor must be installed downstream of the baghouse and upstream of any wet scrubber.
(7) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

§ 63.7742 How do I monitor and collect data to demonstrate continuous compliance?
(a) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) any time a source of emissions is operating.
(b) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emissions or operating levels or to fulfill a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance.
(c) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

§ 63.7743 How do I demonstrate continuous compliance with the emissions limitations that apply to me?
(a) You must demonstrate continuous compliance by meeting the applicable conditions in paragraphs (a)(1) through (12) of this section:
(1) For each electric arc metal melting furnace, electric induction metal melting furnace, or scrap preheater at an existing iron and steel foundry,
(i) Maintaining the average PM concentration in the exhaust stream at or below 0.005 gr/dscf; or
(ii) Maintaining the average total metal HAP concentration in the exhaust stream at or below 0.0004 gr/dscf.
(7) For each building or structure housing any emissions source at the iron and steel foundry, maintaining the opacity of any fugitive emissions discharged to the atmosphere at or below 20 percent opacity (6-minute average), except for one 6-minute average per hour that does not exceed 27 percent opacity.
(12) Conducting subsequent performance tests at least every 5 years for each emissions source subject to an emissions limit for PM, total metal HAP, VOHAP, or TEA in §63.7690(a) and subsequent performance tests at least every 6 months for each building or structure subject to the opacity limit in §63.7690(a)(7).
(c) For each baghouse equipped with a bag leak detection system,
(1) Maintaining records of the times the bag leak detection system alarm sounded, and for each valid alarm, the time you initiated corrective action, the corrective action taken, and the date on which corrective action was completed; and
(2) Inspecting and maintaining each baghouse according to the requirements of §63.7740(b)(1) through (8) and recording all information needed to document conformance with these requirements.

§ 63.7744 How do I demonstrate continuous compliance with the work practice standards that apply to me?
(a) You must maintain records that document continuous compliance with the certification requirements in §63.7700(b) or with the procedures in your scrap selection and inspection plan

required in §63.7700(c). Your records documenting compliance with the scrap selection and inspection plan must include a copy (kept onsite) of the procedures used by the scrap supplier for either removing accessible mercury switches or for purchasing automobile bodies that have had mercury switches removed, as applicable.
(c) For a scrap preheater at an existing iron and steel foundry, you must operate and maintain each gas-fired preheater such that the flame directly contacts the scrap charged to demonstrate continuous compliance with the requirement §63.7700(e)(1). If you choose to meet the work practice standard in §63.7700(e)(2), you must keep records to document that the scrap preheater charges only material that is subject to and in compliance with the scrap certification requirements in §63.7700(b).

§ 63.7745 How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?
(a) For each capture system and control device for an emissions source subject to an emissions limit in §63.7690(a), you must demonstrate continuous compliance with the operation and maintenance requirements of §63.7710 by:
(1) Making monthly inspections of capture systems and initiating corrective action according to §63.7710(b)(1) and recording all information needed to document conformance with these requirements;
(2) Performing preventative maintenance for each control device according to the preventive maintenance plan required by §63.7710(b)(3) and recording all information needed to document conformance with these requirements;
(3) Operating and maintaining each bag leak detection system according to the site-specific monitoring plan required by §63.7710(b)(4) and recording all information needed to demonstrate conformance with these requirements;
(4) Initiating and completing corrective action for a bag leak detection system alarm according to the corrective action plan required by §63.7710(b)(5) and recording all information needed to document conformance with these requirements; and
(5) Igniting gases from mold vents according to the procedures in the plan required by §63.7710(b)(6). (Any instance where you fail to follow the procedures is a deviation that must be included in your semiannual compliance report.)
(b) You must maintain a current copy of the operation and maintenance plans required by §63.7710(b) onsite and available for inspection upon request. You must keep the plans for the life of the iron and steel foundry or until the iron and steel foundry is no longer subject to the requirements of this subpart.

§ 63.7746 What other requirements must I meet to demonstrate continuous compliance?
(a) *Deviations.* You must report each instance in which you did not meet each emissions limitation in §63.7690 (including each operating limit) that applies to you. This requirement includes periods of startup, shutdown, and malfunction. You also must report each instance in which you did not meet each work practice standard in §63.7700 and each operation and maintenance requirement of §63.7710 that applies to you. These instances are deviations from the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart. These deviations must be reported according to the requirements of §63.7751.
(b) *Startups, shutdowns, and malfunctions.* (1) Consistent with the requirements of §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with §63.6(e)(1).
(2) The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations according to the provisions in §63.6(e).

Notifications, Reports, and Records

§ 63.7750 What notifications must I submit and when?
(a) You must submit all of the notifications required by §§63.6(h)(4) and (5), 63.7(b) and (c); 63.8(e); 63.8(f)(4) and (6); 63.9(b) through (h) that apply to you by the specified dates.

(b) As specified in §63.9(b)(2), if you start up your iron and steel foundry before April 22, 2004, you must submit your initial notification no later than August 20, 2004.
(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required by §63.7(b)(1).
(e) If you are required to conduct a performance test or other initial compliance demonstration, you must submit a notification of compliance status according to the requirements of §63.9(h)(2)(ii).
(1) For each initial compliance demonstration that does not include a performance test, you must submit the notification of compliance status before the close of business on the 30th calendar day following completion of the initial compliance demonstration.
(2) For each initial compliance demonstration that does include a performance test, you must submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to the requirement specified in §63.10(d)(2).

§ 63.7751 What reports must I submit and when?
(a) Compliance report due dates. Unless the Administrator has approved a different schedule, you must submit a semiannual compliance report to your permitting authority according to the requirements specified in paragraphs (a)(1) through (5) of this section.
(1) The first compliance report must cover the period beginning on the compliance date that is specified for your iron and steel foundry by §63.7683 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your iron and steel foundry.
(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after your first compliance report is due.
(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.
(5) For each iron and steel foundry that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of the dates specified in paragraphs (a)(1) through (4) of this section.
(b) Compliance report contents. Each compliance report must include the information specified in paragraphs (b)(1) through (3) of this section and, as applicable, paragraphs (b)(4) through (8) of this section.
(1) Company name and address.
(2) Statement by a responsible official, with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
(3) Date of report and beginning and ending dates of the reporting period.
(4) If you had a startup, shutdown, or malfunction during the reporting period and you took action consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).
(5) If there were no deviations from any emissions limitations (including operating limit), work practice standards, or operation and maintenance requirements, a statement that there were no deviations from the emissions limitations, work practice standards, or operation and maintenance requirements during the reporting period.
(6) If there were no periods during which a continuous monitoring system (including a CPMS or CEMS) was out-of-control as specified by §63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.
(7) For each deviation from an emissions limitation (including an operating limit) that occurs at an iron and steel foundry for which you are not using a continuous monitoring system (including a CPMS or CEMS) to comply with an emissions limitation or work practice standard required in this subpart, the compliance report must contain the information specified in paragraphs (b)(1) through

(4) and (b)(7)(i) and (ii) of this section. This requirement includes periods of startup, shutdown, and malfunction.
(i) The total operating time of each emissions source during the reporting period.
(ii) Information on the number, duration, and cause of deviations (including unknown cause) as applicable and the corrective action taken.
(8) For each deviation from an emissions limitation (including an operating limit) or work practice standard occurring at an iron and steel foundry where you are using a continuous monitoring system (including a CPMS or CEMS) to comply with the emissions limitation or work practice standard in this subpart, you must include the information specified in paragraphs (b)(1) through (4) and (b)(8)(i) through (xi) of this section. This requirement includes periods of startup, shutdown, and malfunction.
(i) The date and time that each malfunction started and stopped.
(ii) The date and time that each continuous monitoring system was inoperative, except for zero (low-level) and high-level checks.
(iii) The date, time, and duration that each continuous monitoring system was out-of-control, including the information in §63.8(c)(8).
(iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.
(v) A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total source operating time during that reporting period.
(vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and unknown causes.
(vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.
(viii) A brief description of the process units.
(ix) A brief description of the continuous monitoring system.
(x) The date of the latest continuous monitoring system certification or audit.
(xi) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.
(c) Immediate startup, shutdown, and malfunction report. If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements of §63.10(d)(5)(ii).
(d) Part 70 monitoring report. If you have obtained a title V operating permit for an iron and steel foundry pursuant to 40 CFR part 70 or 40 CFR part 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report for an iron and steel foundry along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emissions limitation or operation and maintenance requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements for an iron and steel foundry to your permitting authority.

§ 63.7752 What records must I keep?
(a) You must keep the records specified in paragraphs (a)(1) through (4) of this section:
(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that you submitted, according to the requirements of §63.10(b)(2)(xiv).
(2) The records specified in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
(3) Records of performance tests and performance evaluations as required by §63.10(b)(2)(viii).
(b) You must keep the following records for each CEMS.

(1) Records described in §63.10(b)(2)(vi) through (xi).
(2) Previous (*i.e.,* superseded) versions of the performance evaluation plan as required in §63.8(d)(3).
(3) Request for alternatives to relative accuracy tests for CEMS as required in §63.8(f)(6)(i).
(4) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.
(c) You must keep the records required by §§63.7743, 63.7744, and 63.7745 to show continuous compliance with each emissions limitation, work practice standard, and operation and maintenance requirement that applies to you.

§ 63.7753 In what form and for how long must I keep my records?
(a) You must keep your records in a form suitable and readily available for expeditious review, according to the requirements of §63.10(b)(1).
(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
(c) You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to the requirements in §63.10(b)(1). You can keep the records for the previous 3 years offsite.

Other Requirements and Information

§ 63.7760 What parts of the General Provisions apply to me?
Table 1 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§ 63.7761 Who implements and enforces this subpart?
(a) This subpart can be implemented and enforced by us, the U.S. Environmental Protection Agency (EPA), or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agency.
(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.
(c) The authorities that cannot be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (4) of this section.
(1) Approval of alternatives to non-opacity emissions limitations in §63.7690 and work practice standards in §63.7700 under §63.6(g).
(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.
(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.
(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

Definitions

§ 63.7765 What definitions apply to this subpart?
Terms used in this subpart are defined in the Clean Air Act (CAA), in §63.2, and in this section.

Automated conveyor and pallet cooling line means any dedicated conveyor line or area used for cooling molds received from pouring stations.

Automated shakeout line means any mechanical process unit designed for and dedicated to separating a casting from a mold. These mechanical processes include, but are not limited to,

shaker decks, rotary separators, and high-frequency vibration units. Automated shakeout lines do not include manual processes for separating a casting from a mold, such as personnel using a hammer, chisel, pick ax, sledge hammer, or jackhammer.

Bag leak detection system means a system that is capable of continuously monitoring relative particulate matter (dust) loadings in the exhaust of a baghouse to detect bag leaks and other upset conditions. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, electrodynamic, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.
Binder chemical means a component of a system of chemicals used to bind sand together into molds, mold sections, and cores through chemical reaction as opposed to pressure.

Capture system means the collection of components used to capture gases and fumes released from one or more emissions points and then convey the captured gas stream to a control device or to the atmosphere. A capture system may include, but is not limited to, the following components as applicable to a given capture system design: duct intake devices, hoods, enclosures, ductwork, dampers, manifolds, plenums, and fans.

Cold box mold or core making line means a mold or core making line in which the formed aggregate is hardened by catalysis with a gas.

Combustion device means an afterburner, thermal incinerator, or scrap preheater.

Conveyance means the system of equipment that is designed to capture pollutants at the source, convey them through ductwork, and exhaust them using forced ventilation. A conveyance may, but does not necessarily include, control equipment designed to reduce emissions of the pollutants. Emissions that are released through windows, vents, or other general building ventilation or exhaust systems are not considered to be discharged through a conveyance.

Cooling means the process of molten metal solidification within the mold and subsequent temperature reduction prior to shakeout.

Cupola means a vertical cylindrical shaft furnace that uses coke and forms of iron and steel such as scrap and foundry returns as the primary charge components and melts the iron and steel through combustion of the coke by a forced upward flow of heated air.

Deviation means any instance in which an affected source or an owner or operator of such an affected source:

(1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emissions limitation (including operating limits), work practice standard, or operation and maintenance requirement;
(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any iron and steel foundry required to obtain such a permit; or
(3) Fails to meet any emissions limitation (including operating limits) or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Electric arc furnace means a vessel in which forms of iron and steel such as scrap and foundry returns are melted through resistance heating by an electric current flowing through the arcs formed between the electrodes and the surface of the metal and also flowing through the metal between the arc paths.

Electric induction furnace means a vessel in which forms of iron and steel such as scrap and foundry returns are melted though resistance heating by an electric current that is induced in the

metal by passing an alternating current through a coil surrounding the metal charge or surrounding a pool of molten metal at the bottom of the vessel.

Emissions limitation means any emissions limit or operating limit.
Exhaust stream means gases emitted from a process through a conveyance as defined in this subpart.

Free organic liquids means material that fails the paint filter test by EPA Method 9095A (incorporated by reference—see §63.14). That is, if any portion of the material passes through and drops from the filter within the 5-minute test period, the material contains free liquids.

Fresh acid solution means a sulfuric acid solution used for the control of triethylamine emissions that has a pH of 2.0 or less.

Fugitive emissions means any pollutant released to the atmosphere that is not discharged through a *conveyance* as defined in this subpart.

Furan warm box mold or core making line means a mold or core making line in which the binder chemical system used is that system commonly designated as a furan warm box system by the foundry industry.

Hazardous air pollutant means any substance on the list originally established in 112(b)(1) of the CAA and subsequently amended as published in the *Code of Federal Regulations.*

Iron and steel foundry means a facility or portion of a facility that melts scrap, ingot, and/or other forms of iron and/or steel and pours the resulting molten metal into molds to produce final or near final shape products for introduction into commerce. Research and development facilities and operations that only produce non-commercial castings are not included in this definition.

Metal melting furnace means a cupola, electric arc furnace, or electric induction furnace that converts scrap, foundry returns, and/or other solid forms of iron and/or steel to a liquid state. This definition does not include a holding furnace, an argon oxygen decarburization vessel, or ladle that receives molten metal from a metal melting furnace, to which metal ingots or other material may be added to adjust the metal chemistry.

Mold or core making line means the collection of equipment that is used to mix an aggregate of sand and binder chemicals, form the aggregate into final shape, and harden the formed aggregate. This definition does not include a line for making green sand molds or cores.

Mold vent means an intentional opening in a mold through which gases containing pyrolysis products of organic mold and core constituents produced by contact with or proximity to molten metal normally escape the mold during and after metal pouring.

Pouring area means an area, generally associated with floor and pit molding operations, in which molten metal is brought to each individual mold. Pouring areas include all pouring operations that do not meet the definition of a pouring station.

Pouring station means the fixed location to which molds are brought in a continuous or semicontinuous manner to receive molten metal, after which the molds are moved to a cooling area.

Responsible official means responsible official as defined in §63.2.

Scrap preheater means a vessel or other piece of equipment in which metal scrap that is to be used as melting furnace feed is heated to a temperature high enough to eliminate moisture and other volatile impurities or tramp materials by direct flame heating or similar means of heating.

Scrubber blowdown means liquor or slurry discharged from a wet scrubber that is either removed as a waste stream or processed to remove impurities or adjust its composition or pH before being returned to the scrubber.
Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

Table 1 to Subpart EEEEE of Part 63—Applicability of General Provisions to Subpart EEEEE

[As stated in § 63.7760, you must meet each requirement in the following table that applies to you.]

Citation	Subject	Applies to Subpart EEEEE?	Explanation
63.1.....	Applicability.....	Yes.....	
63.2.....	Definitions.....	Yes.....	
63.3.....	Units and abbreviations	Yes.....	
63.4.....	Prohibited activities..	Yes.....	
63.5.....	Construction/ reconstruction.	Yes.....	
63.6(a)-(g).....	Compliance with standards and maintenance requirements.	Yes.....	
63.6(h).....	Opacity and visible emissions standards.	Yes.....	
63.6(i)-(j).....	Compliance extension and Presidential compliance exemption.	Yes.....	
63.7(a)(1)-(a)(2).....	Applicability and performance test dates.	No.....	Subpart EEEEE specifies applicability and performance test dates.
63.7(a)(3), (b)-(h).....	Performance testing requirements.	Yes.....	
63.8(a)(1)-(a)(3), (b), (c)(1)-(c)(3), (c)(6)-(c)(8), (d), (e), (f)(1)-(f)(6), (g)(1)-(g)(4).	Monitoring requirements	Yes.....	Subpart EEEEE specifies requirements for alternative monitoring systems.
63.8(a)(4).....	Additional monitoring requirements for control devices in §63.11.	No.....	Subpart EEEEE does not require flares.
63.8(c)(4).....	Continuous monitoring system (CMS) requirements.	No.....	Subpart EEEEE specifies requirements for operation of CMS and CEMS.
63.8(c)(5).....	Continuous opacity monitoring system (COMS) Minimum Procedures.	No.....	Subpart EEEEE does not require COMS.

Citation	Subject	Applies to Subpart EEEEE?	Explanation
63.8(g)(5).....	Data reduction.....	No.....	Subpart EEEEE specifies data reduction requirements.
63.9.....	Notification requirements.	Yes.....	
63.10(a)-(b), (c)(1)-(6), (c)(9)-(15), (d)(1)-(2), (e)(1)-(2), (f).	Recordkeeping and reporting requirements.	Yes.....	Additional records for CMS in §63.10(c)(1)-(6), (9)-(15) apply only to CEMS.
63.10(c)(7)-(8).....	Records of excess emissions and parameter monitoring exceedances for CMS.	No.....	Subpart EEEEE specifies records requirements.
63.10(d)(3).....	Reporting opacity or visible emissions observations.	Yes.....	
63.10(e)(3).....	Excess emissions reports.	No.....	Subpart EEEEE specifies reporting requirements.
63.10(e)(4).....	Reporting COMS data....	No.....	Subpart EEEEE data does not require COMS.
63.11.....	Control device requirements.	No.....	Subpart EEEEE does not require flares.
63.12.....	State authority and delegations.	Yes.....	
63.13-63.15.....	Addresses of State air pollution control agencies and EPA regional offices. Incorporation by reference. Availability of information and confidentiality.	Yes.....	

D.1.13 One Time Deadlines Relating to National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries [40 CFR Part 63, Subpart EEEEE]

The Permittee shall comply with the following requirements by the dates listed:

Requirement	Rule Cite	Affected Facility	Deadline
Initial performance tests	40 CFR 63.7730	five (5) electric induction furnaces, scrap preheater, and fugitive emissions from foundry operations	180 days after April 23, 2007
Work Practice Standards	40 CFR 63.7700	five (5) electric induction furnaces, scrap preheater, and scrap storage areas	April 22, 2005
Operation and Maintenance	40 CFR 63.7710	iron and steel foundry, including air pollution control and monitoring equipment	April 23, 2007
Initial Compliance Demonstration for Work Practice Standards	40 CFR 63.7730	five (5) electric induction furnaces, scrap preheater, and scrap storage areas	30 days after April 22, 2005
Initial Compliance Demonstration for Operation and Maintenance Requirements	40 CFR 63.7730	iron and steel foundry, including air pollution control and monitoring equipment	30 days after April 23, 2007

SECTION D.2 FACILITY OPERATION CONDITIONS

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

(j) one (1) magnesium treatment process station using wire injection, referred to as process P05a, constructed in 1998, with a maximum capacity of 13.76 tons of iron per hour, with emissions controlled by dust collector C14, and exhausting to stack S14;

(k) one (1) magnesium treatment process station using wire injection, referred to as process P05b, constructed in 1994, with a maximum capacity of 13.76 tons of metal per hour, with emissions controlled by dust collector C09, exhausting to stack S09;

(m) One (1) shakeout system, consisting of the following:

(1) one (1) high bay shakeout system, referred to as process P09a, constructed in 1991, with a maximum throughput capacity of 13.76 tons of metal per hour and 68.8 tons of sand per hour, with emissions controlled by the high bay shakeout dust collector, referred to as C01, and exhausting to stack S01;

(2) one (1) center bay shakeout system, referred to as process P09b, constructed in 1990, with a maximum throughput capacity of 13.76 tons of metal per hour and 68.8 tons of sand per hour, with emissions controlled by the center bay shakeout dust collector, referred to as C02, and exhausting to stack S02;

(n) one (1) mechanical reclamation system, referred to as process P10, constructed in 1991 and modified in 1999, with a maximum capacity of 68.8 tons of sand per hour, including one (1) Didion rotary lump crusher and one (1) rotoconditioner with emissions controlled by the mechanical reclaim dust collector, referred to as C04, and exhausting to stack S04;

(o) two (2) pneumatic sand transporters for the mechanical reclamation system, constructed in 1999, each with a maximum capacity of 15 tons of sand per hour, with emissions controlled by dust collector C04, exhausting to stack S04;

(p) one (1) thermal sand reclamation system including a natural gas-fired calcining unit, with a maximum heat input capacity of 6.4 million British thermal units (MMBtu) per hour, referred to as process P11, constructed in 2005, with a maximum capacity of 3.125 tons of sand per hour, with emissions controlled by the thermal dust collector, referred to as C05, and exhausting to stack S05;

(q) Shotblasting operation consisting of the following:

(1) one (1) pneumatic room blast operation, referred to as process P12a, constructed prior to 1972, with a maximum capacity of 1.376 tons of metal per hour, with emissions controlled by the room blast dust collector, referred to as C09, and exhausting through stack S09;

(2) Process 12b, consisting of the following:

(A) one (1) small shotblast machine, referred to as the small castings blaster, constructed prior to 1972, and one (1) BCP shot blast machine, constructed in 1991, with a maximum combined capacity of 13.76 tons of metal per hour, with emissions controlled by the blast operations dust collector, referred to as C03, and exhausting to stack S03;

(B) One (1) table shotblaster, approved for construction in 2007, with a maximum capacity of 13.76 tons of metal per hour, with emissions controlled by a dust collector, referred to as C16, and exhausting to stack S16;

(r) cleaning and grinding operations, referred to as process P13, constructed prior to 1972 and modified in 2001, with a maximum capacity of 13.76 tons of metal per hour, consisting of two (2) grinding areas with emissions from one (1) area controlled by a dust collector, referred to as C15, exhausting to stack S15, and emissions from the other area controlled by a dust collector, referred to as C07, exhausting to stack S07.

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

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

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

The following limits shall apply pursuant to 326 IAC 2-2 as a result of the air dispersion modeling analysis performed in support of the PSD BACT determination in condition D.1.1. The limits in (p), (q), and (r) below shall also apply pursuant to Significant Source Modification No. 091-21258-00018, issued on September 2, 2005, to render the requirements of 326 IAC 2-2 (PSD) not applicable to the thermal sand reclamation unit (P11):

(a) The throughput of metal to the magnesium wire treatment processes, P05a and P05b, shall not exceed 50,000 tons per twelve (12) consecutive month period, and the throughput of metal from the pneumatic room blast operations, P12a, shall not exceed 4,500 tons per twelve (12) consecutive month period, for a combined metal throughput limit of 54,500 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(b) Total PM emissions from dust collectors C09 and C14 controlling the magnesium wire treatment processes, identified as P05a and P05b, and the pneumatic room blast operations, identified as P12a, shall not exceed 0.118 pound per ton of combined metal throughput;

(c) Total PM10 emissions from dust collectors C09 and C14 controlling the magnesium wire treatment processes, identified as P05a and P05b, and the pneumatic room blast operations, identified as P12a, shall not exceed 0.093 pound per ton of combined metal throughput;

(d) The combined throughput of metal from the high and center bay shakeout operations, P09a and P09b, shall not exceed 45,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(e) Total PM emissions from dust collectors C01 and C02 controlling the high and center bay shakeout operations, identified as P09a and P09b, shall not exceed 0.19 pound per ton of combined metal throughput;

(f) Total PM10 emissions from dust collectors C01 and C02 controlling the high and center bay shakeout operations, identified as P09a and P09b, shall not exceed 0.133 pound per ton of combined metal throughput;

(g) The combined throughput of metal from the small castings blaster and BCP shot blast, P12b, shall not exceed 45,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(h) Total PM emissions from dust collector C03 controlling the small casting blaster and BCP shot blast, identified as P12b, shall not exceed 0.25 pound per ton of combined metal throughput;

(i) Total PM10 emissions from dust collector C03 controlling the small casting blaster and BCP shot blast, identified as P12b, shall not exceed 0.025 pound per ton of combined metal throughput;

(j) The combined throughput of metal from the cleaning and grinding operation, P13, shall not exceed 45,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(k) Total PM emissions from dust collectors C07 and C15 controlling the cleaning and grinding operation, identified as P13, shall not exceed 0.012 pound per ton of combined metal throughput;

(l) Total PM10 emissions from dust collectors C07 and C15 controlling the cleaning and grinding operation, identified as P13, shall not exceed 0.013 pound per ton of combined metal throughput;

(m) The total throughput of sand from the mechanical reclamation system, P10, shall not exceed 250,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(n) Total PM emissions from dust collector C04 controlling the mechanical reclamation system, identified as P10, shall not exceed 0.107 pound per ton of sand throughput;

(o) Total PM10 emissions from dust collector C04 controlling the mechanical reclamation system, identified as P10, shall not exceed 0.016 pound per ton of sand throughput;

(p) The total throughput of sand to the thermal sand reclamation system, P11, shall not exceed 27,375 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(q) Total PM emissions from dust collector C05 controlling the thermal sand reclamation system shall not exceed 0.206 pound per ton of sand throughput;

(r) Total PM10 emissions from dust collector C05 controlling the thermal sand reclamation system shall not exceed 0.03 pound per ton of sand throughput;

(s) The Permittee shall increase the heights of stacks S04 and S05 from the existing stack height of 40 feet above ground to 50 feet above ground, within one (1) year after issuance of the Part 70 permit.

D.2.2 PSD Minor Limits [326 IAC 2-2]

(a) The following limits shall limit PM and PM10 emissions from the following emission units so that the net emissions increase of PM and PM10 from the installation of these units are less than the PSD significant thresholds so that the requirements of 326 IAC 2-2 (PSD) do not apply:

(1) Total PM emissions from dust collector C01, controlling the high bay shakeout operation shall not exceed 49.37 pounds per hour;

(2) Total PM10 emissions from the dust collector C01, controlling the high bay shakeout operation shall not exceed 49.37 pounds per hour;

(3) Total PM emissions from the dust collector C04, controlling the mechanical sand reclamation operation shall not exceed 47.6 pounds per hour;

(4) Total PM10 emissions from the dust collector C04, controlling the mechanical sand reclamation operation shall not exceed 47.6 pounds per hour;

(5) Total PM emissions from the dust collector C05, controlling the thermal sand reclamation operation shall not exceed 13.62 pounds per hour;

(6) Total PM10 emissions from the dust collector C05, controlling the thermal sand reclamation operation shall not exceed 13.62 pounds per hour;

(7) Total PM emissions from the dust collector C03, controlling the BCP shot blast shall not exceed 23.75 pounds per hour;

(8) Total PM10 emissions from the dust collector C03, controlling the BCP shot blast shall not exceed 23.75 pounds per hour.

(b) The following limits will ensure that PM and PM10 emissions from the following units are less than 25 and 15 tons per year, respectively, so that the requirements of 326 IAC 2-2 (PSD) do not apply:

(1) Total PM emissions from dust collector C02, controlling the center bay shakeout operation (P09b), installed in 1990, shall not exceed 5.68 pounds per hour;

(2) Total PM10 emissions from dust collector C02, controlling emissions from the center bay shakeout operation (P09b), installed in 1990, shall not exceed 3.4 pounds per hour;

(3) Total PM emissions from dust collector C09, controlling emissions from the magnesium treatment process station using wire injection (P05b), installed in 1994, shall not exceed 5.68 pounds per hour;

(4) Total PM10 emissions from dust collector C09, controlling emissions from the magnesium treatment process station using wire injection (P05b), installed in 1994, shall not exceed 3.4 pounds per hour;

(5) Total PM emissions from dust collector C14, controlling emissions from the magnesium treatment process station using wire injection (P05a), installed in 1998, shall not exceed 5.68 pounds per hour;

(6) Total PM10 emissions from dust collector C14, controlling emissions from the magnesium treatment process station using wire injection (P05a), installed in 1998, shall not exceed 3.4 pounds per hour;

(7) Pursuant to CP 091-10136-00018, issued on April 21, 1999, and CP 091-10594-00018, issued on July 22, 1999, total PM emissions from dust collector C04, controlling the mechanical sand reclamation operation (P10), modified in 1999, including the Didion rotary lump crusher, the rotoconditioner and the two (2) pneumatic sand transporters, shall not exceed 5.48 pounds per hour average over three (3) hours.

(8) Pursuant to CP 091-10136-00018, issued on April 21, 1999, and CP 091-10594-00018, issued on July 22, 1999, total PM10 emissions from dust collector C04, controlling the mechanical sand reclamation operation (P10), modified in 1999, including the Didion rotary lump crusher, the rotoconditioner and the two (2) pneumatic sand transporters, shall not exceed 3.40 pounds per hour average over three (3) hours.

(9) Pursuant to Significant Source Modification No. 091-14518-00018, issued on October 25, 2001, total PM emissions from dust collector C15, controlling one area of the cleaning and grinding operations (P13), modified in 2001, shall not exceed 5.7 pounds per hour, averaged over three (3) hours.

(10) Pursuant to Significant Source Modification No. 091-14518-00018, issued on October 25, 2001, total PM10 emissions from dust collector C15, controlling one area of the cleaning and grinding operations (P13), modified in 2001, shall not exceed 3.42 pounds per hour, averaged over three (3) hours.

(c) Compliance with the following limits shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to these units.

(1) The PM emissions from dust collector C16 controlling the table shot blaster, P12b, shall not exceed 5.68 pounds per hour;

(2) The PM10 emissions from dust collector C16 controlling the table shot blaster, P12b, shall not exceed 3.40 pounds per hour.

D.2.3 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 facilities listed in the table below shall be as follows:

Facility	Control Device	Process Weight Rate (tons/hr)	Emission Limit (lbs PM/hr)
Magnesium wire treatment processes P05a and P05b	Dust collector C14 and Room blast dust collector C09	13.76	23.75
High bay shakeout system P09a	high bay shakeout dust collector C01	82.56	49.37
Center bay shakeout system P09b	center bay shakeout dust collector C02	82.56	49.37
Mechanical reclamation system P10	mechanical reclaim dust collector C04	68.8	47.60
Thermal sand reclamation system P11	Dust collector C05	3.125	8.80
Pneumatic room blast operations P12a	room blast dust collector C09	1.376	5.08
Small casting blaster and BCP blast, P12b	blast operations dust collector C03	13.76	23.75
Table shotblaster, P12b	dust collector C16	13.76	23.75
Cleaning and grinding operations P13	Dust collectors C15 and C07	13.76	23.75

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

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

or

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:

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

D.2.4 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

(a) VOC emissions from the high bay (P09a) shakeout operation shall not exceed 1.2 pounds of VOC per ton of metal throughput;

(b) The throughput of metal from the high bay (P09a) shakeout operation shall not exceed 41,500 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(c) VOC emissions from the center bay (P09b) shakeout operation shall not exceed 1.2 pounds of VOC per ton of metal throughput;

(d) The throughput of metal from the center bay (P09b) shakeout operation shall not exceed 41,500 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

The metal throughput limits and the VOC emission limits will insure that VOC emissions from each of the high bay shakeout operation (P09a) and the center bay shakeout operation (P09b) are limited to less than 25 tons per year. Therefore, compliance with this limit makes 326 IAC 8-1-6 (BACT) not applicable.

Compliance with the metal throughput limit and VOC emission limit for the high bay and center bay shakeout operations (P09a and P09b) will also render the requirements of 326 IAC 2-2 (PSD) not applicable for the high bay and center bay shakeout operations (P09a and P09b).

D.2.5 Burning Regulations – Incinerators [326 IAC 4-2]

That pursuant to 326 IAC 4-2-2 (Incinerators) and Significant Source Modification No. 091-21258-00018, issued on September 2, 2005, the calcining unit, which is part of the thermal sand reclamation system, shall:

(a) Consist of primary and secondary chambers or the equivalent.

(b) Be equipped with a primary burner unless burning wood products.

(c) Comply with 326 IAC 5-1 (Opacity Limitations) and 326 IAC 2 (Permit Review Rules).

(d) Be maintained properly as specified by the manufacturer and approved by IDEM.

(e) Be operated according to the manufacturer's recommendation and only burn waste approved by the IDEM.

(f) Comply with other state and/or local rules or ordinances regarding installation and operation of incinerators.

(g) Be operated so that emissions of hazardous material including, but not limited to, viable pathogenic bacteria, dangerous chemical or gases, or noxious odors are prevented.

(h) Not create a nuisance or a fire hazard.

(i) Not emit particulate matter (PM) in excess of 0.3 pound per 1000 pounds of dry exhaust gas corrected to 50% excess air.

The operation of this calcining unit shall be terminated immediately upon noncompliance with any of the above mentioned requirements.

Compliance Determination Requirements

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

(a) Within 180 days after issuance of this Part 70 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 on the magnesium wire treatment process exhausting through dust collectors C14 and C09, using methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM10 includes filterable and condensable PM10. Testing shall be conducted in accordance with Section C - Performance Testing.

(b) Within 180 days after issuance of this Part 70 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 on the mechanical reclamation system exhausting through dust collector C04 and the thermal sand reclamation system exhausting through dust collector C05 using methods as approved by the Commissioner. These tests 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.

(c) Within 180 days after issuance of this Part 70 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 on the high bay shakeout operation exhausting through dust collector C01 and the center bay shakeout operation exhausting through dust collector C02 using methods as approved by the Commissioner, in order to demonstrate compliance with the particulate emission limits pursuant to 326 IAC 2-2 and 326 IAC 6-3-2. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing. PM10 includes filterable and condensable PM10.

D.2.7 Particulate Control [326 IAC 2-7-6(6)]

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

(a) The dust collector C01 for particulate control shall be in operation and control emissions from the high bay shakeout system at all times that the high bay shakeout system is in operation;

(b) The dust collector C02 for particulate control shall be in operation and control emissions from the center bay shakeout system at all times that the center bay shakeout system is in operation;

(c) The dust collector C03 for particulate control shall be in operation and control emissions from the two (2) small casting blasters and one (1) BCP blast at all times that the two (2) small casting blasters and one (1) BCP blast are in operation;

(d) The dust collector C04 for particulate control shall be in operation and control emissions from the mechanical reclamation system, including the Didion rotary lump crusher, the rotoconditioner, and the two (2) pneumatic sand transporters, at all times that the mechanical reclamation system, including the Didion rotary lump crusher, the rotoconditioner, and the two (2) pneumatic sand transporters, is in operation;

(e) The dust collector C05 for particulate control shall be in operation and control emissions from the thermal sand reclamation system at all times that the thermal sand reclamation system is in operation;

(f) The dust collectors C07 and C15 for particulate control shall be in operation and control emissions from the cleaning and grinding operation at all times that the cleaning and grinding operation is in operation;

(g) The dust collector C09 for particulate control shall be in operation and control emissions from the magnesium wire treatment process (P05b) and the pneumatic room blast operation at all times that the magnesium wire treatment process (P05b) and the pneumatic room blast operation are in operation;

(h) The dust collector C14 for particulate control shall be in operation and control emissions from the magnesium wire treatment process (P05a) at all times that the magnesium wire treatment process (P05a) is in operation.

(i) The dust collector C16 for particulate control shall be in operation and control emissions from the table shotblaster at all times that the table shotblaster is in operation.

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

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

D.2.8 Visible Emissions Notations

(a) Visible emission notations of each of the dust collectors C01, C02, C03, C04, C05, C07, C09, C14, C15, and C16 stack exhausts 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

The Permittee shall record the pressure drop across each of the dust collectors C01, C02, C03, C04, C05, C07, C09, C14, C15, and C16 used in conjunction with the high and center bay shakeout operations, the one (1) small castings blaster and one (1) BCP shot blast, the mechanical reclamation system (including the Didion rotary lump crusher, the rotoconditioner, and the two (2) pneumatic sand transporters), the thermal sand reclamation system, the cleaning and grinding operation, the magnesium wire treatment process, the pneumatic room blast operations, and the table shotblaster at least once per day when their associated facilities are in operation. When for any one reading, the pressure drop across dust collector C01, C02, or C03 is outside the normal range of 3.0 and 9.0 inches of water or a range established during the latest stack test, or the pressure drop across dust collector C04 is outside the normal range of 4.0 and 9.0 inches of water or a range established during the latest stack test, or the pressure drop across dust collector C05 or C09 is outside the normal range of 2.0 and 6.0 inches of water or a range established during the latest stack test, or the pressure drop across dust collector C07, C14, C15, or C16 is outside the normal range of 3.0 and 7.0 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.

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 dust collector 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 dust collector 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 dust collector=s pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.2.11 Record Keeping Requirements

(a) To document compliance with Condition D.2.1(a), (d), (g), and (j) and D.2.4(b) and (d), the Permittee shall maintain records of the throughput of metal to the magnesium wire treatment processes, from the high and center bay shakeout operations, from the pneumatic room blast operations, from the small castings blasters and BCP shot blast, and from the cleaning and grinding operation for each month. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(b) To document compliance with Condition D.2.1(m) and (p), the Permittee shall maintain records of the throughput of sand from the mechanical reclamation system and to the thermal sand reclamation system for each month. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(c) To document compliance with Condition D.2.10, the Permittee shall maintain records of visible emission notations of each of the dust collectors stack exhausts once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(d) To document compliance with Condition D.2.11, the Permittee shall maintain records once per day of the pressure drop across each of the dust collectors during normal operation. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

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

D.2.12 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.1(a), (d), (g), and (j), Condition D.2.4(b) and (d), and Condition D.2.1(m) and (p) 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 “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.3 FACILITY OPERATION CONDITIONS

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

(l) expendable pattern casting, referred to as process P08, constructed in 1978, with a maximum capacity of 68.75 pounds of foam per hour, with emissions uncontrolled and exhausting inside the building;

(s) casting painting operation, referred to as process P14, utilizing air atomization spray, constructed in 1975, using a maximum of 7.25 pounds of coating per hour and 2.0 pounds of thinner per hour, with a dry filter for overspray control, and emissions exhausting to stack S11;

(t) mold making operations, referred to as process P16, constructed prior to 1972, using a phenolic nobake binder system with a maximum capacity of 68.8 tons of sand per hour, with emissions uncontrolled and exhausting inside the building;

(u) core making operations, referred to as process P17, constructed prior to 1972 and modified in 1985 and in 2005 with the addition of a High Bay Core Mixer, using phenolic nobake, phenolic urethane nobake, furan nobake, and SO_2 binder systems with a maximum capacity of 68.8 tons of sand per hour, with SO_2 emissions controlled by a packed tower scrubber, referred to as C10, which exhausts to stack S10, and with particulate emissions controlled by the core room dust collector, referred to as C08, exhausting to stack S08;

Note: The SO_2 scrubber is voluntarily installed and operated.

(v) core and mold refractory wash coating operation, constructed prior to 1972, referred to as process P18, utilizing dip and flow coating, with emissions exhausting to stack S13;

(w) one (1) pattern repair shop, referred to as process P20, constructed prior to 1972, including woodworking equipment for routine maintenance and repair of wood patterns, with emissions controlled by a dust collector, referred to as C07, and exhausting to stack S07.

(x) pattern and core box release agent coating operation, referred to as process P20a, utilizing air atomization spray, constructed prior to 1972, with emissions exhausting inside the building.

(y) one (1) pneumatic sand transport system for the mold making operations, constructed in 2005, with a maximum capacity of 68.8 tons of sand per hour, with emissions uncontrolled and exhausting into the building.

Under 40 CFR 63, Subpart MMMM, the casting painting operation, referred to as process P14, all storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed, all manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials, and all storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation are considered an existing affected source.

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

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

D.3.1 Volatile Organic Compounds (VOCs) [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 (BACT), the following shall apply:

(a) When the phenolic urethane nobake binder is used in the core making operations, referred to as P17, the VOC emission from the resin and catalyst shall not exceed 6.39

pounds of VOC per ton of sand.

(b) When the furan nobake binder is used in the core making operations, referred to as P17, the VOC emission from the resin shall not exceed 21.82 pounds of VOC per ton of sand.

(c) When the phenolic urethane nobake binder is used in the core making operations, the sand throughput to the core making operations, referred to as P17, shall not exceed 12,200 tons per 12 consecutive month period with compliance determined at the end of each month.

(d) When the furan nobake binder is used in the core making operations, the sand throughput to the core making operations, referred to as P17, shall not exceed 3,547 tons per 12 consecutive month period with compliance determined at the end of each month.

D.3.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

(a) The following limits shall apply pursuant to 326 IAC 2-2 as a result of the air dispersion modeling analysis performed in support of the PSD BACT determination in condition D.1.1. The limits in (a)(1), (2), and (3) below shall also apply pursuant to Significant Source Modification No. 091-21258-00018, issued on September 2, 2005, to render the requirements of 326 IAC 2-2 (PSD) not applicable to the core making operations (P17):

(1) Total PM emissions from dust collector C08 controlling the core making operations shall not exceed 0.16 pound per ton of sand throughput;

(2) Total PM10 emissions from dust collector C08 controlling the core making operations shall not exceed 0.024 pound per ton of sand throughput.

(3) The throughput of sand to the core making operations, P17, shall not exceed 70,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) The following limits, which will ensure that the VOC emissions increase for the modification in 1990 do not exceed 100 tons per year, will exempt the source from the requirement to perform an air quality analysis for VOC:

(1) The usage of VOC in the pattern and core box release agent coating operation (P20a) shall not exceed 86,500 pounds per twelve (12) consecutive month period, with compliance determined at the end of each month;

(2) The throughput of foam in the expendable pattern casting operation (P08) shall not exceed 200,000 pounds per twelve (12) consecutive month period, with compliance determined at the end of each month;

(3) Emissions of VOC from the expendable pattern casting operation (P08) shall not exceed 0.005 pound of VOC per pound of foam throughput.

D.3.3 Particulate [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), particulate from the casting painting operation shall be controlled by a dry particulate filter, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

D.3.4 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 core sand handling operation shall not exceed 47.6 pounds per hour when operating at a process weight rate of 68.8 tons per hour.

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

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

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

(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 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. This limit applies to the woodworking equipment in the pattern repair shop.

Compliance Determination Requirements

D.3.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) Within 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Conditions D.3.2 and D.3.4, the Permittee shall perform PM and PM10 testing on the core making operations exhausting through dust collector C08 using methods as approved by the Commissioner. These tests 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.

(b) Within 180 days after issuance of Part 70 Significant Permit Modification No. 091-28463-00018, the Permittee shall perform VOC testing on the core making operations, referred to as P17, in order to demonstrate compliance with Conditions D.3.1(a). This test shall be performed using methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

(c) Within 180 days after issuance of Part 70 Significant Permit Modification No. 091-28463-00018, the Permittee shall perform VOC testing on the core making operations, referred to as P17, in order to demonstrate compliance with Conditions D.3.1(b). This test shall be performed using methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

D.3.6 Particulate Control [326 IAC 2-7-6(6)]

(a) In order to comply with conditions D.3.2 and D.3.4, the dust collectors C08 and C07 for particulate control shall be in operation and control emissions from the core making operations and the woodworking equipment in the pattern repair shop at all times that the core making operations and the woodworking equipment in the pattern repair shop are in operation.

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

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

D.3.7 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters associated with the casting painting operation. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stack (S11) while the booth is in operation. If a condition exists which should result in a response step, 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.

(b) Monthly inspections shall be performed of the coating emissions from the stack**s** and the presence of overspray on the rooftops and the nearby ground. When there is a noticeable change in overspray emissions, or when evidence of overspray emissions is 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.3.8 Visible Emissions Notations

(a) Visible emission notations of the dust collector C08 stack exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

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

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

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

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

D.3.9 Parametric Monitoring

The Permittee shall record the pressure drop across the dust collector C08 used in conjunction with the core making operations, at least once per day when the process is in operation. When for any one reading, the pressure drop across the dust collector is outside the normal range of 4.0 and 9.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.3.10 Broken or Failed Bag Detection

(a) For a single compartment dust collector 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 dust collector 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 dust collector=s pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.3.11 Record Keeping Requirements

(a) To document compliance with Condition D.3.1, the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) below shall be complete and sufficient to establish compliance with the VOC emission limit established in Condition D.3.1.

(1) The amount and VOC content of phenolic urethane nobake resin and catalyst used.

(2) The throughput of sand to the core making operations for each month, where phenolic urethane nobake resin and catalyst are used.

(3) The amount and VOC content of furan nobake resin used.

(4) The throughput of sand to the core making operations for each month, where furan nobake resin is used.

(5) A log of the dates of use;

(6) The total VOC usage from phenolic urethane nobake resin and catalyst usage for each month and compliance period; and

(7) The total VOC usage from furan nobake resin usage for each month and compliance period.

(b) To document compliance with Condition D.3.2(a)(3), the Permittee shall maintain records of the throughput of sand to the core making operations for each month. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(c) To document compliance with Condition D.3.2(b)(1) and (2), the Permittee shall maintain records of the monthly usage of VOC in the pattern and core box release agent coating operation (P20a) and the monthly usage of foam in the expendable pattern casting operation (P08). Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(d) To document compliance with Condition D.3.7, the Permittee shall maintain a log of weekly overspray observations, and daily and monthly inspections.

(e) To document compliance with Condition D.3.8, the Permittee shall maintain records of visible emission notations of the dust collector stack exhaust once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(f) To document compliance with Condition D.3.9, the Permittee shall maintain records once per day of the pressure drop across the dust collector during normal operation when venting to the atmosphere. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

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

D.3.12 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.3.1, D.3.2(a)(3), and D.3.2(b)(1) and (2) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

D.3.13 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.3901, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the casting painting operation, referred to as process P14, all storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed, all manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials, and all storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation as specified in Table 2 of 40 CFR 63, Subpart MMMM in accordance with schedule in 40 CFR 63 Subpart MMMM.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

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

D.3.14 National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products Requirements [40 CFR Part 63, Subpart MMMM] [326 IAC 20-80]

Pursuant to CFR Part 63, Subpart MMMM, the Permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products, which are incorporated by reference as 326 IAC 20-80 for the casting painting operation, referred to as process P14, all storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed, all manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials, and all storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation as specified as follows.

What This Subpart Covers

§ 63.3880 What is the purpose of this subpart?
This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for miscellaneous metal parts and products surface coating facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

§ 63.3881 Am I subject to this subpart?
(a) Miscellaneous metal parts and products include, but are not limited to, metal components of the following types of products as well as the products themselves: motor vehicle parts and accessories, bicycles and sporting goods, recreational vehicles, extruded aluminum structural components, railroad cars, heavy duty trucks, medical equipment, lawn and garden equipment, electronic equipment, magnet wire, steel drums, industrial machinery, metal pipes, and numerous other industrial, household, and consumer products. Except as provided in paragraph (c) of this section, the source category to which this subpart applies is the surface coating of any miscellaneous metal parts or products, as described in paragraph (a)(1) of this section, and it includes the subcategories listed in paragraphs (a)(2) through (6) of this section.
(1) Surface coating is the application of coating to a substrate using, for example, spray guns or dip tanks. When application of coating to a substrate occurs, then surface coating also includes associated activities, such as surface preparation, cleaning, mixing, and storage. However, these activities do not comprise surface coating if they are not directly related to the application of the coating. Coating application with handheld, non-refillable aerosol containers, touch-up markers, marking pens, or the application of paper film or plastic film which may be pre-coated with an adhesive by the manufacturer are not coating operations for the purposes of this subpart.
(2) The general use coating subcategory includes all surface coating operations that are not high performance, magnet wire, rubber-to-metal, or extreme performance fluoropolymer coating operations.
(3) The high performance coating subcategory includes surface coating operations that are performed using coatings that meet the definition of high performance architectural coating or high temperature coating in §63.3981.
(4) The magnet wire coating subcategory includes surface coating operations that are performed using coatings that meet the definition of magnet wire coatings in §63.3981.
(5) The rubber-to-metal coatings subcategory includes surface coating operations that are performed using coatings that meet the definition of rubber-to-metal coatings in §63.3981.
(6) The extreme performance fluoropolymer coatings subcategory includes surface coating operations that are performed using coatings that meet the definition of extreme performance fluoropolymer coatings in §63.3981.
(b) You are subject to this subpart if you own or operate a new, reconstructed, or existing affected source, as defined in §63.3882, that uses 946 liters (250 gallons (gal)) per year, or more, of coatings that contain hazardous air pollutants (HAP) in the surface coating of miscellaneous metal parts and products defined in paragraph (a) of this section; and that is a major source, is located at a major source, or is part of a major source of emissions of HAP. A major source of HAP emissions is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit any single HAP at a rate of 9.07

megagrams (Mg) (10 tons) or more per year or any combination of HAP at a rate of 22.68 Mg (25 tons) or more per year. You do not need to include coatings that meet the definition of non-HAP coating contained in §63.3981 in determining whether you use 946 liters (250 gal) per year, or more, of coatings in the surface coating of miscellaneous metal parts and products.

§ 63.3882 What parts of my plant does this subpart cover?
(a) This subpart applies to each new, reconstructed, and existing affected source within each of the four subcategories listed in §63.3881(a).
(b) The affected source is the collection of all of the items listed in paragraphs (b)(1) through (4) of this section that are used for surface coating of miscellaneous metal parts and products within each subcategory.
(1) All coating operations as defined in §63.3981;
(2) All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;
(3) All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; and
(4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.
(e) An affected source is existing if it is not new or reconstructed.

§ 63.3883 When do I have to comply with this subpart?
The date by which you must comply with this subpart is called the compliance date. The compliance date for each type of affected source is specified in paragraphs (a) through (c) of this section. The compliance date begins the initial compliance period during which you conduct the initial compliance demonstration described in §§63.3940, 63.3950, and 63.3960.
(b) For an existing affected source, the compliance date is the date 3 years after January 2, 2004.
(d) You must meet the notification requirements in §63.3910 according to the dates specified in that section and in subpart A of this part. Some of the notifications must be submitted before the compliance dates described in paragraphs (a) through (c) of this section.

Emission Limitations

§ 63.3890 What emission limits must I meet?
(b) For an existing affected source, you must limit organic HAP emissions to the atmosphere from the affected source to the applicable limit specified in paragraphs (b)(1) through (5) of this section, except as specified in paragraph (c) of this section, determined according to the requirements in §63.3941, §63.3951, or §63.3961.
(1) For each existing general use coating affected source, limit organic HAP emissions to no more than 0.31 kg (2.6 lb) organic HAP per liter (gal) coating solids used during each 12-month compliance period.

§ 63.3891 What are my options for meeting the emission limits?
You must include all coatings (as defined in §63.3981), thinners and/or other additives, and cleaning materials used in the affected source when determining whether the organic HAP emission rate is equal to or less than the applicable emission limit in §63.3890. To make this determination, you must use at least one of the three compliance options listed in paragraphs (a) through (c) of this section. You may apply any of the compliance options to an individual coating operation, or to multiple coating operations as a group, or to the entire affected source. You may use different compliance options for different coating operations, or at different times on the same coating operation. You may employ different compliance options when different coatings are applied to the same part, or when the same coating is applied to different parts. However, you may not use different compliance options at the same time on the same coating operation. If you switch between compliance options for any coating operation or group of coating operations, you must document this switch as required by §63.3930(c), and you must report it in the next semiannual compliance report required in §63.3920.

(b) *Emission rate without add-on controls option.* Demonstrate that, based on the coatings, thinners and/or other additives, and cleaning materials used in the coating operation(s), the organic HAP emission rate for the coating operation(s) is less than or equal to the applicable emission limit in §63.3890, calculated as a rolling 12-month emission rate and determined on a monthly basis. You must meet all the requirements of §§63.3950, 63.3951, and 63.3952 to demonstrate compliance with the emission limit using this option.

§ 63.3892 What operating limits must I meet?
(a) For any coating operation(s) on which you use the compliant material option or the emission rate without add-on controls option, you are not required to meet any operating limits.

§ 63.3893 What work practice standards must I meet?
(a) For any coating operation(s) on which you use the compliant material option or the emission rate without add-on controls option, you are not required to meet any work practice standards.

General Compliance Requirements

§ 63.3900 What are my general requirements for complying with this subpart?
(a) You must be in compliance with the emission limitations in this subpart as specified in paragraphs (a)(1) and (2) of this section.
(1) Any coating operation(s) for which you use the compliant material option or the emission rate without add-on controls option, as specified in §63.3891(a) and (b), must be in compliance with the applicable emission limit in §63.3890 at all times.
(b) You must always operate and maintain your affected source, including all air pollution control and monitoring equipment you use for purposes of complying with this subpart, according to the provisions in §63.6(e)(1)(i).

§ 63.3901 What parts of the General Provisions apply to me?
Table 2 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

Notifications, Reports, and Records

§ 63.3910 What notifications must I submit?
(a) *General.* You must submit the notifications in §§63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) that apply to you by the dates specified in those sections, except as provided in paragraphs (b) and (c) of this section.
(b) *Initial Notification.* You must submit the initial notification required by §63.9(b) for a new or reconstructed affected source no later than 120 days after initial startup or 120 days after January 2, 2004, whichever is later. For an existing affected source, you must submit the initial notification no later than 1 year after January 2, 2004. If you are using compliance with the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (subpart IIII of this part) as provided for under §63.3881(d) to constitute compliance with this subpart for any or all of your metal parts coating operations, then you must include a statement to this effect in your initial notification, and no other notifications are required under this subpart in regard to those metal parts coating operations. If you are complying with another NESHAP that constitutes the predominant activity at your facility under §63.3881(e)(2) to constitute compliance with this subpart for your metal parts coating operations, then you must include a statement to this effect in your initial notification, and no other notifications are required under this subpart in regard to those metal parts coating operations.
(c) *Notification of compliance status.* You must submit the notification of compliance status required by §63.9(h) no later than 30 calendar days following the end of the initial compliance period described in §§63.3940, 63.3950, or 63.3960 that applies to your affected source. The notification of compliance status must contain the information specified in paragraphs (c)(1) through (11) of this section and in §63.9(h).
(1) Company name and address.

(2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
(3) Date of the report and beginning and ending dates of the reporting period. The reporting period is the initial compliance period described in §§63.3940, 63.3950, or 63.3960 that applies to your affected source.
(4) Identification of the compliance option or options specified in §63.3891 that you used on each coating operation in the affected source during the initial compliance period.
(5) Statement of whether or not the affected source achieved the emission limitations for the initial compliance period.
(6) If you had a deviation, include the information in paragraphs (c)(6)(i) and (ii) of this section.
(i) A description and statement of the cause of the deviation.
(ii) If you failed to meet the applicable emission limit in §63.3890, include all the calculations you used to determine the kg (lb) of organic HAP emitted per liter (gal) coating solids used. You do not need to submit information provided by the materials' suppliers or manufacturers, or test reports.
(7) For each of the data items listed in paragraphs (c)(7)(i) through (iv) of this section that is required by the compliance option(s) you used to demonstrate compliance with the emission limit, include an example of how you determined the value, including calculations and supporting data. Supporting data may include a copy of the information provided by the supplier or manufacturer of the example coating or material, or a summary of the results of testing conducted according to §63.3941(a), (b), or (c). You do not need to submit copies of any test reports.
(i) Mass fraction of organic HAP for one coating, for one thinner and/or other additive, and for one cleaning material.
(ii) Volume fraction of coating solids for one coating.
(iii) Density for one coating, one thinner and/or other additive, and one leaning material, except that if you use the compliant material option, only the example coating density is required.
(iv) The amount of waste materials and the mass of organic HAP contained in the waste materials for which you are claiming an allowance in Equation 1 of §63.3951.
(8) The calculation of kg (lb) of organic HAP emitted per liter (gal) coating solids used for the compliance option(s) you used, as specified in paragraphs (c)(8)(i) through (iii) of this section.
(ii) For the emission rate without add-on controls option, provide the calculation of the total mass of organic HAP emissions for each month; the calculation of the total volume of coating solids used each month; and the calculation of the 12-month organic HAP emission rate using Equations 1 and 1A through 1C, 2, and 3, respectively, of §63.3951.

§ 63.3920 What reports must I submit?
(a) *Semiannual compliance reports.* You must submit semiannual compliance reports for each affected source according to the requirements of paragraphs (a)(1) through (7) of this section. The semiannual compliance reporting requirements may be satisfied by reports required under other parts of the Clean Air Act (CAA), as specified in paragraph (a)(2) of this section.
(1) *Dates.* Unless the Administrator has approved or agreed to a different schedule for submission of reports under §63.10(a), you must prepare and submit each semiannual compliance report according to the dates specified in paragraphs (a)(1)(i) through (iv) of this section. Note that the information reported for each of the months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.
(i) The first semiannual compliance report must cover the first semiannual reporting period which begins the day after the end of the initial compliance period described in §63.3940, §63.3950, or §63.3960 that applies to your affected source and ends on June 30 or December 31, whichever date is the first date following the end of the initial compliance period.
(ii) Each subsequent semiannual compliance report must cover the subsequent semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
(iii) Each semiannual compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(iv) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the date specified in paragraph (a)(1)(iii) of this section.
(2) *Inclusion with title V report.* Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a semiannual compliance report pursuant to this section along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the semiannual compliance report includes all required information concerning deviations from any emission limitation in this subpart, its submission will be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a semiannual compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permitting authority.
(3) *General requirements.* The semiannual compliance report must contain the information specified in paragraphs (a)(3)(i) through (vii) of this section, and the information specified in paragraphs (a)(4) through (7) and (c)(1) of this section that is applicable to your affected source.
(i) Company name and address.
(ii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
(iii) Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.
(iv) Identification of the compliance option or options specified in §63.3891 that you used on each coating operation during the reporting period. If you switched between compliance options during the reporting period, you must report the beginning and ending dates for each option you used.
(v) If you used the emission rate without add-on controls or the emission rate with add-on controls compliance option (§63.3891(b) or (c)), the calculation results for each rolling 12-month organic HAP emission rate during the 6-month reporting period.
(4) *No deviations.* If there were no deviations from the emission limitations in §§63.3890, 63.3892, and 63.3893 that apply to you, the semiannual compliance report must include a statement that there were no deviations from the emission limitations during the reporting period. If you used the emission rate with add-on controls option and there were no periods during which the continuous parameter monitoring systems (CPMS) were out-of-control as specified in §63.8(c)(7), the semiannual compliance report must include a statement that there were no periods during which the CPMS were out-of-control during the reporting period.
(6) *Deviations: Emission rate without add-on controls option.* If you used the emission rate without add-on controls option and there was a deviation from the applicable emission limit in §63.3890, the semiannual compliance report must contain the information in paragraphs (a)(6)(i) through (iii) of this section.
(i) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in §63.3890.
(ii) The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. You must submit the calculations for Equations 1, 1A through 1C, 2, and 3 of §63.3951; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.3951(e)(4). You do not need to submit background data supporting these calculations (*e.g.,* information provided by materials suppliers or manufacturers, or test reports).
(iii) A statement of the cause of each deviation.

§ 63.3930 What records must I keep?
You must collect and keep records of the data and information specified in this section. Failure to collect and keep these records is a deviation from the applicable standard.

(a) A copy of each notification and report that you submitted to comply with this subpart, and the documentation supporting each notification and report. If you are using the predominant activity alternative under §63.3890(c), you must keep records of the data and calculations used to determine the predominant activity. If you are using the facility-specific emission limit alternative under §63.3890(c), you must keep records of the data used to calculate the facility-specific emission limit for the initial compliance demonstration. You must also keep records of any data used in each annual predominant activity determination and in the calculation of the facility-specific emission limit for each 12-month compliance period included in the semi-annual compliance reports.
(b) A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner and/or other additive, and cleaning material, and the volume fraction of coating solids for each coating. If you conducted testing to determine mass fraction of organic HAP, density, or volume fraction of coating solids, you must keep a copy of the complete test report. If you use information provided to you by the manufacturer or supplier of the material that was based on testing, you must keep the summary sheet of results provided to you by the manufacturer or supplier. You are not required to obtain the test report or other supporting documentation from the manufacturer or supplier.
(c) For each compliance period, the records specified in paragraphs (c)(1) through (4) of this section.
(1) A record of the coating operations on which you used each compliance option and the time periods (beginning and ending dates and times) for each option you used.
(3) For the emission rate without add-on controls option, a record of the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1, 1A through 1C, and 2 of §63.3951; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.3951(e)(4); the calculation of the total volume of coating solids used each month using Equation 2 of §63.3951; and the calculation of each 12-month organic HAP emission rate using Equation 3 of §63.3951.
(d) A record of the name and volume of each coating, thinner and/or other additive, and cleaning material used during each compliance period. If you are using the compliant material option for all coatings at the source, you may maintain purchase records for each material used rather than a record of the volume used.
(e) A record of the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each compliance period unless the material is tracked by weight.
(f) A record of the volume fraction of coating solids for each coating used during each compliance period.
(g) If you use either the emission rate without add-on controls or the emission rate with add-on controls compliance option, the density for each coating, thinner and/or other additive, and cleaning material used during each compliance period.
(h) If you use an allowance in Equation 1 of §63.3951 for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF) according to §63.3951(e)(4), you must keep records of the information specified in paragraphs (h)(1) through (3) of this section.
(1) The name and address of each TSDF to which you sent waste materials for which you use an allowance in Equation 1 of §63.3951; a statement of which subparts under 40 CFR parts 262, 264, 265, and 266 apply to the facility; and the date of each shipment.
(2) Identification of the coating operations producing waste materials included in each shipment and the month or months in which you used the allowance for these materials in Equation 1 of §63.3951.
(3) The methodology used in accordance with §63.3951(e)(4) to determine the total amount of waste materials sent to or the amount collected, stored, and designated for transport to a TSDF each month; and the methodology to determine the mass of organic HAP contained in these waste materials. This must include the sources for all data used in the determination, methods

used to generate the data, frequency of testing or monitoring, and supporting calculations and documentation, including the waste manifest for each shipment.
(j) You must keep records of the date, time, and duration of each deviation.

§ 63.3931 In what form and for how long must I keep my records?
(a) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1). Where appropriate, the records may be maintained as electronic spreadsheets or as a database.
(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
(c) You must keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to §63.10(b)(1). You may keep the records off-site for the remaining 3 years.

Compliance Requirements for the Emission Rate Without Add-On Controls Option

§ 63.3950 By what date must I conduct the initial compliance demonstration?
You must complete the initial compliance demonstration for the initial compliance period according to the requirements of §63.3951. The initial compliance period begins on the applicable compliance date specified in §63.3883 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next 12 months. You must determine the mass of organic HAP emissions and volume of coating solids used each month and then calculate an organic HAP emission rate at the end of the initial compliance period. The initial compliance demonstration includes the calculations according to §63.3951 and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in §63.3890.

§ 63.3951 How do I demonstrate initial compliance with the emission limitations?
You may use the emission rate without add-on controls option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. You must use either the compliant material option or the emission rate with add-on controls option for any coating operation in the affected source for which you do not use this option. To demonstrate initial compliance using the emission rate without add-on controls option, the coating operation or group of coating operations must meet the applicable emission limit in §63.3890, but is not required to meet the operating limits or work practice standards in §§63.3892 and 63.3893, respectively. You must conduct a separate initial compliance demonstration for each general use, magnet wire, rubber-to-metal, and extreme performance fluoropolymer coating operation unless you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.3890(c). If you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.3890(c), you must demonstrate that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit. You must meet all the requirements of this section. When calculating the organic HAP emission rate according to this section, do not include any coatings, thinners and/or other additives, or cleaning materials used on coating operations for which you use the compliant material option or the emission rate with add-on controls option. You do not need to redetermine the mass of organic HAP in coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site (or reclaimed off-site if you have documentation showing that you received back the exact same materials that were sent off-site) and reused in the coating operation for which you use the emission rate without add-on controls option. If you use coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site, the amount of each used in a month may be reduced by the amount of each that is reclaimed. That is, the amount used may be calculated as the amount consumed to account for materials that are reclaimed.

(a) *Determine the mass fraction of organic HAP for each material.* Determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each month according to the requirements in §63.3941(a).
(b) *Determine the volume fraction of coating solids.* Determine the volume fraction of coating solids (liter (gal) of coating solids per liter (gal) of coating) for each coating used during each month according to the requirements in §63.3941(b).
(c) *Determine the density of each material.* Determine the density of each liquid coating, thinner and/or other additive, and cleaning material used during each month from test results using ASTM Method D1475–98, "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products" (incorporated by reference, see §63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If you are including powder coatings in the compliance determination, determine the density of powder coatings, using ASTM Method D5965–02, "Standard Test Methods for Specific Gravity of Coating Powders" (incorporated by reference, see §63.14), or information from the supplier. If there is disagreement between ASTM Method D1475–98 or ASTM Method D5965–02 test results and other such information sources, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine material density. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C, and 2 of this section.
(d) *Determine the volume of each material used.* Determine the volume (liters) of each coating, thinner and/or other additive, and cleaning material used during each month by measurement or usage records. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine the volume of each material used. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, and 1C of this section.
(e) *Calculate the mass of organic HAP emissions.* The mass of organic HAP emissions is the combined mass of organic HAP contained in all coatings, thinners and/or other additives, and cleaning materials used during each month minus the organic HAP in certain waste materials. Calculate the mass of organic HAP emissions using Equation 1 of this section.

$$H_e = A + B + C - R_w \qquad (Eq.\ 1)$$

Where:
H_e = Total mass of organic HAP emissions during the month, kg.
A = Total mass of organic HAP in the coatings used during the month, kg, as calculated in Equation 1A of this section.
B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg, as calculated in Equation 1B of this section.
C = Total mass of organic HAP in the cleaning materials used during the month, kg, as calculated in Equation 1C of this section.
R_w = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the month, kg, determined according to paragraph (e)(4) of this section. (You may assign a value of zero to R_w if you do not wish to use this allowance.)
(1) Calculate the kg organic HAP in the coatings used during the month using Equation 1A of this section:

$$A = \sum_{i=1}^{m} (Vol_{c,i})(D_{c,i})(W_{c,i}) \qquad (Eq.\ 1A)$$

Where:
A = Total mass of organic HAP in the coatings used during the month, kg.
$Vol_{c,i}$ = Total volume of coating, i, used during the month, liters.
$D_{c,i}$ = Density of coating, i, kg coating per liter coating.

$W_{c,i}$ = Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart PPPP of this part.
m = Number of different coatings used during the month.
(2) Calculate the kg of organic HAP in the thinners and/or other additives used during the month using Equation 1B of this section:

$$B = \sum_{j=1}^{n} \left(Vol_{t,j}\right)\left(D_{t,j}\right)\left(W_{t,j}\right) \qquad (Eq.\ 1B)$$

Where:
B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg.
$Vol_{t,j}$ = Total volume of thinner and/or other additive, j, used during the month, liters.
$D_{t,j}$ = Density of thinner and/or other additive, j, kg per liter.
$W_{t,j}$ = Mass fraction of organic HAP in thinner and/or other additive, j, kg organic HAP per kg thinner and/or other additive. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart PPPP of this part.
n = Number of different thinners and/or other additives used during the month.
(3) Calculate the kg organic HAP in the cleaning materials used during the month using Equation 1C of this section:

$$C = \sum_{k=1}^{p} \left(Vol_{s,k}\right)\left(D_{s,k}\right)\left(W_{s,k}\right) \qquad (Eq.\ 1C)$$

Where:
C = Total mass of organic HAP in the cleaning materials used during the month, kg.
$Vol_{s,k}$ = Total volume of cleaning material, k, used during the month, liters.
$D_{s,k}$ = Density of cleaning material, k, kg per liter.
$W_{s,k}$ = Mass fraction of organic HAP in cleaning material, k, kg organic HAP per kg material.
p = Number of different cleaning materials used during the month.
(4) If you choose to account for the mass of organic HAP contained in waste materials sent or designated for shipment to a hazardous waste TSDF in Equation 1 of this section, then you must determine the mass according to paragraphs (e)(4)(i) through (iv) of this section.
(i) You may only include waste materials in the determination that are generated by coating operations in the affected source for which you use Equation 1 of this section and that will be treated or disposed of by a facility that is regulated as a TSDF under 40 CFR part 262, 264, 265, or 266. The TSDF may be either off-site or on-site. You may not include organic HAP contained in wastewater.
(ii) You must determine either the amount of the waste materials sent to a TSDF during the month or the amount collected and stored during the month and designated for future transport to a TSDF. Do not include in your determination any waste materials sent to a TSDF during a month if you have already included them in the amount collected and stored during that month or a previous month.
(iii) Determine the total mass of organic HAP contained in the waste materials specified in paragraph (e)(4)(ii) of this section.
(iv) You must document the methodology you use to determine the amount of waste materials and the total mass of organic HAP they contain, as required in §63.3930(h). If waste manifests include this information, they may be used as part of the documentation of the amount of waste materials and mass of organic HAP contained in them.
(f) *Calculate the total volume of coating solids used.* Determine the total volume of coating solids used, liters, which is the combined volume of coating solids for all the coatings used during each month, using Equation 2 of this section:

$$V_{st} = \sum_{i=1}^{m} \left(Vol_{c,i}\right)\left(V_{s,i}\right) \qquad (Eq.\ 2)$$

Where:
V_{st} = Total volume of coating solids used during the month, liters.
$Vol_{c,i}$ = Total volume of coating, i, used during the month, liters.
$V_{s,i}$ = Volume fraction of coating solids for coating, i, liter solids per liter coating, determined according to §63.3941(b).
m = Number of coatings used during the month.
(g) *Calculate the organic HAP emission rate.* Calculate the organic HAP emission rate for the compliance period, kg (lb) organic HAP emitted per liter (gal) coating solids used, using Equation 3 of this section:

$$H_{yr} = \frac{\sum_{y=1}^{n} H_e}{\sum_{y=1}^{n} V_{st}} \qquad (Eq.\ 3)$$

Where:
H_{yr} = Average organic HAP emission rate for the compliance period, kg organic HAP emitted per liter coating solids used.
H_e = Total mass of organic HAP emissions from all materials used during month, y, kg, as calculated by Equation 1 of this section.
V_{st} = Total volume of coating solids used during month, y, liters, as calculated by Equation 2 of this section.
y = Identifier for months.
n = Number of full or partial months in the compliance period (for the initial compliance period, n equals 12 if the compliance date falls on the first day of a month; otherwise n equals 13; for all following compliance periods, n equals 12).
(h) *Compliance demonstration.* The organic HAP emission rate for the initial compliance period calculated using Equation 3 of this section must be less than or equal to the applicable emission limit for each subcategory in §63.3890 or the predominant activity or facility-specific emission limit allowed in §63.3890(c). You must keep all records as required by §§63.3930 and 63.3931. As part of the notification of compliance status required by §63.3910, you must identify the coating operation(s) for which you used the emission rate without add-on controls option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in §63.3890, determined according to the procedures in this section.

§ 63.3952 How do I demonstrate continuous compliance with the emission limitations?
(a) To demonstrate continuous compliance, the organic HAP emission rate for each compliance period, determined according to §63.3951(a) through (g), must be less than or equal to the applicable emission limit in §63.3890. A compliance period consists of 12 months. Each month after the end of the initial compliance period described in §63.3950 is the end of a compliance period consisting of that month and the preceding 11 months. You must perform the calculations in §63.3951(a) through (g) on a monthly basis using data from the previous 12 months of operation. If you are complying with a facility-specific emission limit under §63.3890(c), you must also perform the calculation using Equation 1 in §63.3890(c)(2) on a monthly basis using the data from the previous 12 months of operation.
(b) If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in §63.3890, this is a deviation from the emission limitation for that compliance period and must be reported as specified in §§63.3910(c)(6) and 63.3920(a)(6).

(c) As part of each semiannual compliance report required by §63.3920, you must identify the coating operation(s) for which you used the emission rate without add-on controls option. If there were no deviations from the emission limitations, you must submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in §63.3890, determined according to §63.3951(a) through (g).
(d) You must maintain records as specified in §§63.3930 and 63.3931.

Other Requirements and Information

§ 63.3980 Who implements and enforces this subpart?
(a) This subpart can be implemented and enforced by us, the U.S. Environmental Protection Agency (EPA), or a delegated authority such as your State, local, or tribal agency. If the Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the EPA) has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agency.
(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator and are not transferred to the State, local, or tribal agency.
(c) The authorities that will not be delegated to State, local, or tribal agencies are listed in paragraphs (c)(1) through (4) of this section:
(1) Approval of alternatives to the requirements in §63.3881 through 3883 and §63.3890 through 3893.
(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.
(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.
(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

§ 63.3981 What definitions apply to this subpart?
Terms used in this subpart are defined in the CAA, in 40 CFR 63.2, and in this section as follows:
Additive means a material that is added to a coating after purchase from a supplier (*e.g.,* catalysts, activators, accelerators).
Add-on control means an air pollution control device, such as a thermal oxidizer or carbon adsorber, that reduces pollution in an air stream by destruction or removal before discharge to the atmosphere.
Adhesive, adhesive coating means any chemical substance that is applied for the purpose of bonding two surfaces together. Products used on humans and animals, adhesive tape, contact paper, or any other product with an adhesive incorporated onto or in an inert substrate shall not be considered adhesives under this subpart.
Assembled on-road vehicle coating means any coating operation in which coating is applied to the surface of some component or surface of a fully assembled motor vehicle or trailer intended for on-road use including, but not limited to, components or surfaces on automobiles and light-duty trucks that have been repaired after a collision or otherwise repainted, fleet delivery trucks, and motor homes and other recreational vehicles (including camping trailers and fifth wheels). Assembled on-road vehicle coating includes the concurrent coating of parts of the assembled on-road vehicle that are painted off-vehicle to protect systems, equipment, or to allow full coverage. Assembled on-road vehicle coating does not include surface coating operations that meet the applicability criteria of the automobiles and light-duty trucks NESHAP. Assembled on-road vehicle coating also does not include the use of adhesives, sealants, and caulks used in assembling on-road vehicles.
Capture device means a hood, enclosure, room, floor sweep, or other means of containing or collecting emissions and directing those emissions into an add-on air pollution control device.
Capture efficiency or capture system efficiency means the portion (expressed as a percentage) of the pollutants from an emission source that is delivered to an add-on control device.

Capture system means one or more capture devices intended to collect emissions generated by a coating operation in the use of coatings or cleaning materials, both at the point of application and at subsequent points where emissions from the coatings and cleaning materials occur, such as flashoff, drying, or curing. As used in this subpart, multiple capture devices that collect emissions generated by a coating operation are considered a single capture system.
Cleaning material means a solvent used to remove contaminants and other materials, such as dirt, grease, oil, and dried or wet coating (*e.g.,* depainting or paint stripping), from a substrate before or after coating application or from equipment associated with a coating operation, such as spray booths, spray guns, racks, tanks, and hangers. Thus, it includes any cleaning material used on substrates or equipment or both.
Coating means a material applied to a substrate for decorative, protective, or functional purposes. Such materials include, but are not limited to, paints, sealants, liquid plastic coatings, caulks, inks, adhesives, and maskants. Decorative, protective, or functional materials that consist only of protective oils for metal, acids, bases, or any combination of these substances, or paper film or plastic film which may be pre-coated with an adhesive by the film manufacturer, are not considered coatings for the purposes of this subpart. A liquid plastic coating means a coating made from fine particle-size polyvinyl chloride (PVC) in solution (also referred to as a plastisol).
Coating operation means equipment used to apply cleaning materials to a substrate to prepare it for coating application (surface preparation) or to remove dried coating; to apply coating to a substrate (coating application) and to dry or cure the coating after application; or to clean coating operation equipment (equipment cleaning). A single coating operation may include any combination of these types of equipment, but always includes at least the point at which a given quantity of coating or cleaning material is applied to a given part and all subsequent points in the affected source where organic HAP are emitted from the specific quantity of coating or cleaning material on the specific part. There may be multiple coating operations in an affected source. Coating application with handheld, non-refillable aerosol containers, touch-up markers, or marking pens is not a coating operation for the purposes of this subpart.
Coatings solids means the nonvolatile portion of the coating that makes up the dry film.
Continuous parameter monitoring system (CPMS) means the total equipment that may be required to meet the data acquisition and availability requirements of this subpart, used to sample, condition (if applicable), analyze, and provide a record of coating operation, or capture system, or add-on control device parameters.
Controlled coating operation means a coating operation from which some or all of the organic HAP emissions are routed through an emission capture system and add-on control device.
Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:
(1) Fails to meet any requirement or obligation established by this subpart including but not limited to, any emission limit or operating limit or work practice standard;
(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
(3) Fails to meet any emission limit, or operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.
Emission limitation means the aggregate of all requirements associated with a compliance option including emission limit, operating limit, work practice standard, etc.
Enclosure means a structure that surrounds a source of emissions and captures and directs the emissions to an add-on control device.
Exempt compound means a specific compound that is not considered a VOC due to negligible photochemical reactivity. The exempt compounds are listed in 40 CFR 51.100(s).
Extreme performance fluoropolymer coating means coatings that are formulated systems based on fluoropolymer resins which often contain bonding matrix polymers dissolved in non-aqueous solvents as well as other ingredients. Extreme performance fluoropolymer coatings are typically used when one or more critical performance criteria are required including, but not limited to a nonstick low-energy surface, dry film lubrication, high resistance to chemical attack, extremely wide operating temperature, high electrical insulating properties, or that the surface comply with

government (*e.g.,* USDA, FDA) or third party specifications for health, safety, reliability, or performance. Once applied to a substrate, extreme performance fluoropolymer coatings undergo a curing process that typically requires high temperatures, a chemical reaction, or other specialized technology.

Facility maintenance means the routine repair or renovation (including the surface coating) of the tools, equipment, machinery, and structures that comprise the infrastructure of the affected facility and that are necessary for the facility to function in its intended capacity.

General use coating means any material that meets the definition of coating but does not meet the definition of high performance coating, rubber-to-metal coating, magnet wire coating, or extreme performance fluoropolymer coating as defined in this section.

High performance architectural coating means any coating applied to architectural subsections which is required to meet the specifications of Architectural Aluminum Manufacturer's Association's publication number AAMA 605.2–2000.

High performance coating means any coating that meets the definition of high performance architectural coating or high temperature coating in this section.

High temperature coating means any coating applied to a substrate which during normal use must withstand temperatures of at least 538 degrees Celsius (1000 degrees Fahrenheit).

Hobby shop means any surface coating operation, located at an affected source, that is used exclusively for personal, noncommercial purposes by the affected source's employees or assigned personnel.

Magnet wire coatings, commonly referred to as magnet wire enamels, are applied to a continuous strand of wire which will be used to make turns (windings) in electrical devices such as coils, transformers, or motors. Magnet wire coatings provide high dielectric strength and turn-to-turn conductor insulation. This allows the turns of an electrical device to be placed in close proximity to one another which leads to increased coil effectiveness and electrical efficiency.

Magnet wire coating machine means equipment which applies and cures magnet wire coatings.

Manufacturer's formulation data means data on a material (such as a coating) that are supplied by the material manufacturer based on knowledge of the ingredients used to manufacture that material, rather than based on testing of the material with the test methods specified in §63.3941. Manufacturer's formulation data may include, but are not limited to, information on density, organic HAP content, volatile organic matter content, and coating solids content.

Mass fraction of organic HAP means the ratio of the mass of organic HAP to the mass of a material in which it is contained, expressed as kg of organic HAP per kg of material.

Month means a calendar month or a pre-specified period of 28 days to 35 days to allow for flexibility in recordkeeping when data are based on a business accounting period.

Non-HAP coating means, for the purposes of this subpart, a coating that contains no more than 0.1 percent by mass of any individual organic HAP that is an OSHA-defined carcinogen as specified in 29 CFR 1910.1200(d)(4) and no more than 1.0 percent by mass for any other individual HAP.

Organic HAP content means the mass of organic HAP emitted per volume of coating solids used for a coating calculated using Equation 2 of §63.3941. The organic HAP content is determined for the coating in the condition it is in when received from its manufacturer or supplier and does not account for any alteration after receipt. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, organic HAP content is the mass of organic HAP that is emitted, rather than the organic HAP content of the coating as it is received.

Permanent total enclosure (PTE) means a permanently installed enclosure that meets the criteria of Method 204 of appendix M, 40 CFR part 51, for a PTE and that directs all the exhaust gases from the enclosure to an add-on control device.

Personal watercraft means a vessel (boat) which uses an inboard motor powering a water jet pump as its primary source of motive power and which is designed to be operated by a person or persons sitting, standing, or kneeling on the vessel, rather than in the conventional manner of sitting or standing inside the vessel.

Protective oil means an organic material that is applied to metal for the purpose of providing lubrication or protection from corrosion without forming a solid film. This definition of protective oil includes, but is not limited to, lubricating oils, evaporative oils (including those that evaporate completely), and extrusion oils. Protective oils used on miscellaneous metal parts and products

include magnet wire lubricants and soft temporary protective coatings that are removed prior to installation or further assembly of a part or component.
Reactive adhesive means adhesive systems composed, in part, of volatile monomers that react during the adhesive curing reaction, and, as a result, do not evolve from the film during use. These volatile components instead become integral parts of the adhesive through chemical reaction. At least 70 percent of the liquid components of the system, excluding water, react during the process.
Research or laboratory facility means a facility whose primary purpose is for research and development of new processes and products, that is conducted under the close supervision of technically trained personnel, and is not engaged in the manufacture of final or intermediate products for commercial purposes, except in a *de minimis* manner.
Responsible official means responsible official as defined in 40 CFR 70.2.
Rubber-to-metal coatings are coatings that contain heat-activated polymer systems in either solvent or water that, when applied to metal substrates, dry to a non-tacky surface and react chemically with the rubber and metal during a vulcanization process.
Startup, initial means the first time equipment is brought online in a facility.
Surface preparation means use of a cleaning material on a portion of or all of a substrate. This includes use of a cleaning material to remove dried coating, which is sometimes called depainting.
Temporary total enclosure means an enclosure constructed for the purpose of measuring the capture efficiency of pollutants emitted from a given source as defined in Method 204 of appendix M, 40 CFR part 51.
Thinner means an organic solvent that is added to a coating after the coating is received from the supplier.
Total volatile hydrocarbon (TVH) means the total amount of nonaqueous volatile organic matter determined according to Methods 204 and 204A through 204F of appendix M to 40 CFR part 51 and substituting the term TVH each place in the methods where the term VOC is used. The TVH includes both VOC and non-VOC.
Uncontrolled coating operation means a coating operation from which none of the organic HAP emissions are routed through an emission capture system and add-on control device.
Volatile organic compound (VOC) means any compound defined as VOC in 40 CFR 51.100(s).
Volume fraction of coating solids means the ratio of the volume of coating solids (also known as the volume of nonvolatiles) to the volume of a coating in which it is contained; liters (gal) of coating solids per liter (gal) of coating.
Wastewater means water that is generated in a coating operation and is collected, stored, or treated prior to being discarded or discharged.

Table 2 to Subpart MMMM of Part 63—Applicability of General Provisions to Subpart MMMM of Part 63

You must comply with the applicable General Provisions requirements according to the following table:

Citation	Subject	Applicable to Subpart MMMM	Explanation
§ 63.1(a)(1)-(14).....	General Applicability.	Yes.....	
§ 63.1(b)(1)-(3).....	Initial Applicability Determination.	Yes.....	Applicability to subpart MMMM is also specified in §63.3881.
§ 63.1(c)(1).....	Applicability After Standard Established.	Yes.....	
§ 63.1(c)(2)-(3).....	Applicability of Permit Program for Area Sources.	No.....	Area sources are not subject to subpart MMMM.
§ 63.1(c)(4)-(5).....	Extensions and Notifications.	Yes.....	

Citation	Subject	Applicable to Subpart MMMM	Explanation
§ 63.1(e).....	Applicability of Permit Program Before Relevant Standard is Set.	Yes.....	
§ 63.2.....	Definitions.....	Yes.....	Additional definitions are specified in § 63.3981.
§ 63.1(a)-(c).....	Units and Abbreviations.	Yes.....	
§ 63.4(a)(1)-(5).....	Prohibited Activities.	Yes.....	
§ 63.4(b)-(c).....	Circumvention/ Severability.	Yes.....	
§ 63.5(a).....	Construction/ Reconstruction.	Yes.....	
§ 63.5(b)(1)-(6).....	Requirements for Existing Newly Constructed, and Reconstructed Sources.	Yes.....	
§ 63.5(d).....	Application for Approval of Construction/ Reconstruction.	Yes.....	
§ 63.5(e).....	Approval of Construction/ Reconstruction.	Yes.....	
§ 63.5(f).....	Approval of Construction/ Reconstruction Based on Prior State Review.	Yes.....	
§ 63.6(a).....	Compliance With Standards and Maintenance Requirements - Applicability.	Yes.....	
§ 63.6(b)(1)-(7).....	Compliance Dates for New and Reconstructed Sources.	Yes.....	Section 63.3883 specifies the compliance dates.
§ 63.6(c)(1)-(5).....	Compliance Dates for Existing Sources.	Yes.....	Section 63.3883 specifies the compliance dates.
§ 63.6(e)(1)-(2).....	Operation and Maintenance.	Yes.....	
§ 63.6(e)(3).....	Startup, Shutdown, and Malfunction Plan.	Yes.....	Only sources using an add-on control device to comply with the standard must complete startup, shutdown, and malfunction plans.
§ 63.6(f)(1).....	Compliance Except During Startup, Shutdown, and Malfunction.	Yes.....	Applies only to sources using an add-on control device to comply with the standard.
§ 63.6(f)(2)-(3).....	Methods for Determining Compliance..	Yes.....	
§ 63.6(g)(1)-(3).....	Use of an Alternative Standard.	Yes.....	

Citation	Subject	Applicable to Subpart MMMM	Explanation
§ 63.6(h).....	Compliance With Opacity/Visible Emission Standards.	No.....	Subpart MMMM does not establish opacity standards and does not require continuous opacity monitoring systems (COMS).
§ 63.6(i)(1)-(16).....	Extension of Compliance.	Yes.....	
§ 63.6(j).....	Presidential Compliance Exemption.	Yes.....	
§ 63.7(a)(1).....	Performance Test Requirements - Applicability.	Yes.....	Applies to all affected sources. Additional requirements for performance testing are specified in §§ 63.3964, 63.3965, and 63.3966.
§ 63.7(a)(2).....	Performance Test Requirements - Dates.	Yes.....	Applies only to performance tests for capture system and control device efficiency at sources using these to comply with the standard. Section 63.3960 specifies the schedule for performance test requirements that are earlier than those specified in §63.7(a)(2).
§ 63.7(a)(3).....	Performance Tests Required By the Administrator.	Yes.....	
§ 63.7(b)-(e).....	Performance Test Requirements - Notification, Quality Assurance, Facilities Necessary for Safe Testing, Conditions During Test.	Yes.....	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standard.
§ 63.7(f).....	Performance Test Requirements - Use of Alternative Test Method.	Yes.....	Applies to all test methods except those used to determine capture system efficiency.
§ 63.7(g)-(h).....	Performance Test Requirements - Data Analysis, Recordkeeping, Reporting, Waiver of Test.	Yes.....	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standard.

Citation	Subject	Applicable to Subpart MMMM	Explanation
§ 63.8(a)(1)-(3).....	Monitoring Requirements - Applicability.	Yes.....	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for monitoring are specified in § 63.3968.
§ 63.8(a)(4).....	Additional Monitoring Requirements.	No.....	Subpart MMMM does not have monitoring requirements for flares.
§ 63.8(b).....	Conduct of Monitoring.	Yes.....	
§ 63.8(c)(1)-(3).....	Continuous Monitoring Systems (CMS) Operation and Maintenance.	Yes.....	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for CMS operations and maintenance are specified in § 63.3968.
§ 63.8(c)(4).....	CMS.....	No.....	§ 63.3968 specifies the requirements for the operation of CMS for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(5).....	COMS.....	No.....	Subpart MMMM does not have opacity or visible emission standards.
§ 63.8(c)(6).....	CMS Requirements.....	No.....	Section 63.3968 specifies the requirements for monitoring systems for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(7).....	CMS Out-of-Control Periods.	Yes.....	
§ 63.8(c)(8).....	CMS Out-of-Control Periods and Reporting.	No.....	§ 63.3920 requires reporting of CMS out-of-control periods.
§ 63.8(d)-(e).....	Quality Control Program and CMS Performance Evaluation.	No.....	Subpart MMMM does not require the use of continuous emissions monitoring systems.
§ 63.8(f)(1)-(5).....	Use of an Alternative Monitoring Method.	Yes.....	

Citation	Subject	Applicable to Subpart MMMM	Explanation
§ 63.8(f)(6).....	Alternative to Relative Accuracy Test.	No.....	Subpart MMMM does not require the use of continuous emissions monitoring systems.
§ 63.8(g)(1)-(5).....	Data Reduction.....	No.....	Sections 63.3967 and 63.3968 specify monitoring data reduction.
§ 63.9(a)-(d).....	Notification Requirements.	Yes.....	
§ 63.9(e).....	Notification of Performance Test.	Yes.....	Applies only to capture system and add-on control device performance tests at sources using these to comply with the standard.
§ 63.9(f).....	Notification of Visible Emissions/Opacity Test.	No.....	Subpart MMMM does not have opacity or visible emissions standards.
§ 63.9(g)(1)-(3).....	Additional Notifications When Using CMS.	No.....	Subpart MMMM does not require the use of continuous emissions monitoring systems.
§ 63.9(h).....	Notification of Compliance Status.	Yes.....	Section 63.3910 specifies the dates for submitting the notification of compliance status.
§ 63.9(i).....	Adjustment of Submittal Deadlines.	Yes.....	
§ 63.9(j).....	Change in Previous Information.	Yes.....	
§ 63.10(a).....	Recordkeeping/Reporting - Applicability and General Information.	Yes.....	
§ 63.10(b)(1).....	General Recordkeeping Requirements.	Yes.....	Additional requirements are specified in §§ 63.3930 and 63.3931.
§ 63.10(b)(2) (i)-(v).....	Recordkeeping Relevant to Startup, Shutdown, and Malfunction Periods and CMS.	Yes.....	Requirements for startup, shutdown, and malfunction records only apply to add-on control devices used to comply with the standard.
§ 63.10(b)(2) (vi)-(xi)....	.....	Yes.....	
§ 63.10(b)(2) (xii).....	Records.....	Yes.....	
§ 63.10(b)(2) (xiii).....	.....	No.....	Subpart MMMM does not require the use of continuous emissions monitoring systems.
§ 63.10(b)(2) (xiv).....	.....	Yes.....	

Citation	Subject	Applicable to Subpart MMMM	Explanation
§ 63.10(b)(3).....	Recordkeeping Requirements for Applicability Determinations.	Yes.....	
§ 63.10(c) (1)-(6).....	Additional Recordkeeping Requirements for Sources with CMS.	Yes.....	
§ 63.10(c) (7)-(8).....	.....	No.....	The same records are required in §63.3920(a)(7).
§ 63.10(c) (9)-(15).....	.....	Yes.....	
§ 63.10(d)(1).....	General Reporting Requirements.	Yes.....	Additional requirements are specified in § 63.3920.
§ 63.10(d)(2).....	Report of Performance Test Results.	Yes.....	Additional requirements are specified in §63.3920(b).
§ 63.10(d)(3).....	Reporting Opacity or Visible Emissions Observations.	No.....	Subpart MMMM does not require opacity or visible emissions observations.
§ 63.10(d)(4).....	Progress Reports for Sources With Compliance Extensions.	Yes.....	
§ 63.10(d)(5).....	Startup, Shutdown, and Malfunction Reports.	Yes.....	Applies only to add-on control devices at sources using these to comply with the standard.
§ 63.10(e) (1)-(2).....	Additional CMS Reports	No.....	Subpart MMMM does not require the use of continuous emissions monitoring systems.
§ 63.10(e) (3).....	Excess Emissions/CMS Performance Reports.	No.....	Section 63.3920 (b) specifies the contents of periodic compliance reports.
§ 63.10(e) (4).....	COMS Data Reports.....	No.....	Subpart MMMMM does not specify requirements for opacity or COMS.
§ 63.10(f).....	Recordkeeping/Reporting Waiver.	Yes.....	
§ 63.11.....	Control Device Requirements/Flares.	No.....	Subpart MMMM does not specify use of flares for compliance.
§ 63.12.....	State Authority and Delegations.	Yes.....	
§ 63.13.....	Addresses.....	Yes.....	
§ 63.14.....	Incorporation by Reference.	Yes.....	
§ 63.15.....	Availability of Information/ Confidentiality.	Yes.....	

D.3.15 One Time Deadlines Relating to National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products [40 CFR Part 63, Subpart MMMM]

The Permittee shall comply with the following requirements by the dates listed:

Requirement	Rule Cite	Affected Facility	Deadline
Initial Notification	40 CFR 63.3910(b)	casting painting operation, P14, all storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed, all manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials, and all storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation	January 2, 2005.
Notification of compliance status.	40 CFR 63.3910(c)	Same as above	No later than 30 calendar days following the end of the initial compliance period described in §63.3950.
First Semi-annual Compliance Report	40 CFR 63.3920(a)(1)	Same as above	July 31, 2008
Initial compliance demonstration for the initial compliance period according to the requirements of §63.3951.	40 CFR 63.3950	Same as above	Initial compliance period is from January 2, 2007 through January 31, 2008.

SECTION D.4 FACILITY OPERATION CONDITIONS

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

(a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6: one (1) Safety Kleen maintenance parts washer with a remote solvent reservoir. [326 IAC 8-3-2]

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

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

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

Cold Cleaner Operations

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

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

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

(a) Equip the cleaner with a cover;

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

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

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

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

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

Process Weight Activities

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

D.4.2 Particulate [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. This limit applies to the following insignificant activities:

(a) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Casting Service
Source Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Mailing Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Part 70 Permit No.: T091-6141-00018

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

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify)

☐ Report (specify)

☐ Notification (specify)

☐ Affidavit (specify)

☐ Other (specify)

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

Signature:
Printed Name:
Title/Position:
Phone:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

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

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name:	Casting Service
Source Address:	300 Philadelphia Street, LaPorte, Indiana 46350
Mailing Address:	300 Philadelphia Street, LaPorte, Indiana 46350
Part 70 Permit No.:	T091-6141-00018

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

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

X 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

X The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

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

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

If any of the following are not applicable, mark N/A **Page 2 of 2**

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

Form Completed by:

Title / Position:

Date:

Phone:

A certification is not required for this report.

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

Part 70 Quarterly Report

Source Name:	Casting Service
Source Address:	300 Philadelphia Street, LaPorte, Indiana 46350
Mailing Address:	300 Philadelphia Street, LaPorte, Indiana 46350
Part 70 Permit No.:	T091-6141-00018
Facility:	electric induction furnaces, scrap and charge handling process, and inoculation process
Parameter:	PM and PM10 emissions
Limit:	The throughput of metal from the electric induction furnaces, from the scrap and charge handling process, and to the inoculation process, shall not exceed 60,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR:

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

☐ 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

Part 70 Quarterly Report

Source Name: Casting Service
Source Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Mailing Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Part 70 Permit No.: T091-6141-00018
Facility: pouring and casting operation, and casting cooling operation
Parameter: PM and PM10 emissions
Limit: The throughput of metal to the pouring and casting operation, and the casting cooling operation shall not exceed 60,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR:

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

☐ 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

Part 70 Quarterly Report

Source Name: Casting Service
Source Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Mailing Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Part 70 Permit No.: T091-6141-00018
Facility: magnesium wire treatment process, P05a and P05b, and pneumatic room blast operations, P12a
Parameter: PM and PM10 emissions
Limit: The throughput of metal to the magnesium wire treatment processes, P05a and P05b, shall not exceed 50,000 tons per twelve (12) consecutive month period, and the throughput of metal from the pneumatic room blast operations, P12a, shall not exceed 4,500 tons per twelve (12) consecutive month period, for a combined metal throughput limit of 54,500 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;

YEAR:

Month	Column 1a	Column 1b	Column 2a	Column 2b	Column 1a + Column 2a	Column 1b + Column 2b	Column 1a + 1b + Column 2a + 2b
	P05a and P05b Metal Throughput This Month (tons)	P12a Metal Throughput This Month (tons)	P05a and P05b Metal Throughput Previous 11 Months (tons)	P12a Metal Throughput Previous 11 Months (tons)	12 Month Total P05a and P05b Metal Throughput (tons)	12 Month Total P12a Metal Throughput (tons)	12 Month Total Combined Metal Throughput (tons)
Month 1							
Month 2							
Month 3							

☐ 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

Part 70 Quarterly Report

Source Name: Casting Service
Source Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Mailing Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Part 70 Permit No.: T091-6141-00018
Facility: high and center bay shakeout operations, P09a and P09b
Parameter: PM and PM10 emissions
Limit: The combined throughput of metal from the high and center bay shakeout operations, P09a and P09b, shall not exceed 45,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	Combined Metal Throughput This Month (tons)	Combined Metal Throughput Previous 11 Months (tons)	12 Month Total Combined Metal Throughput (tons)
Month 1			
Month 2			
Month 3			

☐ 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

Part 70 Quarterly Report

Source Name: Casting Service
Source Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Mailing Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Part 70 Permit No.: T091-6141-00018
Facility: small castings blasters and BCP shot blast, P12b
Parameter: PM and PM10 emissions
Limit: The total combined throughput of metal from the small castings blaster and BCP shot blast, P12b, shall not exceed 45,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	Combined Metal Throughput This Month (tons)	Combined Metal Throughput Previous 11 Months (tons)	12 Month Total Combined Metal Throughput (tons)
Month 1			
Month 2			
Month 3			

☐ 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

Part 70 Quarterly Report

Source Name: Casting Service
Source Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Mailing Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Part 70 Permit No.: T091-6141-00018
Facility: the cleaning and grinding operation, P13
Parameter: PM and PM10 emissions
Limit: The total combined throughput of metal from the cleaning and grinding operation, P13, shall not exceed 45,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	Combined Metal Throughput This Month (tons)	Combined Metal Throughput Previous 11 Months (tons)	12 Month Total Combined Metal Throughput (tons)
Month 1			
Month 2			
Month 3			

☐ 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

Part 70 Quarterly Report

Source Name: Casting Service
Source Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Mailing Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Part 70 Permit No.: T091-6141-00018
Facility: mechanical reclamation system, P10
Parameter: PM and PM10 emissions
Limit: The total throughput of sand from the mechanical reclamation system, P10, shall not exceed 250,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	Sand Throughput This Month (tons)	Sand Throughput Previous 11 Months (tons)	12 Month Total Sand Throughput (tons)
Month 1			
Month 2			
Month 3			

☐ 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

Part 70 Quarterly Report

Source Name: Casting Service
Source Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Mailing Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Part 70 Permit No.: T091-6141-00018
Facility: thermal sand reclamation system, P11
Parameter: PM and PM10 emissions
Limit: The total throughput of sand to the thermal sand reclamation system, P11, shall not exceed 52,560 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	Sand Throughput This Month (tons)	Sand Throughput Previous 11 Months (tons)	12 Month Total Sand Throughput (tons)
Month 1			
Month 2			
Month 3			

☐ 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

Part 70 Quarterly Report

Source Name: Casting Service
Source Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Mailing Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Part 70 Permit No.: T091-6141-00018
Facility: high bay (P09a) shakeout operation
Parameter: VOC emissions
Limit: The throughput of metal from the high bay (P09a) shakeout operation shall not exceed 41,500 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR:

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

☐ 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

Part 70 Quarterly Report

Source Name: Casting Service
Source Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Mailing Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Part 70 Permit No.: T091-6141-00018
Facility: center bay (P09b) shakeout operation
Parameter: VOC emissions
Limit: The throughput of metal from the center bay (P09b) shakeout operation shall not exceed 41,500 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR:

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

☐ 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

Part 70 Quarterly Report

Source Name: Casting Service
Source Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Mailing Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Part 70 Permit No.: T091-6141-00018
Facility: pattern and core box release agent coating operation
Parameter: VOC emissions
Limit: The usage of VOC in the pattern and core box release agent coating operation (P20a) shall not exceed 86,500 pounds per twelve (12) consecutive month period, with compliance determined at the end of each month;

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	VOC Usage This Month (tons)	VOC Usage Previous 11 Months (tons)	12 Month Total VOC Usage (tons)
Month 1			
Month 2			
Month 3			

☐ 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

Part 70 Quarterly Report

Source Name: Casting Service
Source Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Mailing Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Part 70 Permit No.: T091-6141-00018
Facility: expendable pattern casting operation
Parameter: VOC emissions
Limit: The throughput of foam in the expendable pattern casting operation (P08) shall not exceed 200,000 pounds per twelve (12) consecutive month period, with compliance determined at the end of each month;

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	Foam Usage This Month (tons)	Foam Usage Previous 11 Months (tons)	12 Month Total Foam Usage (tons)
Month 1			
Month 2			
Month 3			

☐ 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

Part 70 Quarterly Report

Source Name: Casting Service
Source Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Mailing Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Part 70 Permit No.: T091-6141-00018
Facility: core making operations, P17
Parameter: VOC emissions
Limit: When the phenolic urethane nobake binder is used in the core making operations, referred to as P17, the VOC emission from the resin and catalyst shall not exceed 6.39 pounds of VOC per ton of sand.

When the phenolic urethane nobake binder is used in the core making operations, the sand throughput to the core making operations, referred to as P17, shall not exceed 12,200 tons per 12 consecutive month period with compliance determined at the end of each month.

YEAR:

Month	Column 1 Sand Usage This Month (tons)	Column 2 Sand Usage Previous 11 Months (tons)	Column 1 + Column 2 12 Month Total Sand Usage (tons)
Month 1			
Month 2			
Month 3			

☐ 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

Part 70 Quarterly Report

Source Name: Casting Service
Source Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Mailing Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Part 70 Permit No.: T091-6141-00018
Facility: core making operations, P17
Parameter: VOC emissions
Limit: When the furan nobake binder is used in the core making operations, referred to as P17, the VOC emission from the resin shall not exceed 21.82 pounds of VOC per ton of sand.

When the furan nobake binder is used in the core making operations, the sand throughput to the core making operations, referred to as P17, shall not exceed 3,547 tons per 12 consecutive month period with compliance determined at the end of each month.

YEAR:

Month	Column 1 Sand Usage This Month (tons)	Column 2 Sand Usage Previous 11 Months (tons)	Column 1 + Column 2 12 Month Total Sand Usage (tons)
Month 1			
Month 2			
Month 3			

☐ 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

Part 70 Quarterly Report

Source Name: Casting Service
Source Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Mailing Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Part 70 Permit No.: T091-6141-00018
Facility: core making operations, P17
Parameter: PM and PM10 emissions
Limit: The throughput of sand to the core making operations, P17, shall not exceed 70,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	Sand Throughput This Month (tons)	Sand Throughput Previous 11 Months (tons)	12 Month Total Sand Throughput (tons)
Month 1			
Month 2			
Month 3			

☐ 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

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Casting Service
Source Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Mailing Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Part 70 Permit No.: T091-6141-00018

Months: _____ to _____ Year: _____

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

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

Form Completed By:

Title/Position:

Date:

Phone:

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Significant Source Modification and Significant Permit Modification

Source Description and Location

Source Name:	**Casting Service**
Source Location:	**300 Philadelphia Street, LaPorte, IN 46350**
County:	**LaPorte**
SIC Code:	**3321**
Operation Permit No.:	**T091-6141-00018**
Operation Permit Issuance Date:	**May 11, 2006**
Significant Source Modification No.:	**091-24674-00018**
Significant Permit Modification No.:	**091-28463-00018**
Permit Reviewer:	**Julia Handley/EVP**

Existing Approvals

The source was issued Part 70 Operating Permit No. T091-6141-00018 on May 11, 2006. The source has since received First Significant Permit Modification No. 091-22920-00018, issued on March 7, 2007.

The source also has pending Significant Permit Modification 091-24700-00018. All changes made under this Significant Permit Modification have been incorporated in the draft permit.

County Attainment Status

The source is located in LaPorte County.

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

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

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

(b) LaPorte County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions.

(c) LaPorte County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

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

(e) Since this source is classified as a secondary metal production plant, it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).

(f) Fugitive Emissions
Since this type of operation is in one of the twenty-eight (28) listed source categories under 326 IAC 2-2, fugitive emissions are counted toward the determination of PSD applicability.

Source Status

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Pollutant	Emissions (tons/year)
PM	177.33
PM10	83.87
SO_2	1.60
VOC	301.69
CO	30.09
NO_x	36.12

(a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).

(b) These emissions are based upon First Significant Source Modification No. 091-24619-00018, which is pending with IDEM, OAQ.

The table below summarizes the potential to emit HAPs for the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

HAPs	Potential To Emit (tons/year)
Nickel	Less than 10
Lead	Less than 10
Manganese	Less than 10
Chromium	Less than 10
Hexane	Less than 10
Tetrachloroethylene (TCE)	Greater than 10
Benzene	Less than 10
Xylene	Less than 10
Toluene	Less than 10
MIBK	Less than 10
Dimethylphthalate	Greater than 10
Styrene	Less than 10
TOTAL	Greater than 25

This existing source is a major source of HAPs, as defined in 40 CFR 63.41, because HAP emissions are greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

Actual Emissions

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

Pollutant	Actual Emissions (tons/year)
PM2.5	49.0
PM10	72.0
SO_2	1.0
VOC	49.0
CO	5.0
NO_x	6.0
HAP (Lead)	0.03

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Casting Services on April 24, 2007, requesting changes to the 326 IAC 8-1-6 BACT limitation, issued on January 21, 1994, under CP 091-2238-00018, for the existing mold making operations, referred to as P16, and the core making operations, referred to as P17. No emission units will be modified as a result of this modification and the requested changes will not result in increased emissions.

Enforcement Issues

There are no pending enforcement actions regarding this proposed modification.

Emission Calculations

This modification does not include the construction or modification of any emission units and will not result in an increase of the potential to emit of this source.

Permit Level Determination – Part 70

The potential to emit for this source will not increase as a result of this significant permit modification because no new emission units will be constructed and there are no increases in emissions.

The modification will be incorporated into the Part 70 Operating Permit through a significant source modification issued pursuant to 326 IAC 2-7-10.5(f)(1) and (2), because the modification is subject to 326 IAC 2-2 and 326 IAC 8-1-6. The modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d).

Permit Level Determination – PSD

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

	Existing Potential to Emit VOC (tons/year)	Proposed Potential to Emit VOC (tons/year)	Emission Increase (tons/year)	PSD Significant Level for VOC (tons/year)
core making, P17,				
Phenolic Urethane Nobake Binder & Catalyst	39.0	39.0	0.0	40
Furan Nobake Binder	40.05	40.05	0.0	

This modification to an existing major stationary source is not major because there are no increases in potential to emit of any criteria pollutant. Therefore, pursuant to 326 IAC 2-2, PSD requirements do not apply to this modification.

Federal Rule Applicability Determination

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) included in this proposed modification.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this proposed modification.

State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

326 IAC 2-2 (PSD)
PSD applicability is discussed under the Permit Level Determination - PSD section.

326 IAC 8-1-6 (BACT)
Pursuant to 326 IAC 8-1-6 (BACT) and CP 091-2238-00018, issued on January 21, 1994, the mold making operations, referred to as P16, and the core making operations, referred to as P17, shall reduce emissions using BACT. This existing 326 IAC 8-1-6 BACT limitation, states that the binder usage shall be limited to 30 pounds of binder per ton of sand used and the resin usage shall be limited to 20 pounds of resin per ton of sand used. Based on the worst case binder/resin VOC content of 80%, these limitations are equivalent to 16 pounds VOC from the binder per ton of sand used for the binder and 24 pounds of VOC from the resin per ton of sand. The existing BACT limit does not limit sand throughput.

As part of this modification, the source has requested changes to their BACT limitation as follows:

(a) When the phenolic urethane nobake binder is used in the core making operations, referred to as P17, the VOC emission from the resin and catalyst shall not exceed 6.39 pounds of VOC per ton of sand.

(b) When the furan nobake binder is used in the core making operations, referred to as P17, the VOC emission from the resin shall not exceed 21.82 pounds of VOC per ton of sand.

(c) When the phenolic urethane nobake binder is used in the core making operations, the sand throughput to the core making operations, referred to as P17, shall not exceed 12,201 tons per 12 consecutive month period with compliance determined at the end of each month.

(d) When the furan nobake binder is used in the core making operations, the sand throughput to the core making operations, referred to as P17, shall not exceed 3,670 tons per 12 consecutive month period with compliance determined at the end of each month.

A discussion of these requested changes as well as control technology summaries are included in Appendix A.

Compliance Determination and Monitoring Requirements

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

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source=s failure to take the appropriate corrective actions within a specific time period.

The Compliance Determination Requirements applicable to this modification are as follows:

(a) The core making operations, referred to as P17 have applicable compliance determination conditions as specified below:

(1) Within 60 days after achieving maximum production but no later than 180 days after startup, the Permittee shall perform VOC testing on the phenolic urethane nobake binder system core making operations, referred to as P17, in order to demonstrate compliance with Conditions D.3.1(a). This test shall be performed using methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

(2) Within 60 days after achieving maximum production but no later than 180 days after startup, the Permittee shall perform VOC testing on the furan nobake binder core making operations, referred to as P17, in order to demonstrate compliance with Conditions D.3.1(b). This test shall be performed using methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. T091-6141-00018. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

1. Section A.2(t) and (u) have been revised to include the new units as follows:

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

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

(t) mold making operations, referred to as process P16, constructed prior to 1972, using **a** phenolic nobake ~~and phenolic urethane nobake~~ binder system~~s~~ with a maximum capacity of 68.8 tons of sand per hour, with emissions uncontrolled and exhausting inside the building;

(u) core making operations, referred to as process P17, constructed prior to 1972 and modified in 1985 and in 2005 with the addition of a High Bay Core Mixer, using phenolic nobake, **phenolic urethane nobake,** furan nobake, and SO_2 binder systems with a maximum capacity of 68.8 tons of sand per hour, with SO_2 emissions controlled by a packed tower scrubber, referred to as C10, which exhausts to stack S10, and with particulate emissions controlled by the core room dust collector, referred to as C08, exhausting to stack S08;

***

The equipment descriptions in section D.3 for the above facilities have also been revised as shown above.

2. Conditions D.3.1, D.3.7, D.3.11, and the Part 70 Quarterly Report Forms has been revised to reflect the changes to the core and mold making BACT, as described in Appendix A.

D.3.1 Volatile Organic Compounds (VOCs) [326 IAC 8-1-6]

~~Pursuant to 326 IAC 8-1-6 (BACT) and CP 091-2238-00018, issued on January 21, 1994, the BACT for the mold making operations, referred to as P16, and the core making operations, referred to as P17, shall consist of the following:~~

~~(a) The binder usage shall be limited to 30 pounds of binder per ton of sand used.~~

~~(b) The resin usage shall be limited to 20 pounds of resin per ton of sand used.~~

Pursuant to 326 IAC 8-1-6 (BACT), the following shall apply:

(a) When the phenolic urethane nobake binder is used in the core making operations, referred to as P17, the VOC emission from the resin and catalyst shall not exceed 6.39 pounds of VOC per ton of sand.

(b) When the furan nobake binder is used in the core making operations, referred to as P17, the VOC emission from the resin shall not exceed 21.82 pounds of VOC per ton of sand.

(c) When the phenolic urethane nobake binder is used in the core making operations, the sand throughput to the core making operations, referred to as P17, shall not exceed 12,201 tons per 12 consecutive month period with compliance determined at the end of each month.

(d) When the furan nobake binder is used in the core making operations, the sand throughput to the core making operations, referred to as P17, shall not exceed 3,670 tons per 12 consecutive month period with compliance determined at the end of each month.

D.3.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) Within 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Conditions D.3.2 and D.3.4, the Permittee shall perform PM and PM10 testing on the core making operations exhausting through dust collector C08 using methods as approved by the Commissioner. These tests 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.

(b) Within 60 days after achieving maximum production but no later than 180 days after startup, the Permittee shall perform VOC testing on the core making operations, referred to as P17, in order to demonstrate compliance with Conditions D.3.1(a). This test shall be performed using methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

(c) Within 60 days after achieving maximum production but no later than 180 days after startup, the Permittee shall perform VOC testing on the core making operations, referred to as P17, in order to demonstrate compliance with Conditions D.3.1(b). This test shall be performed using methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

D.3.15 Record Keeping Requirements

(a) To document compliance with Condition D.3.1, the Permittee shall maintain ~~a record of the binder usage and the resin usage on a monthly basis.~~ **records in accordance with (1) through (7) below. Records maintained for (1) through (7) below shall be complete and sufficient to establish compliance with the VOC emission limit established in Condition D.3.1.**

(1) The amount and VOC content of phenolic urethane nobake resin and catalyst used.

(2) The throughput of sand to the core making operations for each month, where phenolic urethane nobake resin and catalyst are used.

(3) The amount and VOC content of furan nobake resin used.

(4) The throughput of sand to the core making operations for each month, where furan nobake resin is used.

(5) A log of the dates of use;

(6) The total VOC usage from phenolic urethane nobake resin and catalyst usage for each month and compliance period; and

(7) The total VOC usage from furan nobake resin usage for each month and compliance period.

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

~~Part 70 Quarterly Report~~

~~Source Name: Casting Service~~

~~Source Address: 300 Philadelphia Street, LaPorte, Indiana 46350~~

~~Mailing Address: 300 Philadelphia Street, LaPorte, Indiana 46350~~

~~Part 70 Permit No.: T091-6141-00018~~
~~Facility: mold making operations, P16, and core making operations, P17~~
~~Parameter: VOC emissions~~
~~Limit: (1) The binder usage shall be limited to 30 pounds of binder per ton of sand used.~~
~~(2) The resin usage shall be limited to 20 pounds of resin per ton of sand used.~~

~~YEAR:~~

~~Month~~	~~Column 1~~			~~Column 2~~			~~Column 1 + Column 2~~				
	~~Binder Usage This Month (lbs)~~	~~Resin Usage This Month (lbs)~~	~~Sand Usage This Month (tons)~~	~~Binder Usage Previous 11 Months (lbs)~~	~~Resin Usage Previous 11 Months (lbs)~~	~~Sand Usage Previous 11 Months (tons)~~	~~12 Month Total Binder Usage (lbs)~~	~~12 Month Total Resin Usage (lbs)~~	~~12 Month Total Sand Usage (tons)~~	~~12 Month Binder Usage per Ton Sand (lb/ton)~~	~~12 Month Resin Usage per Ton Sand (lb/ton)~~
~~Month 1~~											
~~Month 2~~											
~~Month 3~~											

~~☐ 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

Part 70 Quarterly Report

Source Name: **Casting Service**

Source Address: **300 Philadelphia Street, LaPorte, Indiana 46350**

Mailing Address: **300 Philadelphia Street, LaPorte, Indiana 46350**

Part 70 Permit No.: **T091-6141-00018**
Facility: **core making operations, P17**
Parameter: **VOC emissions**
Parameter: **VOC emissions**
Limit: **When the phenolic urethane nobake binder is used in the core making operations, referred to as P17, the VOC emission from the resin and catalyst shall not exceed 6.39 pounds of VOC per ton of sand.**

When the phenolic urethane nobake binder is used in the core making operations, the sand throughput to the core making operations, referred to as P17, shall not exceed 12,201 tons per 12 consecutive month period with compliance determined at the end of each month.

YEAR:

Month	Column 1		Column 2		Column 1 + Column 2		
	Resin and Catalyst Usage This Month (lbs)	Sand Usage This Month (tons)	Resin Usage Previous 11 Months (lbs)	Sand Usage Previous 11 Months (tons)	12 Month Total Resin Usage (lbs)	12 Month Total Sand Usage (tons)	12 Month Resin Usage per Ton Sand (lb/ton)
Month 1							
Month 2							
Month 3							

☐ **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

Part 70 Quarterly Report

Source Name: Casting Service

Source Address: 300 Philadelphia Street, LaPorte, Indiana 46350

Mailing Address: 300 Philadelphia Street, LaPorte, Indiana 46350

Part 70 Permit No.: T091-6141-00018
Facility: core making operations, P17
Parameter: VOC emissions
Limit: When the furan nobake binder is used in the core making operations, referred to as P17, the VOC emission from the resin shall not exceed 21.82 pounds of VOC per ton of sand.

When the furan nobake binder is used in the core making operations, the sand throughput to the core making operations, referred to as P17, shall not exceed 3,670 tons per 12 consecutive month period with compliance determined at the end of each month.

YEAR:

Month	Column 1		Column 2		Column 1 + Column 2		
	Resin and Catalyst Usage This Month (lbs)	Sand Usage This Month (tons)	Resin Usage Previous 11 Months (lbs)	Sand Usage Previous 11 Months (tons)	12 Month Total Resin Usage (lbs)	12 Month Total Sand Usage (tons)	12 Month Resin Usage per Ton Sand (lb/ton)
Month 1							
Month 2							
Month 3							

☐ 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.

Conclusion and Recommendation

This proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 091-24674-00018 and Significant Permit Modification No. 091-28463-00018. The staff recommends to the Commissioner that this Part 70 Significant Source and Significant Permit Modification be approved.

Indiana Department of Environmental Management
Office of Air Quality

APPENDIX A: BACT ANALYSIS

of Technical Support Document (TSD) for a
Part 70 Significant Source Modification
and Significant Permit Modification

Source Background and Description

Source Name:	**Casting Service**
Source Location:	**300 Philadelphia Street, LaPorte, IN 46350**
County:	**LaPorte**
SIC Code:	**3321**
Operation Permit No.:	**T 091-6141-00018**
Operation Permit Issuance Date:	**May 11, 2006**
Significant Source Modification No.:	**091-24674-00018**
Significant Permit Modification No.:	**091-28463-00018**
Permit Reviewer:	**Julia Handley/EVP**

The requirements of 326 IAC 8-1-6 (New Facilities, General Reduction Requirements) apply to facilities located anywhere in the state that were constructed on or after January 1, 1980, which have potential volatile organic compounds (VOC) emissions of 25 tons per year or more, and which are not otherwise regulated by other provisions of 326 IAC 8, and require the reduction of VOC emissions using Best Available Control Technology (BACT). Casting service has requested changes to clarify their existing BACT limit for the mold making operations, referred to as P16, and the core making operations, referred to as P17.

BACT limitations pursuant to 326 IAC 8-1-6 (BACT) were established under CP 091-2238-00018, issued on January 21, 1994 for the mold making operations, referred to as P16, and the core making operations, referred to as P17. The terminology included in this BACT determination was inaccurate. This limitation states that (a) the binder usage shall be limited to 30 pounds of binder per ton of sand used and (b) the resin usage shall be limited to 20 pounds of resin per ton of sand used. The terms binder and resin are synonymous with one another. In addition, the existing BACT limitation does not specify which core and/or mold making operation is being regulated.

Casting Service utilizes several different core and mold making binder systems, namely:

(a) phenolic nobake;

(b) phenolic urethane nobake;

(c) furan; and

(d) SO2 cure.

Potential to emit:

(a) The unlimited potential to emit of VOC resulting from use of the phenolic nobake binder system is 9.0 tons VOC per year, based on maximum capacity and 8760 hours of operation per year. Therefore the phenolic nobake binder is not subject to the requirements of 326 IAC 8-1-6 (BACT) and is not addressed further in this analysis.

(b) The unrestricted potential to emit of VOC from use of the phenolic urethane nobake core binder system is 39.0 tons VOC per year, based on maximum capacity and 8760 hours of operation per year. The phenolic urethane nobake binder system is only used in the production of cores, P17, and not in the production of molds, P16. Therefore, core making using the phenolic urethane nobake binder system is subject to the requirements of 326 IAC 8-1-6 (BACT) and is addressed further in this analysis.

(c) The unrestricted potential to emit of VOC from use of the furan nobake binder system is 40.05 tons VOC per year, based on maximum capacity and 8760 hours of operation per year. The furan nobake binder system is only used in the production of cores, P17, and not in the production of molds, P16. Therefore, core making using the furan nobake binder system is subject to the requirements of 326 IAC 8-1-6 (BACT) and is addressed further in this analysis.

(d) The SO2 core binder system does not generate any VOC emissions, and therefore is not subject to the requirements of 326 IAC 8-1-6 (BACT) and is not addressed further in this analysis.

The source has proposed resin and catalyst usage limits and core sand throughput limits to limit VOC emissions from the core making operations. These proposed limits are based on the uncontrolled potential VOC emissions from the phenolic urethane nobake and furan nobake core binder systems, as documented in Title V permit No. 091-6141-00018, issued May 11, 2006. Therefore, the uncontrolled VOC emissions which were used in this analysis to determine the cost effectiveness of each control option in $/ton are based on the uncontrolled potential to emit VOC of 39.0 and 40.05 tons per year from the phenolic urethane nobake and furan nobake binder systems, respectively.

BACT Analysis

IDEM conducts BACT analyses in accordance with the *"Top-Down" Best Available Control Technology Guidance Document* outlined in the 1990 draft USEPA *New Source Review Workshop Manual*, which outlines the steps for conducting a top-down BACT analysis. Those steps are listed below.

(1) Identify alternative emission control techniques;
(2) Technical Feasibility Analysis of BACT Options;
(3) Rank remaining control technologies by control effectiveness;
(4) Evaluate the technically feasible control technologies; and
(5) Selecting BACT.

Also in accordance with the *"Top-Down" Best Available Control Technology Guidance Document* outlined in the 1990 draft USEPA *New Source Review Workshop Manual*, BACT analyses take into account the energy, environmental, and economic impacts on the source. Emission reductions may be determined through the application of available control techniques, process design, and/or operational limitations. Such reductions are necessary to demonstrate that the emissions remaining after application of BACT will not cause or contribute to air pollution thereby protecting public health and the environment.

Step 1 – Identify Alternative Emission Control Techniques

The first step in evaluating BACT is identifying all applicable control technology options for core machines and core mixers. Seven (7) available technologies are initially considered potential control alternatives to reduce VOC emissions from the core making operations:

• Recuperative Thermal Oxidation
• Regenerative Thermal Oxidation
• Recuperative Catalytic Oxidation
• Regenerative Catalytic Oxidation
• Adsorption
• Absorption (scrubbing)
• Condensation

Step 2 – Technical Feasibility Analysis of BACT Options

Recuperative Thermal Oxidation

A Recuperative thermal Oxidizer is an add-on control device to control VOC emissions, which reheats the incoming VOC air stream. The stream is pre-hated by exiting flue gas from the same system in a heat exchanger or recuperator. A burner then heats the air to the required temperature of 1400 degrees F. The clean flue gas is discharged into the atmosphere. Recuperative Thermal Oxidation is not technically feasible to control VOC emissions from the phenolic urethane nobake and furan core making lines because of the variation of the pollutant's loading. Variation in pollutant loading will required a longer retention time in the oxidizer in order to properly destroy VOC emissions. Carbon monoxide, an intermediate oxidation product, may be formed as a result of incomplete combustion. Since this add-on control device is not technically feasible to control the VOC emissions, economic feasibility will not be evaluated. Recuperative Thermal Oxidation will not be considered as BACT for these operations.

Regenerative Thermal Oxidation

Regenerative Thermal Oxidizers (RTOs) are add-on control devices to control VOC emissions by simple reaction of the harmful air pollutants with oxygen and heat. RTOs use direct contact heat exchangers. These direct contact heat exchangers consist of a bed of porous ceramic packing or other structured, high heat capacity media. Since no additional chemicals are introduced into the RTO in order to achieve proper combustion, the RTO is technically feasible to control the VOC emissions from the core making lines with variable pollutant loading. Since this add-on control device is technically feasible to control VOC emissions, economic feasibility will be evaluated as follows:

- Capture Efficiency for enclosure = 200 feet per minute as required for all natural draft openings (i.e., 100%); and

- Control Efficiency for RTO = 98%

Recuperative and Regenerative Catalytic Oxidation

A Catalytic Oxidizer is an add-on control device to control VOC emissions by using a bed or catalyst that facilitates the oxidation of combustible gases. The catalyst increases the reaction rate and allows the destruction of VOCs at lower temperatures than a Thermal Oxidizer. Catalytic oxidation is not technically feasible to control the VOC emissions from the phenolic urethane nobake and furan core making lines because of the large airflow and pollutant loading fluctuations encountered during core making production. In addition, fouling (contamination) of the catalyst is a very common operating problem. Since this add-on control is not technically feasible to control the VOC emissions, economic feasibility will not be evaluated. Catalytic Oxidizers will not be considered as BACT for these operations.

Adsorption

Carbon Adsorbers are add-on control devices to control VOC emissions by adsorption. Carbon Adsorbers are not technically feasible to control the VOC emissions from the core making lines because of the flammability of the VOCs, difficulty of the recovery of the pollutants and the low VOC concentrations in the exhaust system. Since this add-on control technology is not technically feasible to control the VOC emissions, economic feasibility will not be evaluated. Carbon Adsorbers will not be considered as BACT for this operation.

Absorption (scrubbing)

Absorption controls VOC emissions by dissolving one or more soluble components of a gas mixture in a liquid in a wet scrubber, packed tower or bubble tower. Gas Absorbers, specifically packed bed scrubbers, are only technically feasible to control the VOC emissions from the amine catalysts of core making binder systems. Casting Service is not aware of any technically feasible gas absorbers for controlling other VOC emissions from the core making operations. Since Casting Service does not utilize an amine catalyst in either of the phenolic urethane nobake or furan binder systems at their source, this control technology is not technically feasible and the economic feasibility will not be evaluated. Absorption will not be considered as BACT for this operation.

Condensation

Condensers in use today may fall in either of two categories: refrigerated or non-refrigerated. Non-refrigerated condensers are widely used as raw material and/or product recovery devices in chemical process industries. They are frequently used prior to control devices (e.g., oxidizers or absorbers) to remove components that may be corrosive or damaging to other parts of the system. Refrigerated condensers are used as air pollution control devices for treating emission streams with high VOC concentrations (usually > 5,000 ppmv) in applications involving gasoline bulk terminals, storage, etc. Refrigeration systems are not technically feasible to control the VOC emissions from the phenolic urethane nobake and furan core making lines because of the low VOC concentrations, which are less than 100 ppmv. With such low VOC concentrations, the capture efficiency of the condenser would be extremely small. Since this add-on control device is not technically feasible to control the VOC emissions, economic feasibility will not be evaluated. Refrigeration Systems will not be considered as BACT for this operation.

Step 3 – Ranking of Technically Feasible BACT Options

The only technically feasible BACT add-on control that remains is regenerative thermal oxidizer (RTO).

The phenolic urethane nobake core making mixers at Casting Service are enclosed during mixing in order to prevent the resin-coated core and sand from being discharged from the machine and leading to lost product. Installing a VOC control device on any of the phenolic urethane core making mixers would require air to be pulled from the mixer and directed to the control device. Pulling the air away from the mixer would result in the resin-coated core sand also being sent to the VOC control device. Installing a dust collector in front of the VOC control would not solve this problem. The resin-coated sand would still be pulled from the mixing process and would not meet the required specifications for use in the core making processes due to improper mixing parameters and cross-contamination from the baghouse. Therefore, the collected resin-coated sand would be wasted and additional waste would be required to be disposed of in a landfill. Based on typical sizing parameters of baghouses and VOC control devices, all the resin-coated sand might easily be pulled from the mixer in order to direct the VOC emissions to these control devices; therefore, no add-on control device is technologically feasible for the phenolic urethane nobake mixers. Emission limitations will be considered as BACT for this operation.

Casting Service did evaluate the use of an add-on RTO to control VOC emissions from the phenolic urethane core making stations. The source also evaluated the use of emission limits to control this operation.

Since the furan core making operation consists of manually mixing sand, resin, and catalyst into a bowl and then placing this material into a core box at the same table, this analysis evaluates controlling both the furan mixing and core making activities as one process using an RTO. The source also evaluated the use of emission limits to control this operation.

Process	Control Technology	Control Efficiency (%)
phenolic urethane nobake core making mixers	Emission Limits	None
phenolic urethane nobake core making stations	Regenerative Thermal Oxidizer	98% destruction 100% capture
	Emission Limits	None
furan mixing and core making	Regenerative Thermal Oxidizer	98% destruction 100% capture
	Emission Limits	None

<u>Step 4 – The BACT Selection Process</u>

Evaluation of the Most Cost Effective Controls

According to the EPA's published testing method 204 for permanent and temporary enclosures, an average face velocity of 200 feet per minute through all natural draft openings into the enclosure must be maintained. Since Casting Service's phenolic urethane nobake and furan core making activities are currently open and not controlled, capture hoods would need to be built adjacent to each of these lines in order to allow for a safe working environment and mobility of the mixer's dispensing arm to each of the core making tables. Casting Service estimated the necessary air flow for each of the applicable core making lines required to maintain 200 feet per minute using the following equation.

$Q = U \{(10*X^2) + A]$

Where,

Q = minimum required air flow rate measured in actual cubic feet per minute;

U = minimum required capture velocity of 200 feet per minute;

X = maximum distance from equipment to capture system measured in feet; and

A = cross sectional area of the capture system hood measured in square feet.

For the phenolic urethane nobake core making operations, the following airflow rates were determined.

Line 3:

$Q = (200 \text{ feet per minute}) * [(10*(15 \text{ feet})^2)] + (40 \text{ feet} * 3 \text{ feet})]$

Q = 474,000 cubic feet per minute

Line 4:

Q = (200 feet per minute) * [(10*(5 feet)^2)] + (20 feet * 3 feet)]

Q = 62,000 cubic feet per minute

For the furan mixing and core making operations, the following airflow rate was determined:

Line 7:

Q = (200 feet per minute) * [(10*(15 feet)^2)] + (30 feet * 3 feet)]

Q = 468,000 cubic feet per minute

For simplicity in this analysis, it was presumed that 100 percent of the VOC contained in the phenolic urethane nobake resin and catalyst was emitted from the core making operations.

The economic, environmental, and energy impacts of the feasible control options were determined for the phenolic urethane nobake core making operations (Line 3 and Line 4) and furan mixing and core making operations (Line 7).

Cost analyses for add-on RTO controls are provided below:

Costs to Install and Operate a Thermal Oxidizer Controlling Line 3

phenolic urethane nobake core molding Line 3 with	474,000	CFM	and 4.62	lb VOC / hr

Cost Item	Avg Cost Factor	Cost ($)	Reference
Direct Costs:			
Control system price	included	$5,763,840	vendor
Instrument and controls	included		
Taxes	0.05	$288,192	1
Freight	0.05	$288,192	1
Ductwork system		$500,000	Engr. Estimate
Base Price		$6,840,224	

Installation Costs, Direct:			
Foundations and supports	0.08	$547,218	1
Erection, assembly, handling	0.14	$957,631	1
Electrical	0.04	$273,609	1
Piping	0.02	$136,804	1
Insulation	0.01	$68,402	1
Painting, weather proofing	0.01	$68,402	1
Total Installation Costs		$2,052,067	
TOTAL DIRECT COSTS (base price + installation costs)		$8,892,291	

Costs to Install and Operate a Thermal Oxidizer Controlling Line 3, cont.

Cost Item	Avg Cost Factor	Cost ($)	Reference
Installation Costs, Indirect			
Engineering, supervision	0.10	$684,022	1
Construction, field expenses	0.05	$342,011	1
Construction, fees	0.10	$684,022	1
Start-up, shakedown	0.02	$136,804	1
Contingencies	0.03	$205,207	1
TOTAL INDIRECT COSTS		$2,052,067	
TOTAL CAPITAL COSTS (Direct + Indirect)		$10,944,358	

Direct Operating Costs						
Operator ($/hr * hrs/yr)		16.79	547.5		$9,193	
Supervision		15% of labor			$1,379	1
Operating Materials						
Maintenance labor		25.19	547.5		$13,789	
Maintenance materials		100% of labor			$13,789	
Replacement parts (as required)		5% of equip cost			$288,192	
Utilities						
Electricity	($/KWH * KWH/year)		0.0534	410,000	$21,894	
Natural gas	($/Mcft * 1000 Mcft/MMcft * MMcft/year)		13.45	40,400	$543,380	
TOTAL DIRECT OPERATING COSTS (A)					$891,615	

Indirect Operating (fixed) Costs							
Overhead			(60% of O&M labor/matl's)			$189,462	1
Property Tax			1% of capital costs			$109,444	1
Insurance			1% of capital costs			$109,444	1
Administration			2% of capital costs			$218,887	1
Capital Recovery (CRF)	0.14569	7.0%	for 30 years	0.0805864	CRF	$881,966	1
TOTAL FIXED COSTS (B)						$1,509,203	
TOTAL ANNUALIZED COSTS (A+B-C)						$2,400,818	
Uncontrolled emission rate (tons / year)						20.2	
Control System Efficiency =	100%	Capture Eff *		98%	Control Eff	98.0%	
Controlled emission rate (tons/year)						0.40	
VOC controlled emissions (tons/year)						19.8	
Cost ($/ton)						$121,065	

[1] EPA OAQPS Cost Control Manual, Table 2

Costs to Install and Operate a Thermal Oxidizer Controlling Line 4

phenolic urethane nobake core molding Line 4 with	62,000	CFM	and 4.28	lb VOC / hr

Cost Item	Avg Cost Factor	Cost ($)	Reference
Direct Costs:			
Control system price	included	$753,920	vendor
Instrument and controls	included		
Taxes	0.05	$37,696	1
Freight	0.05	$37,696	1
Ductwork system		$450,000	Engr. Estimate
Base Price		$1,279,312	

Installation Costs, Direct:			
Foundations and supports	0.08	$102,345	1
Erection, assembly, handling	0.14	$179,104	1
Electrical	0.04	$51,172	1
Piping	0.02	$25,586	1
Insulation	0.01	$12,793	1
Painting, weather proofing	0.01	$12,793	1
Total Installation Costs		$383,794	
TOTAL DIRECT COSTS (base price + installation costs)		$1,663,106	

Installation Costs, Indirect			
Engineering, supervision	0.10	$127,931	1
Construction, field expenses	0.05	$63,966	1
Construction, fees	0.10	$127,931	1
Start-up, shakedown	0.02	$25,586	1
Contingencies	0.03	$38,379	1
TOTAL INDIRECT COSTS		$383,794	
TOTAL CAPITAL COSTS (Direct + Indirect)		$2,046,899	

Costs to Install and Operate a Thermal Oxidizer Controlling Line 4, cont.

Cost Item			Avg Cost Factor			Cost ($)	Reference
Direct Operating Costs							
Operator ($/hr * hrs/yr)			16.79	547.5		$9,193	
Supervision			15% of labor			$1,379	1
Operating Materials							
Maintenance labor			25.19	547.5		$13,789	
Maintenance materials			100% of labor			$13,789	
Replacement parts (as required)			5% of equip cost			$288,192	
Utilities							
Electricity	($/KWH * KWH/year)			0.0534	410,000	$21,894	
Natural gas	($/Mcft * 1000 Mcft/MMcft * MMcft/year)			13.45	40,400	$543,380	
TOTAL DIRECT OPERATING COSTS (A)						$641,119	
Indirect Operating (fixed) Costs							
Overhead			(60% of O&M labor/matl's)			$39,164	1
Property Tax			1% of capital costs			$20,469	1
Insurance			1% of capital costs			$20,469	1
Administration			2% of capital costs			$40,938	1
Capital Recovery (CRF)	0.14569	7.0%	for 30 years	0.0805864	CRF	$164,952	1
TOTAL FIXED COSTS (B)						$285,992	
TOTAL ANNUALIZED COSTS (A+B-C)						$927,111	
Uncontrolled emission rate (tons / year)						18.7	
Control System Efficiency =	100%	Capture Eff *		98%	Control Eff	98.0%	
Controlled emission rate (tons/year)						0.37	
VOC controlled emissions (tons/year)						18.4	
Cost ($/ton)						$50,465	

[1] EPA OAQPS Cost Control Manual, Table 2

Costs to Install and Operate a Thermal Oxidizer Controlling Line 7

furan mixing and core molding Line 7 with	468,000	CFM	and 9.14	lb VOC / hr

Cost Item	Avg Cost Factor	Cost ($)	Reference
Direct Costs:			
Control system price	included	$5,763,840	vendor
Instrument and controls	included		
Taxes	0.05	$288,192	1
Freight	0.05	$288,192	1
Ductwork system		$500,000	Engr. Estimate
Base Price		$6,840,224	
Installation Costs, Direct:			
Foundations and supports	0.08	$547,218	1
Erection, assembly, handling	0.14	$957,631	1
Electrical	0.04	$273,609	1
Piping	0.02	$136,804	1
Insulation	0.01	$68,402	1
Painting, weather proofing	0.01	$68,402	1
Total Installation Costs		$2,052,067	
TOTAL DIRECT COSTS (base price + installation costs)		$8,892,291	
Installation Costs, Indirect			
Engineering, supervision	0.10	$684,022	1
Construction, field expenses	0.05	$342,011	1
Construction, fees	0.10	$684,022	1
Start-up, shakedown	0.02	$136,804	1
Contingencies	0.03	$205,207	1
TOTAL INDIRECT COSTS		$2,052,067	
TOTAL CAPITAL COSTS (Direct + Indirect)		$10,944,358	

Costs to Install and Operate a Thermal Oxidizer Controlling Line 7, cont.

Cost Item			Avg Cost Factor			Cost ($)	Reference
Direct Operating Costs							
Operator ($/hr * hrs/yr)			16.79	547.5		$9,193	
Supervision			15% of labor			$1,379	1
Operating Materials							
Maintenance labor			25.19	547.5		$13,789	
Maintenance materials			100% of labor			$13,789	
Replacement parts (as required)			5% of equip cost			$288,192	
Utilities							
Electricity	($/KWH * KWH/year)			0.0534	410,000	$21,894	
Natural gas	($/Mcft * 1000 Mcft/MMcft * MMcft/year)			13.45	40,400	$543,380	
TOTAL DIRECT OPERATING COSTS (A)						$891,615	
Indirect Operating (fixed) Costs							
Overhead			(60% of O&M labor/matl's)			$189,462	1
Property Tax			1% of capital costs			$109,444	1
Insurance			1% of capital costs			$109,444	1
Administration			2% of capital costs			$218,887	1
Capital Recovery (CRF)	0.14569	7.0%	for 30 years	0.0805864	CRF	$871,618	1
TOTAL FIXED COSTS (B)						$1,491,529	
TOTAL ANNUALIZED COSTS (A+B-C)						$2,379,496	
Uncontrolled emission rate (tons / year)						40.0	
Control System Efficiency =	100%	Capture Eff *		98%	Control Eff	98.0%	
Controlled emission rate (tons/year)						0.80	
VOC controlled emissions (tons/year)						39.2	
Cost ($/ton)						$60,651	

[1] EPA OAQPS Cost Control Manual, Table 2

Costs to Install and Operate a Thermal Oxidizer Controlling Combined Lines 3, 4 and 7

phenolic urethane nobake core molding Line 3 with	474,000	CFM	and 4.62	lb VOC / hr
phenolic urethane nobake core molding Line 4 with	62,000	CFM	and 4.28	lb VOC / hr
furan mixing and core molding Line 7 with	468,000	CFM	and 9.14	lb VOC / hr

Costs to Install Operate a Thermal Oxidizer Controlling Combined Lines 3, 4 and 7, cont.

Cost Item	Avg Cost Factor			Cost ($)	Reference
Direct Costs:					
Control system price	included			$12,208,640	vendor
Instrument and controls	included				
Taxes	0.05			$610,432	1
Freight	0.05			$610,432	1
Ductwork system				$650,000	Engr. Estimate
Base Price				$14,079,504	
Installation Costs, Direct:					
Foundations and supports	0.08			$1,126,360	1
Erection, assembly, handling	0.14			$1,971,131	1
Electrical	0.04			$563,180	1
Piping	0.02			$281,590	1
Insulation	0.01			$140,795	1
Painting, weather proofing	0.01			$140,795	1
Total Installation Costs				$4,223,851	
TOTAL DIRECT COSTS (base price + installation costs)				$18,303,355	
Installation Costs, Indirect					
Engineering, supervision	0.10			$1,407,950	1
Construction, field expenses	0.05			$703,975	1
Construction, fees	0.10			$1,407,950	1
Start-up, shakedown	0.02			$281,590	1
Contingencies	0.03			$422,385	1
TOTAL INDIRECT COSTS				$4,223,851	
TOTAL CAPITAL COSTS (Direct + Indirect)				$22,527,206	
Direct Operating Costs					
Operator ($/hr * hrs/yr)	16.79	547.5		$9,193	
Supervision	15% of labor			$1,379	1
Operating Materials					
Maintenance labor	25.19	547.5		$13,789	
Maintenance materials	100% of labor			$13,789	
Replacement parts (as required)	5% of equip cost			$610,432	
Utilities					
Electricity ($/KWH * KWH/year)		0.0534	410,000	$21,894	
Natural gas ($/Mcft * 1000 Mcft/MMcft * MMcft/year)		13.45	40,400	$543,380	
TOTAL DIRECT OPERATING COSTS (A)				$1,213,855	

Costs to Install and Operate a Thermal Oxidizer Controlling Combined Lines 3, 4 and 7, cont.

Cost Item			Avg Cost Factor			Cost ($)	Reference
Indirect Operating (fixed) Costs							
Overhead			(60% of O&M labor/matl's)			$382,806	[1]
Property Tax			1% of capital costs			$225,272	[1]
Insurance			1% of capital costs			$225,272	[1]
Administration			2% of capital costs			$450,544	[1]
Capital Recovery (CRF)	0.14569	7.0%	for 30 years	0.0846712	CRF	$1,815,387	[1]
TOTAL FIXED COSTS (B)						$3,099,281	
TOTAL ANNUALIZED COSTS (A+B-C)						$4,313,136	
Uncontrolled emission rate (tons / year)						79.0	
Control System Efficiency =	100%	Capture Eff *		98%	Control Eff	98.0%	
Controlled emission rate (tons/year)						1.58	
VOC controlled emissions (tons/year)						77.4	
Cost ($/ton)						$55,700	

[1] EPA OAQPS Cost Control Manual, Table 2

Economic Analysis Summary

Process	Air Flow Rate (ACFM)	Cost Effectiveness ($/ton)
Line 3 – Phenolic Urethane Nobake	474,000	$121,065
Line 4 – Phenolic Urethane Nobake	62,000	$50,465
Line 7 – Furan Nobake	468,000	$60,651
Lines 3, 4 and 7 Combined	1,004,000	$55,700

Based on the results of the cost analyses, the RTO is not economically feasible to control the VOC emissions from any of the above core making lines.

The USEPA RACT/BACT/LAER Clearinghouse (RBLC) was also reviewed to identify prior control requirements and limitations for other mixers and core machines. Because it is infeasible to track emissions separately, Casting Service is requesting to combine the process emission limitations from the core mixing and core making operations. The table below summarizes these BACT determinations for iron foundries in the United States, as provided by the RBLC and other IDEM permits. The results of the search were limited to sources with SIC Codes of 3321. The following table represents the BACT/LAER emission limitations established for both core mixers and core machines. Sources are arranged in alphabetical order.

Existing VOC BACT Limits for core mixers and core machines			
Source Name	**VOC BACT Limits**	**Control Technology**	**Compliance Information**
Casting Service's Proposed Limit	6.39 pounds of VOC per ton of sand, sand limited to 12,200 tons/year (phenolic urethane nobake process) 21.82 pounds of VOC per ton of sand, sand limited to 3,574 tons/year (furan nobake binder)	No add-on control device for mixers or core machines.	N/A
Huron Casting, Inc., MI Permit 850-90, issued on 6/10/1991(1)	0.854 lbs/ton cores and 0.51 tons/year (combined limits for both core mixing and core machines)	No add-on control device for mixers. Regenerative Thermal Oxidizer (RTO) used to control core machines.	Not currently in operation. No compliance information available.
Waupaca Foundry, IN Permit No. 123-12948-00019, issued on 6/5/2001 and revised on 2/9/2006(2)	0.002 pounds per pound of binder used 0.324 pounds/hour (equivalent to 0.054 pounds per ton of cores) 0.36 lbs/ton of cores (combined limits for both core mixing and core machines)	No add-on control device for mixers. Scrubber 100% Capture Efficiency used to control core machines.	The source is required to perform compliance testing. Testing results are pending.
Waupaca Foundry, IN Permit No. 123-8451-00019, issued on 2/4/1998(2)	0.63 lbs/ton cores 0.18 lbs/ton cores (TEA) (combined limits for both core mixing and core machines)	No add-on control device for mixers. Scrubber 100% Capture Efficiency used to control core machines.	The source is required to perform compliance testing. Compliance stack tests conducted on May 3-8, 2000. Test results were 0.41 lbs VOC/ton cores and 0.015 lbs TEA/ton cores
Waupaca Foundry, IN Permit No. 123-4593-00019, issued on 1/19/1996(2)	0.76 lb/ton cores (combined limits for both core mixing and core machines)	No add-on control device for mixers. Scrubber 100% Capture Efficiency used to control core machines.	The source agreed to the emission limit but no method of achieving compliance is specified.
Waupaca Foundry, TN Permit 54-017420, issued 4/28/2000(3)	3 lbs/hr (stack) (equivalent to 0.15 lb/ton at 20 tons/hour), 15.06 lbs/hr (total stack and fugitive) (equivalent to 0.753 lbs/ton cores at 20 tons/hour) 5.50 tons per month (combined limits for both core mixing and core making)	No add-on control device for mixers. Scrubber 100% Capture Efficiency used to control core machines.	No method specified for demonstrating compliance. Source agreed to the emission limit but no method of achieving compliance is specified in the permit.

(1) Huron Casting, Inc.
This source is currently not in operation and, therefore, compliance with the VOC mass limitation cannot be verified.

(2) Waupaca Foundry, IN, (Permit Nos. 123-12948-00019, 123-8451-00019, and 123-4593-00019)
This source utilizes a TEA scrubber for VOC reduction from the core machines. As described in Step 2, the use of Gas Absorbers, specifically packed bed scrubbers, are only technically feasible to control the VOC emissions from the amine catalysts of core making binder systems. Since Casting Service does not utilize an amine catalyst in either of the phenolic urethane nobake or furan binder systems at their source, this control technology is not technically feasible for Casting Service. Therefore, this source is not considered as BACT for this analysis.

(3) Waupaca Foundry, TN
This source utilizes a phenolic-urethane resin and DMIPA catalyst to produce cores. An acid scrubber is used for VOC reduction from the core machines. Compliance with the VOC limits at the Waupaca Foundry in Etowah, TN has not been verified. As described in Step 2, the use of Gas Absorbers, specifically packed bed scrubbers, are only technically feasible to control the VOC emissions from the amine catalysts of core making binder systems. Since Casting Service does not utilize an amine catalyst in either of the phenolic urethane nobake or furan binder systems at their source, this control technology is not technically feasible for Casting Service. Therefore, this source is not considered as BACT for this analysis.

Existing VOC BACT Limits for core mixers			
Source Name	**VOC BACT Limits**	**Control Technology**	**Compliance Information**
Casting Service's Proposed Limit	6.39 pounds of VOC per ton of sand, sand limited to 12,200 tons/year (phenolic urethane nobake process) 21.82 pounds of VOC per ton of sand, sand limited to 3,574 tons/year (furan nobake binder)	No add-on control device for mixers or core machines.	N/A
Dalton Foundry, IN Permit 085-6708-00003, issued on 5/9/2007 (1)	0.185 lbs/ton of sand Sand production limits for each line. Total sand throughput limited to 67,421 tons per year	No add-on control device for mixers.	The source is required to perform compliance testing.

(1) Dalton Foundry, IN
The VOC limits specified for Dalton Foundry are for the core mixing alone. A direct comparison of this BACT limits with the proposed VOC limit for Casting Service cannot be made. The BACT requirements for casting service were evaluated for the mixers and core machines combined due the operational design of core making lines. Therefore, the VOC limits specified for Waupaca Foundry will not be considered as BACT for Casting Service's core making lines.

Existing VOC BACT Limits for core machines			
Source Name	**VOC BACT Limits**	**Control Technology**	**Compliance Information**
Casting Service's Proposed Limit	6.39 pounds of VOC per ton of sand, sand limited to 12,200 tons/year (phenolic urethane nobake process) 21.82 pounds of VOC per ton of sand, sand limited to 3,574 tons/year (furan nobake binder)	No add-on control device for mixers or core machines.	N/A
Dalton Foundry, IN Permit 085-6708-00003, issued on 5/9/2007 (1)	Sand Production Limits for each line. Core Machine Resin = 0.541 lb/ton sand Core Box Cleaner = 0.144 lb/ton sand Release Agent = 0.015 lb/ton sand Total = 3.45 lbs/ton sand Catalyst (DMIPA) = 0.785 lb/ton sand	Acid Scrubber 89.3% Capture; 99.9% Control of catalyst VOC emissions 89.2% overall control efficiency	Routine compliance testing The existing scrubber in the plant was tested on July 1, 2003.
Golden Casting Corporation, IN Permit 005-7081-00006, issued on 3/1/1997(2)	No specific total VOC limit, but calculations show that with the production limit, total VOC emissions would be 2.90 lbs/ton cores 1.34 lbs/hr (stack only) (equivalent to 0.103 lb/ton)	Acid Scrubber 95% overall control efficiency (equivalent to 0.208 lbs/ton cores) (stack and fugitive)	No longer in operation. Compliant stack test December 16-17, 1998. Test results showed TEA emissions of 0.0015 lb/ton cores
Grede Foundries, Iron Mountain Division, MI Permit 199-04A, issued on 12/6/2004(3)	Sand Production Limit of 73,320 tons of sand/year VOC = 4.8 lbs/hour VOC = 21.02 tons/year DMEA = 0.13 lb/hr DMEA = 0.29 tons/year	Acid Scrubber 100% Capture Efficiency used to control core machines.	The source is required to perform compliance testing.
Wheland Foundry, Chattanooga, TN Permit 3710-30400319-91I, issued on 11/3/1998(4)	22.04 lbs/hr, TEA = 1,148 tons/year	RTO 98% overall control efficiency (equivalent to 2.2 lbs/ton cores)	No longer in operation.

(1) Dalton Foundry, IN
This source uses phenolic urethane resin and DMIPA catalyst to produce cores and utilizes an acid scrubber for VOC reduction from the core machines. As described in Step 2, the use of Gas Absorbers is only technically feasible to control the VOC emissions from the amine catalysts of core making binder systems. Since Casting Service does not utilize an amine catalyst in the phenolic urethane nobake or furan binder systems at their source, this control technology is not technically feasible for Casting Service. Furthermore, a direct comparison of these BACT limits with the proposed VOC limit for Casting Service cannot be made because combined BACT requirements were evaluated for the mixers and core machines due the operational design of core making core making lines. Therefore, this source is not considered as BACT for this analysis.

(2) Golden Casting Corporation, IN
This source is not currently in operation and, therefore, compliance with the VOC mass limitation cannot be verified.

(3) Grede Foundries, Iron Mountain Division, MI
This source uses a phenolic urethane resin and DMIPA catalyst to produce cores. This source utilizes an acid scrubber for VOC reduction from the core machines. The use of Gas Absorbers, specifically packed bed scrubbers, are only technically feasible to control the VOC emissions from the amine catalysts of core making binder systems. Since Casting Service does not utilize an amine catalyst in either of the phenolic urethane nobake or furan binder systems at their source, this control technology is not technically feasible for Casting Service. A direct comparison of this BACT limits with the proposed VOC limit for Casting Service cannot be made because combined BACT requirements were evaluated for Casting Service's mixers and core machines combined due the operational design of core making lines. Therefore, this source is not considered as BACT for this analysis.

(4) Wheland Foundry, Chattanooga, TN
This source is currently not in operation and, therefore, compliance with the VOC mass limitation cannot be verified.

Step 5 – Selecting BACT

The review of the USEPA RACT/BACT/LAER Clearinghouse (RBLC) revealed that state regulatory agencies have previously allowed VOC BACT limitations on core mixing and core machine operations. These limitations are stated in terms of pounds of VOC emissions per ton of core sand processed, pounds VOC per hour, or tons VOC per year. These emission limitations are based on specific process information such as materials processed and size of cores with related directly to each unique source. Because it is infeasible to track emissions separately, Casting Service is requesting to combine the process emission limitations from the core mixing and core making operations.

Since the IDEM has previously accepted a VOC emission limitation for both the mixing and core making operations (see permit #8451 for Waupaca Foundry listed in the above table and permit #6141 for Casting Service), Casting Service is requesting that the IDEM not differentiate between the VOC emissions that may be generated at the core mixing operations versus the core making operations.

Casting Service is proposing to meet an emission limit for the core making operations, P17, consisting of both core mixing and core making operations. Material safety data sheets were used to calculate the worst-case VOC emission generated from the phenolic urethane nobake and furan core making processes. In addition, Casting Service calculated potential VOC emissions based on the assumption that 100 percent of the VOC contained in the resin and catalysts would be emitted at the core making operations. Casting Service will document compliance based on sand usage, resin usage, catalyst usage and review of MSDSs.

For the phenolic urethane nobake process, Casting Service evaluated the minimum and maximum batch recipe ranges for the resin, catalyst and total sand used in this operation. Based on the results of this evaluation, a maximum usage ratio was established. The results are as follows:

- for resin, a maximum ratio of 29 pounds of resin per ton of sand processed; and
- for catalyst, a maximum ratio of 5 pounds of catalyst per ton of sand processed.

Utilizing the percent VOC for each material, the following maximum VOC emission limitations were calculated:

- for resin, 2.61 pounds VOC per ton of sand;
- for catalyst, 3.78 pounds VOC per ton of sand; and
- total for this operation is 6.39 tons VOC per ton of sand.

For the furan nobake process, Casting Service evaluated the minimum and maximum batch recipe ranges for the resin and total sand used in this operation. Based on the results of the evaluation, a maximum usage ratio was established. The result is 27.2 pounds of resin per ton of sand. Utilizing the percent VOC for the resin material, the maximum VOC emission limitation is 21.82 pounds of resin per ton of sand.

Sand throughput limits were determined for each of the binder systems. These sand throughput limits, in conjunction with the respective pound VOC per ton of sand limits for each binder system, will limit annual VOC emissions from the phenolic urethane nobake process core making process and furan nobake core making process each to less than 39.0 tons per year.

Proposed BACT Limit Summary

Actual VOC Ratio for Resin & Catalyst					
Binder System	**Batch Recipe Range**	**Min/Max**	**BACT Ratio**	**% VOC**	**Max VOC Ratio Based on Range Info**
Phenolic Urethane Nobake Sand	62 to 72 lbs	62 lbs			
Phenolic Urethane Nobake Resin	7.6 to 7.9 and 6.2 to 6.5 ozs	0.90 lbs	29.0 lbs Resin/ton Sand	9.00%	2.61 lbs Resin VOC/tons Sand
Phenolic Urethane Nobake Catalyst	1.4 to 2.5 ozs	0.16 lbs	5.0 lbs Catalyst/ton sand	75.00%	3.78 lbs Catalyst VOC/ton sand
Furan Nobake sand	195 to 209 lbs	195 lbs			
Furan Nobake Resin	39.5 to 42.5 ozs	2.66 lbs	27.2 lbs Resin/ton Sand	80.10%	21.82 lbs Resin VOC/tons Sand

Annual Sand Limit Based on Max VOC Ratio for Resin Catalyst			
Binder System	**Potential VOC emissions (Tons/Year)**	**Max VOC Ratio Based on Range Info (lbs VOC/ton Sand)**	**Annual Sand Limit**
Phenolic Urethane Nobake Operations	39.0	6.39	12,200
Furan Nobake Operations	39.0	21.82	3,574

Therefore, IDEM has determined that BACT for the core making operations, referred to as P17, to control of VOC emission from these operations as follows:

(a) When the phenolic urethane nobake binder is used in the core making operations, referred to as P17, VOC emissions from the use of resin and catalyst shall not exceed 6.39 pounds of VOC per ton of sand;

(b) When the furan nobake binder is used in the core making operations, referred to as P17, VOC emissions from the use of resin shall not exceed 21.82 pounds of VOC per ton of sand;

(c) When the phenolic urethane nobake binder is used in the core making operations, the sand throughput to the core making operations, referred to as P17, shall not exceed 12,200 tons per 12 consecutive month period with compliance determined at the end of each month.

(d) When the furan nobake binder is used in the core making operations, the sand throughput to the core making operations, referred to as P17, shall not exceed 3,574 tons per 12 consecutive month period with compliance determined at the end of each month.