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

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: August 2, 2012

RE: Interstate Castings / 097 - 31761 - 00063

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

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted 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, Suite N 501E, 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.dot12/03/07

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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August 2, 2012

Ms. Becky Meyer
Interstate Castings
3823 Massachusetts Avenue
Indianapolis, IN 46218

Re: 097-31761-00063
First Significant Revision to
F097-18317-00063

Dear Ms. Meyer:

Interstate Castings was issued a Federally Enforceable State Operating Permit (FESOP) Renewal No. F097-18317-00063 on April 16, 2007 for a stationary Gray & Ductile Iron Foundry located at 3823 Massachusetts Avenue, Indianapolis. On April 20, 2012, the Office of Air Quality (OAQ) received an application from the source requesting:

(a) To delete the testing requirement for the charge handling system.

(b) To replace baghouse CE-A and Cyclone CE-C with a new baghouse that will be identified as CE-A controlling particulate emissions for the Shakeout, Casting Cleaning, Sand Handling operation (EU-06A, EU-06B, EU-06C).

(c) To increase the PM, PM10 and PM2.5 limits for the Shakeout, Casting Cleaning, Sand Handling operation (EU-06A, EU-06B, EU-06C) controlled by the baghouse CE-A.

The attached Technical Support Document (TSD) provides additional explanation of the changes to the source/permit. Pursuant to the provisions of 326 IAC 2-8-11.1, these changes to the permit are required to be reviewed in accordance with the Significant Permit Revision (SPR) procedures of 326 IAC 2-8-11.1(f). Pursuant to the provisions of 326 IAC 2-8-11.1, a significant permit revision to this permit is hereby approved as described in the attached Technical Support Document (TSD).

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Attached please find the entire revised permit.

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, please contact Bruce Farrar, of my staff, at 317-234-5401 or 1-800-451-6027, and ask for extension 4-5401.

Sincerely,

Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

Attachments: Technical Support Document and revised permit

IC/BF

cc: File - Marion County
Marion County Health Department
U.S. EPA, Region V
Compliance and Enforcement Branch
Billing, Licensing and Training Section

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FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) RENEWAL

Indiana Department of Environmental Management
Office of Air Quality

Interstate Castings
3823 Massachusetts Avenue
Indianapolis, Indiana 46218

(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 provision of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; and denial of a permit renewal application. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This permit also addresses new source review requirements and is intended to fulfill the new source review procedures and permit revision requirements pursuant to 326 IAC 2-8-11.1, applicable to those conditions.

Operation Permit No.: F097-18317-00063	
Issued by: Original Signed by Felicia A. Robinson Felicia A. Robinson, Administrator Office of Environmental Services	Issuance Date: April 16, 2007 Expiration Date: April 16, 2017

First Administrative Amendment 097-25719-00063, issued on January 14, 2008.
First Minor Permit Revision 097-27070-00063, issued on December 19, 2008.
Second Administrative Amendment 097-27676-00063, issued on May 21, 2009.

First Significant Permit Revision: 097-31761-00063	
Issued by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: August 2, 2012 Expiration Date: April 16, 2017

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SECTION A SOURCE SUMMARY

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

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary Gray & Ductile Iron Foundry.

Source Address:	3823 Massachusetts Ave. Indianapolis, Indiana 46218
General Source Phone:	317-546-2427
SIC Code:	3321 (Gray and Ductile Iron Foundries)
County Location:	Marion County
Source Location Status:	Nonattainment for PM2.5 Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD Rule, Emission Offset, and Nonattainment NSR Minor Source, section 112 of the Clean Air Act 1 of 28 source categories

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

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

(a) Melt Operations, installed in 1972, consisting of the following:

(1) Two (2) electric induction furnaces, collectively identified as EU-01, with emissions collected by a canopy hood located directly over the furnaces and controlled by a settling tank followed by a cyclone which exhausts through one stack identified as stack B. Only one furnace can be operated at any time because there is only one transformer to supply electrical energy;

Under 40 CFR 63, Subpart ZZZZZ (5Z), this unit is considered an affected source/facility.

(2) One (1) charge handling system, identified as EU-02, with a maximum charge capacity of 5 tons of metal per hour. The maximum capacity of the charge handling system is limited by the source's ability to melt metal;

(3) One (1) natural gas preheater, identified as EU-03, with a maximum heat input capacity of 25 million Btu per hour; and

(4) One (1) reaction/holding ladle, identified as EU-04, where inoculation takes place.

Emissions from the charge handling system, preheater, and holding ladle are collected by the general furnace area ventilation system that exhausts through two uncontrolled stacks identified as stacks V11 and V12.

(b) Pouring and Cooling Operations, collectively identified as EU-05, where the molten metal from the melting operation are poured from ladles into molds and allowed to cool. These facilities were installed in the 1930s and have a maximum throughput of 5 tons of metal per hour. Emissions are collected by hoods located on the ceiling above the pouring deck and exhaust through uncontrolled stacks V17, V18, V25, V26, V27, and V28.

(c) Shakeout Operations, collectively identified as EU-06A, where the molding sand is separated from the casting by mechanical shaking. These units were installed in 1972 and have a maximum throughput of 5 tons of metal per hour. Emissions are collected by hoods located over the shakeout area and controlled by a dust collector, identified as CE-A, approved for modification in 2012, exhausting through stack A.

(d) Casting Cleaning Operations, collectively identified as EU-06B, with a maximum throughput of 5 tons of metal per hour, consisting of the following:

(1) One (1) table blast installed in 1981;

(2) One (1) shot blast machine installed in June 1960;

(3) Five (5) grinders installed in 1960; and

(4) One (1) cutoff saw installed in 1981.

Emissions are collected by various hoods located throughout the casting cleaning operation and are controlled by a dust collector, identified as CE-A**,** approved for modification in 2012, which exhausts through stack A.

(e) Sand Handling Operations, collectively identified as EU-06C, installed prior to 1967 and modified in 1998 and in 2000, with a maximum capacity of 20.63 tons of sand per hour, consisting of the following:

(1) One (1) sand muller;

(2) Thirteen (13) hopper stations;

(3) One (1) sand elevator;

(4) One (1) sand tank;

(5) One (1) sand cooler;

(6) Seven (7) belts;

(7) One (1) molding line consisting of a B & P 16 X 20 mold machine, approved for construction in 2012, with a maximum production capacity of 80 molds per hour, each mold weighing 140 pounds;

(8) One (1) molding line consisting of a Sinto FB03 20 X 24 mold machine, constructed in 1998, with a maximum production capacity of 80 molds per hour, each mold weighing 240 pounds; and

(9) Five (5) manual mold machines, consisting of one (1) squeezer mold machine, two (2) PinLift mold machines, and two (2) RotoLift mold machines, constructed prior to 1967 and modified in 1998 and 2002**.**

Emissions are collected by various hoods located throughout the sand handling process line and are controlled by a dust collector, identified as CE-A**,** approved for modification in 2012, which exhausts through stack A.

(f) Core Making Operations consisting of the following three (3) core making processes:

(1) Two (2) Redford shell core machines identified as EU-09A and EU-09B, each with a maximum capacity 35.75 pounds of shell sand per hour and constructed in February 2002;

(2) One (1) air set core making process, identified as EU-07, constructed in 1982, with a maximum operating capacity of 0.5 tons of cores per hour. In the air set core making process, sand, catalyst, and resin are blended together in a sand mixer. Following blending, the blended sand is placed in the core boxes. Cores are then formed into the desired shape in the core machine. If required, the cores are placed in the core oven in order to harden the cores. The air set core oven is fired with natural gas and has a maximum heat input capacity of 0.115 million Btu per hour; and

(3) One (1) oil sand core making process, identified as EU-08, constructed in 1958, with a maximum operating capacity of 0.05 tons of cores per hour. In the oil core making process, sand and core oil are blended together in a sand mixer and placed in core molds to produce the desired shape. If required, the oil cores are then baked in a core oven in order to harden and strengthen the cores. The oil sand core oven is fired with natural gas and has a maximum heat input capacity of 1.6 million Btu per hour.

Emissions are collected by building ventilation hoods located in the core making area and exhaust through uncontrolled stacks V4, V5, and V38.

(g) One (1) airset mechanical sand reclamation unit, identified as emission unit EU-10, approved for construction in 2008, with a maximum capacity of twelve (12) tons per hour, using a cartridge filter identified as CE-D as control, and exhausting to a stack identified as stack/vent D.

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

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

(a) Old Conference Room Boiler, with a heat input capacity of 0.106 MMBtu/hr. [326 IAC 6.5-1-2(b)(3)]

(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 6.5-1]

(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.

(1) Woodworking operation consisting of one (1) bandsaw and one (1) oscillating vertical sand. The emissions from this operation are controlled by a dust collector with a design flow rate of 55 cubic feet per minute. [326 IAC 6.5-1]

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

(e) Space heaters, process heaters, or boilers using the following fuels.

(1) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.

(A) Core Oven, with a heat input capacity of 1.6 MMBtu/hr.
(B) Maintenance West Space Heater, with a heat input capacity of 0.225 MMBtu/hr.
(C) Maintenance East Space Heater, with a heat input capacity of 0.225 MMBtu/hr.
(D) Chipping Booth Space Heater, with a heat input capacity of 0.2 MMBtu/hr.

(E) Old Dock Space Heater, with a heat input capacity of 0.4 MMBtu/hr.
(F) Maintenance Shower Room Furnace, with a heat input capacity of 0.125 MMBtu/hr.
(G) Airset Oven, with a heat input capacity of 0.115 MMBtu/hr.
(H) Airset Torpedo, with a heat input capacity of 0.4 MMBtu/hr.
(I) Airset Torpedo, with a heat input capacity of 0.4 MMBtu/hr.
(J) Bull Ladle Torch -2", with a heat input capacity of 0.279 MMBtu/hr.
(K) Control Room Furnace, with a heat input capacity of 0.125 MMBtu/hr.
(L) Core Dip Drying Table Infra-red, with a heat input capacity of 0.048 MMBtu/hr.
(M) Ladle Torch 2" Floor Molding, with a heat input capacity of 0.279 MMBtu/hr.
(N) Ladle Torch 2" Floor Molding, with a heat input capacity of 0.279 MMBtu/hr.
(O) Ladle Torch 2" Floor Molding, with a heat input capacity of 0.279 MMBtu/hr.
(P) Bull Ladle Torch -2", with a heat input capacity of 0.279 MMBtu/hr.
(Q) Heavy Chip Torpedo, with a heat input capacity of 0.4 MMBtu/hr.
(R) Shipping Office North Infra-red, with a heat input capacity of 0.014 MMBtu/hr.
(S) Shipping Office South Infra-red, with a heat input capacity of 0.014 MMBtu/hr.
(T) Core Assembly Table Heater, with a heat input capacity of 0.014 MMBtu/hr.
(U) Muller Trash Chute Torch, with a heat input capacity of 0.005 MMBtu/hr.
(V) Muller Gearbox Infra-red, with a heat input capacity of 0.024 MMBtu/hr.
(W) Muller Manifold Infra-red, with a heat input capacity of 0.024 MMBtu/hr.
(X) Compressor Water Manifold Infra-red, with a heat input capacity of 0.024 MMBtu/hr.
(Y) Air-set room space heater, with a heat input capacity of 0.15 MMBtu/hr.
(Z) Air-set room Infra-red, with a heat input capacity of 0.024 MMBtu/hr.
(AA) Air-set room Infra-red, with a heat input capacity of 0.024 MMBtu/hr.
(BB) Air-set conveyor Infra-red, with a heat input capacity of 0.024 MMBtu/hr.
(CC) Air-set conveyor Infra-red, with a heat input capacity of 0.024 MMBtu/hr.
(DD) Air-set conveyor Infra-red, with a heat input capacity of 0.024 MMBtu/hr.
(EE) Core Room Core Prep Infra-red, with a heat input capacity of 0.024 MMBtu/hr.
(FF) Bench Core Table Infra-red, with a heat input capacity of 0.024 MMBtu/hr.
(GG) Bench Core Table Infra-red, with a heat input capacity of 0.024 MMBtu/hr.
(HH) Core Assembly Table Infra-red, with a heat input capacity of 0.024 MMBtu/hr.
(II) Air-set Core & Mold assembly Table Infrared, with a heat input capacity of 0.024 MMBtu/hr.
(JJ) Air-set Core & Mold assembly Table Infrared, with a heat input capacity of 0.024 MMBtu/hr.
(KK) Air-set Mold Assembly Infrared, with a heat input capacity of 0.024 MMBtu/hr.
(LL) Air-set Mold Assembly Infrared, with a heat input capacity of 0.024 MMBtu/hr.
(MM) Sinto Infro-red (basement), with a heat input capacity of 0.024 MMBtu/hr.
(NN) Sinto Infro-red (basement), with a heat input capacity of 0.024 MMBtu/hr.
(OO) #9 Molding Machine Infra-red (overhead), with a heat input capacity of 0.024 MMBtu/hr.
(PP) #9 Molding Machine Infra-red (basement), with a heat input capacity of 0.024 MMBtu/hr.
(QQ) Molding Line Setup Table Infra-red (basement), with a heat input capacity of 0.024 MMBtu/hr.

(RR) #8 Molding Machine Infra-red (basement), with a heat input capacity of 0.024 MMBtu/hr.
(SS) #8 Molding Machine Infra-red (overhead), with a heat input capacity of 0.024 MMBtu/hr.
(TT) #7 Molding Machine Infra-red (basement), with a heat input capacity of 0.024 MMBtu/hr.
(UU) #7 Molding Machine Infra-red (overhead), with a heat input capacity of 0.024 MMBtu/hr.
(VV) #6 Molding Machine Infra-red (basement), with a heat input capacity of 0.024 MMBtu/hr.
(WW) #6 Molding Machine Infra-red (overhead), with a heat input capacity of 0.024 MMBtu/hr.
(XX) #5 Molding Machine Infra-red (basement), with a heat input capacity of 0.024 MMBtu/hr.
(YY) #5 Molding Machine Infra-red (overhead), with a heat input capacity of 0.024 MMBtu/hr.
(ZZ) #4 Molding Machine Infra-red (basement), with a heat input capacity of 0.024 MMBtu/hr.
(AAA) #4 Molding Machine Infra-red (overhead), with a heat input capacity of 0.024 MMBtu/hr.
(BBB) #3 Molding Machine Infra-red (basement), with a heat input capacity of 0.024 MMBtu/hr.
(CCC) #3 Molding Machine Infra-red (overhead), with a heat input capacity of 0.024 MMBtu/hr.
(DDD) #1 Molding Machine Infra-red (basement), with a heat input capacity of 0.024 MMBtu/hr.
(EEE) #1 Molding Machine Infra-red (overhead), with a heat input capacity of 0.024 MMBtu/hr.
(FFF) Ladle Prep Area Sink Infra-red, with a heat input capacity of 0.024 MMBtu/hr.
(GGG) #2 Stand Grinder Infra-red, with a heat input capacity of 0.024 MMBtu/hr.
(HHH) #1 Stand Grinder Infra-red, with a heat input capacity of 0.024 MMBtu/hr.
(III) Brinell Tester Infrared, with a heat input capacity of 0.024 MMBtu/hr.
(JJJ) Single Pedestal Dual Wheel Grinder Infra-red, with a heat input capacity of 0.024 MMBtu/hr.
(KKK) Floor Molding Rollaround Triple Unit Infra-red, with a heat input capacity of 0.024 MMBtu/hr.
(LLL) Floor Molding North Station Infra-red, with a heat input capacity of 0.024 MMBtu/hr.
(MMM) Floor Molding South Station Infra-red, with a heat input capacity of 0.024 MMBtu/hr.
(NNN) Floor Molding Water Barell Infra-red, with a heat input capacity of 0.024 MMBtu/hr.
(OOO) Floor Molding Simpson Muller Infra-red, with a heat input capacity of 0.024 MMBtu/hr.

(2) Propane or liquified petroleum gas or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour.

(A) Payloader, 61 HP

(B) Hand Torch unit for mold drying, 0.3 MMBtu/hr

(3) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.

(A) Dayton Salamader, 0.6 MMBtu/hr

(B) Dayton Salamader, 0.055 MMBtu/hr

(f) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hour.

(g) Combustion source flame safety purging on startup.

(h) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.

(i) The following VOC and HAP storage containers:

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

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

(j) Closed loop heating and cooling systems.

(k) Infared cure equipment.

(l) Noncontact cooling tower systems with forced and induced draft cooling tower system not regulated under a NESHAP.

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

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

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

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

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

SECTION B GENERAL CONDITIONS

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

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

B.2 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5] [IC 13-15-3-6(a)]

(a) This permit, F097-18317-00063, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

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

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

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

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

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

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

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

B.5 Severability [326 IAC 2-8-4(4)]

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

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

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

B.7 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

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

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

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

B.9 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

(a) A certification required by this permit meets the requirements of 326 IAC 2-8-5(a)(1) if:

(i) it contains a certification by an "authorized individual", as defined by 326 IAC 2-1.1-1(1), and

(ii) the certification is based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

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

B.10 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All 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 April 15 of each year to:

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

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

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

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

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and

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

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

(a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

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

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

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

(b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

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

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

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

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

Indiana Department of Environmental Management
Compliance and Enforcement 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 a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2- 1.1- 1(1).

The Permittee shall implement the PMPs.

(c) 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. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by "authorized individual" as defined by 326 IAC 2- 1.1- 1(1).

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

B.12 Emergency Provisions [326 IAC 2-8-12]

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

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

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

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

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

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

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or,
Telephone No.: 317-233-0178 (ask for Compliance Section)
Facsimile No.: 317-233-6865

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

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

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

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

(A) A description of the emergency;

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

(C) Corrective actions taken.

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

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

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

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

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

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

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

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

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

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

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

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

(a) All terms and conditions of permits established prior to F097-18317-00063 and issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

(2) revised,

(3) deleted.

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

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

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

B.15 Reserved

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

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

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

(1) That this permit contains a material mistake.

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

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

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

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

Request for renewal shall be submitted to:

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

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

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

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

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source’s failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing, pursuant to 326 IAC 2-8-3(g), by IDEM, OAQ any additional information identified as being needed to process the application.

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

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

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

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

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

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

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

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

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

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

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

(4) The Permittee notifies the:

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

and

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

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

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emissions trades that are subject to 326 IAC 2-8-15(b)(1) and (c). The Permittee shall make such records available, upon reasonable request, for public review.

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

(b) Emission Trades [326 IAC 2-8-15(b)]
The Permittee may trade emission increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(b).

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

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

B.20 Source Modification Requirement [326 IAC 2-8-11.1]

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

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

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

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

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

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

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

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

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

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

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

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

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

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

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ, no later than thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action, or revocation of this permit.

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

B.24 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314][326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

(a) Pursuant to 326 IAC 2-8:

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

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

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

(b) The potential to emit particulate matter from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period.

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

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

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (Applicability) and 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 thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

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

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

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

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

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).

C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted. The plan is included as Attachment A.

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

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

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

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

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

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

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

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

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

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

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

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

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

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

(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

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

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such monitoring. If due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance or the date of initial startup, whichever is later, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirement of 326 IAC 2-8-5(a)(1) by an “authorization individual” as defined by 326 IAC 2-1.1-1(1).

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

C.12 Reserved

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

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

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

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

(a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

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

C.15 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

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

C.16 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(a) the Permittee shall take reasonable response steps to 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 excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction The response may include, but are not limited to, the following:

(1) initial inspection and evaluation;

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

(3) any necessary follow-up actions to return operation to normal or usual manner of operation.

(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 record the reasonable responses steps taken.

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

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) 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 a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

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

C.18 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes the following:

(AA) All calibration and maintenance records.
(BB) All original strip chart recordings for continuous monitoring instrumentation.
(CC) Copies of all reports required by the FESOP.

Records of required monitoring information include the following:

(AA) The date, place, as defined in this permit, and time of sampling or measurements.
(BB) The dates analyses were performed.
(CC) The company or entity that performed the analyses.
(DD) The analytical techniques or methods used.
(EE) The results of such analyses.
(FF) The operating conditions as existing at the time of sampling or measurement.

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, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.19 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported, except that 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. This report shall be submitted not later than thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC2-1.1-1(1). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(b) The address for report submittal is:

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

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

(d) Reserved.

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

Stratospheric Ozone Protection

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

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

SECTION D.1 FACILITY OPERATION CONDITIONS

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

(a) Melt Operations, installed in 1972, consisting of the following:

(1) Two (2) electric induction furnaces, collectively identified as EU-01, with emissions collected by a canopy hood located directly over the furnaces and controlled by a settling tank followed by a cyclone which exhausts through one stack identified as stack B. Only one furnace can be operated at any time because there is only one transformer to supply electrical energy;

Under 40 CFR 63, Subpart ZZZZZ (5Z), this unit is considered an affected source/facility.

(2) One (1) charge handling system, identified as EU-02, with a maximum charge capacity of 5 tons of metal per hour. The maximum capacity of the charge handling system is limited by the source's ability to melt metal;

(3) One (1) natural gas preheater, identified as EU-03, with a maximum heat input capacity of 25 million Btu per hour; and

(4) One (1) reaction/holding ladle, identified as EU-04, where inoculation takes place.

Emissions from the charge handling system, preheater, and holding ladle are collected by the general furnace area ventilation system that exhausts through two uncontrolled stacks identified as stacks V11 and V12.

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

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

D.1.1 Particulate Matter (PM) [326 IAC 6.5-1-2(e)(2)]

Pursuant to 326 IAC 6.5-1-2(e)(2), the PM emissions from the melt operations (EU-01, EU-02, EU-03, and EU-04) shall not exceed 0.07 grains per dry standard cubic foot of exhaust gas. For the purposes of demonstrating stack compliance with 326 IAC 6.5-1-2(e)(2) only the filterable fraction of PM shall be counted.

D.1.2 Particulate Matter (PM10) and PM2.5 [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 2-8-4, the PM10 and PM2.5 emissions from the melt operations are limited as follows:

(a) The throughput of metal to the two (2) electric induction furnaces (EU-01), charge handling (EU-02), and the reaction/holding ladle (EU-04) shall each be limited to less than 20,000 tons per twelve consecutive month period with compliance determined at the end of each month.

(b) The combined PM10 emissions from the two (2) electric induction furnaces (EU-01) exhausting through Stack B shall not exceed 0.64 lbs PM10/ton metal. For the purposes of demonstrating compliance with this condition the filterable and condensable fractions of PM10 shall be counted.

(c) The combined PM10 emissions from the charge handling (EU-02) and reaction/holding ladle (EU-04) processes exhausting through stacks V11 and V12 shall not exceed 3.24 lbs PM10/ton metal. For the purposes of demonstrating compliance with this condition the filterable and condensible fractions of PM10 shall be counted.

(d) The combined PM2.5 emissions from the two (2) electric induction furnaces (EU-01) exhausting through Stack B shall not exceed 0.64 lbs PM2.5/ton metal. For the purposes of demonstrating compliance with this condition the filterable and condensable fractions of PM2.5 shall be counted.

(e) The combined PM2.5 emissions from the charge handling (EU-02) and reaction/holding ladle (EU-04) processes exhausting through stacks V11 and V12 shall not exceed 3.24 lbs PM2.5/ton metal. For the purposes of demonstrating compliance with this condition the filterable and condensable fractions of PM2.5 shall be counted.

Combined with the PM10 and PM2.5 emissions from other emission units, the PM10 and PM2.5 emissions from the entire source are limited to less than 100 tons per year. Therefore, compliance with this Condition and Conditions D.2.2, D.3.2, and D.4.1 makes the Part 70 Operating Permit requirements (326 IAC 2-7) and 326 IAC 2-2 (PSD) not applicable.

D.1.3 PSD Minor Source Limit [326 IAC 2-2]

(a) The throughput of metal to the two (2) electric induction furnaces (EU-01), charge handling (EU-02), and the reaction/holding ladle (EU-04) shall each be limited to less than 20,000 tons per twelve consecutive month period with compliance determined at the end of each month.

(b) The PM emissions from the two (2) electric induction furnaces (EU-01) exhausting through Stack B shall be limited to 0.67 lbs PM/ton Metal.

(c) The PM emissions from the charge handling (EU-02) and reaction/holding ladle (EU-04) processes exhausting through stacks V11 and V12 shall be limited to 2.40 lbs PM/ton Metal.

Compliance with this Condition and Condition D.2.3, and in combination with PM emissions from other emission units, renders the requirements of 326 IAC 2-2, Prevention of Significant Deterioration not applicable.

D.1.4 Metallic HAP Minor Limit

(a) Emissions of manganese from the two (2) electric induction furnaces (EU-01) exhausting through Stack B shall not exceed 0.207 ton per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) Emission of any combination of metal HAPs from the two (2) electric induction furnaces (EU-01) exhausting through Stack B shall not exceed 2.40 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(c) Emissions of manganese from the charge handling (EU-02) and reaction/holding ladle (EU-04) processes exhausting through stacks V11 and V12 shall not exceed 0.744 ton per twelve (12) consecutive month period, with compliance determined at the end of each month.

(d) Emission of any combination of metal HAPs from the charge handling (EU-02) and reaction/holding ladle (EU-04) processes exhausting through stacks V11 and V12 shall not exceed 1.01 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

A summary of these limits is included in the following table:

Emission Unit	Pollutant	Emission Limit (tons/yr)
electric induction furnaces (stack B)	Manganese	0.207
	Total Metal HAPs	2.40
charge handling and reaction/holding ladle (stacks V11 and V12)	Manganese	0.744
	Total Metal HAPs	1.01

Compliance with the emission limits in paragraph (a) and (c) above in conjunction with the other Manganese limits included in this permit limit source-wide Manganese emissions to less than 10 tons per year. Compliance with the limits in paragraph (b) and (d) above in conjunction with the other combined HAP limits included in this permit limit source-wide emissions of any combination of HAPs to less than 25 tons per year.

D.1.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for the two (2) electric induction furnaces and the associated Settling Tank and Cyclone. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.6 Particulate Matter (PM)

In order to demonstrate compliance with Conditions D.1.1, D.1.2(b), D.1.3(b), and the HAP emission limits in Conditions D.1.4(a) and (b), the Settling Tank and Cyclone used for PM, PM10 and HAP control shall be in operation and control emissions from the two (2) electronic induction furnaces at all times that these induction furnaces are in operation.

D.1.7 Testing Requirements [326 IAC 2-8-4(3)]

(a) In order to demonstrate compliance with Conditions D.1.2 and D.1.3, the Permittee shall perform PM/PM10/PM2.5 testing on one (1) of the two (2) identical electric induction furnaces utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. PM10/PM2.5 shall include filterable and condensable PM10/PM2.5. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

(b) In order to demonstrate compliance with Condition D.1.4, the Permittee shall perform manganese testing on one (1) of the two (2) identical electric induction furnaces utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.1.8 Metallic HAP Emissions Compliance Determinations

Compliance with the HAP limits in Condition D.1.4 shall be demonstrated using the following equations:

(a) Manganese Emissions from the two (2) electric induction furnaces (tons/yr) = EF_{FMn} (lb/ton) x M_F (tons per twelve (12) consecutive month period) x (1 ton / 2000 pounds)

Where:
EF_{FMn} = 0.0207 pound manganese per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)
M_F = total metal throughput to the two (2) electric induction furnaces (tons per twelve (12) consecutive month period)

(b) Manganese Emissions from the charge handling (EU-02) and reaction/holding ladle (EU-04) processes (tons/yr) = EF_{CHMn} (lb/ton) x M_{CH} (tons per twelve (12) consecutive month period) x (1 ton / 2000 pounds)

Where:
EF_{CHMn} = 0.0744 pound manganese per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

M_{CH} = total metal throughput to the charge handling (EU-02) and reaction/holding ladle (EU-04) processes (tons per twelve (12) consecutive month period)

(c) Total Metal HAP Emissions from the two (2) electric induction furnaces (tons/yr) = EF_{FTM} (lb/ton) x M_F (tons per twelve (12) consecutive month period) x (1 ton / 2000 pounds)

Where:
EF_{FTM} = 0.24 pound combined metal HAP per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)
M_F = total metal throughput to two (2) electric induction furnaces (tons per twelve (12) consecutive month period)

(d) Total Metal HAP Emissions from the charge handling (EU-02) and reaction/holding ladle (EU-04) processes (tons/yr) = EF_{CHTM} (lb/ton) x M_{CH} (tons per twelve (12) consecutive month period) x (1 ton / 2000 pounds)

Where:
EF_{CHTM} = 0.101 pound combined metal HAP per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)
M_{CH} = total metal throughput to the charge handling (EU-02) and reaction/holding ladle (EU-04) processes (tons per twelve (12) consecutive month period)

(e) Upon IDEM approval of manganese compliance stack test results on one (1) of the two (2) electric induction furnaces, the following shall apply:

(1) The manganese emission factors in pound per ton obtained from the IDEM approved stack test results shall be used for the variable identified above as EF_{FMn}.

(2) The total metal HAP emission factor in pound per ton that shall be used for the variable EF_{FTM} shall be the sum of the manganese emission factor obtained from the stack test and the remaining non-manganese metal HAP emission factors used to calculate emissions.

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

D.1.9 Visible Emissions Notations

(a) Visible emission notations of stacks B, V11 and V12 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, Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reporting required by this condition. Failure to take response steps shall be considered a deviation from this permit.

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

D.1.10 Record Keeping Requirements

(a) To document the compliance status with Conditions D.1.2, D.1.3, and D.1.4, the Permittee shall maintain monthly records of the tons of metal to the two (2) electric induction furnaces (EU-01), charge handling (EU-02), and the reaction/holding ladle (EU-04).

(b) To document the compliance status with condition D.1.4, the Permittee shall maintain records of the following:

(1) HAP stack test results for one (1) of the two (2) electric induction furnaces;

(2) HAP emission calculations performed using the equations in condition D.1.8; and

(3) HAP emissions in tons per year.

(c) To document the compliance status with Condition D.1.9, the Permittee shall maintain daily records of visible emission notations for stack B, V11, and V12 exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (i.e. the process did not operate that day).

(d) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.1.11 Reporting Requirements

A quarterly summary of the information to document compliance status with Conditions D.1.2, D.1.3, and D.1.4 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee’s obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meet the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual” as defined by 326 IAC 2-1.1-1(1).

SECTION D.2 FACILITY OPERATION CONDITIONS

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

(b) Pouring and Cooling Operations, collectively identified as EU-05, where the molten metal from the melting operation are poured from ladles into molds and allowed to cool. These facilities were installed in the 1930s and have a maximum throughput of 5 tons of metal per hour. Emissions are collected by hoods located on the ceiling above the pouring deck and exhaust through uncontrolled stacks V17, V18, V25, V26, V27, and V28.

(c) Shakeout Operations, collectively identified as EU-06A, where the molding sand is separated from the casting by mechanical shaking. These units were installed in 1972 and have a maximum throughput of 5 tons of metal per hour. Emissions are collected by hoods located over the shakeout area and controlled by a dust collector, identified as CE-A, approved for modification in 2012; exhausting through stack A.

(d) Casting Cleaning Operations, collectively identified as EU-06B, with a maximum throughput of 5 tons of metal per hour, consisting of the following:

(1) One (1) table blast installed in 1981;

(2) One (1) shot blast machine installed in June 1960;

(3) Five (5) grinders installed in 1960; and

(4) One (1) cutoff saw installed in 1981.

Emissions are collected by various hoods located throughout the casting cleaning operation and are controlled by a dust collector, identified as CE-A, approved for modification in 2012, which exhausts through stack A.

(e) Sand Handling Operations, collectively identified as EU-06C, installed prior to 1967 and modified in 1998 and in 2002, with a maximum capacity of 20.63 tons of sand per hour, consisting of the following:

(1) One (1) sand muller;

(2) Thirteen (13) hopper stations;

(3) One (1) sand elevator;

(4) One (1) sand tank;

(5) One (1) sand cooler;

(6) Seven (7) belts;

(7) One (1) molding line consisting of a B & P 16 X 20 mold machine, approved for construction in 2012, with a maximum production capacity of 80 molds per hour, each mold weighing 140 pounds;

(8) One (1) molding line consisting of a Sinto FB03 20 X 24 mold machine, constructed in 1998, with a maximum production capacity of 80 molds per hour, each mold weighing 240 pounds; and

(9) Five (5) manual mold machines, consisting of one (1) squeezer mold machine, two (2) PinLift mold machines, and two (2) RotoLift mold machines, constructed prior to 1967 and modified in 1998 and 2002.

Emissions are collected by various hoods located throughout the sand handling process line and are controlled by a dust collector, identified as CE-A, approved for modification in 2012, which exhausts through stack A.

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

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

D.2.1 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a), PM emissions from casting pouring and cooling operations, collectively identified as EU-05, and the sand handling, casting cleaning, and shakeout operations (EU-06A, EU-06B, and EU-06C) shall each not exceed 0.03 grains per dry standard cubic foot of exhaust gas. For the purposes of demonstrating compliance with 326 IAC 6.5-1-2(e)(2) only the filterable fraction of PM shall be counted.

D.2.2 Particulate Matter (PM10), PM2.5 and Carbon Monoxide (CO) [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 2-8-4 (FESOP), and in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following emission limits:

(a) The throughput of metal to the pouring and cooling operations (EU-05) and the shakeout and shot blast operations (EU-06A and EU-06B) shall each be limited to less than 20,000 tons per twelve consecutive month period with compliance determined at the end of each month.

(b) The PM10 emissions from the pouring and cooling operations (EU-05) exhausting through stacks V17, V18, V25, V26, V27, and V28 shall not exceed 3.09 lbs PM10/ton Metal. For the purposes of demonstrating compliance with this condition the filterable and condensable fractions of PM10 shall be counted.

(c) The combined CO emissions from the pouring and cooling operations (EU-05) exhausting through stacks V17, V18, V25, V26, V27, and V28 and the shakeout operations (EU-06A) exhausting through stack A shall not exceed 6.0 lbs CO/ton Metal.

(d) The combined PM10 emissions from the shakeout, casting cleaning, and sand handling operations (EU-06A, EU-06B, and EU-06C) exhausting through stack A shall not exceed 0.598 lbs/hr. For the purposes of demonstrating compliance with this condition the filterable and condensable fractions of PM10 shall be counted.

(e) The combined PM2.5 emissions from the shakeout, casting cleaning, and sand handling operations (EU-06A, EU-06B, and EU-06C) exhausting through stack A shall not exceed 0.598 lbs/hr. For the purposes of demonstrating compliance with this condition the filterable and condensable fractions of PM2.5 shall be counted.

Combined within the PM10, PM2.5 and CO emissions from other emission units, the PM10, PM2.5 and CO emissions from the entire source are limited to less than 100 tons per year. Therefore, compliance with this Condition and Conditions D.1.2, D.3.2, and D.4.1 makes the Part 70 Operating Permit requirements (326 IAC 2-7) and 326 IAC 2-2 (PSD), not applicable.

D.2.3 PSD Minor Source Limit [326 IAC 2-2]

(a) The PM emissions from the pouring and cooling operations (EU-05) shall be limited to 4.20 lbs PM/ton Metal.

(b) The PM emissions from the shakeout, casting cleaning, and sand handling operations (EU-06A, EU-06B, and EU-06C) shall be limited to 1.54 lbs/hr.

Compliance with this Condition and Condition D.1.3 renders the requirements of 326 IAC 2-2, Prevention of Significant Deterioration not applicable.

D.2.4 Metallic HAP Minor Limit

(a) Total emissions of manganese from the pouring and cooling operations (EU-05) shall not exceed 1.30 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(b) Total emissions of any combination of metal HAPs from the pouring and cooling operations (EU-05) shall not exceed 1.77 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(c) Total emissions of manganese from the shakeout and shot blast operations (EU-06A and EU-06B) shall not exceed 0.0626 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(d) Total emissions of any combination of metal HAPs from the shakeout and shot blast operations (EU-06A and EU-06B) shall not exceed 2.39 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

A summary of these limits is included in the following table:

Emission Unit	Pollutant	Emission Limit (tons/yr)
pouring and cooling operations	Manganese	1.30
	Total Metal HAPs	1.77
shakeout and shot blast operations	Manganese	0.0626
	Total Metal HAPs	2.39

Compliance with the emission limit in paragraphs (a) and (c) above in conjunction with the other manganese limits included in this permit, limit source-wide manganese emissions to less than 10 tons per year. Compliance with the limit in paragraphs (b) and (d) above in conjunction with the other combined HAP limits included in this permit limit source-wide emissions of any combination of HAPs to less than 25 tons per year.

D.2.5 Organic HAP Minor Limit

Emissions of any combination of organic HAPs from the pouring and cooling operations (EU-05) and the shakeout operations (EU-06A) combined shall not exceed 1.21 pounds of combined organic HAP per ton of metal melted and 12.1 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. Compliance with the limit in conjunction with the other combined HAP limits included in this permit limit source-wide emissions of any combination of HAPs to less than 25 tons per year.

D.2.6 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for the shakeout, casting cleaning, and sand handling operations, including the baghouse identified as CE-A. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.2.7 Particulate Matter (PM)

(a) In order to demonstrate compliance with Conditions D.2.1, D.2.2, D.2.3, and D.2.4 the Baghouse identified as CE-A, shall be in operation and control emissions from the sand handling, casting cleaning, and shakeout operations at all times that these units are in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse or cyclone failure is observed, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring

parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.2.8 Testing Requirements [326 IAC 2-8-4(3)]

In order to demonstrate compliance with Conditions D.2.1, D.2.2, D.2.3, and D.2.4 the Permittee shall perform PM, PM10, PM2.5 and Manganese testing on the shakeout, casting cleaning, and sand handling operations (EU-06A, EU-06B, and EU-06C) using methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. PM10/PM2.5 shall include filterable and condensable PM10/PM2.5. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.2.9 HAP Emissions Compliance Demonstrations

(a) Compliance with the metal HAP limits in Condition D.2.4 shall be demonstrated using the following equations:

(1) Manganese Emissions from the pouring and cooling operations (tons/yr) = (EF_{PCMn} x M_{PC}) x (1 ton / 2000 pounds)

Where:
EF_{PCMn} = 0.1302 pound manganese per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)
M_{PC} = total metal throughput to the pouring and cooling operations (tons per twelve (12) consecutive month period)

(2) Total Metal HAP Emissions from the pouring and cooling operations (tons/yr) = (EF_{PCTM} x M_{PC}) x (1 ton / 2000 pounds)

Where:
EF_{PCTM} = 0.177 pound combined metal HAP per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)
M_{PC} = total metal throughput to the pouring and cooling operations (tons per twelve (12) consecutive month period)

(3) Manganese Emissions from the shakeout and shot blast operations (tons/yr) = (EF_{SMn} x M_S) x (1 ton / 2000 pounds)

Where:
EF_{SMn} = 0.00626 pound manganese per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)
M_S = total metal throughput to the shakeout and shot blast operations (tons per twelve (12) consecutive month period)

(4) Total Metal HAP Emissions from the shakeout and shot blast operations (tons/yr) = (EF_{STM} x M_S) x (1 ton / 2000 pounds)

Where:
EF_{STM} = 0.239 pound combined metal HAP per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)
M_S = total metal throughput to the shakeout and shot blast operations (tons per twelve (12) consecutive month period)

(5) Upon IDEM approval of total metallic HAP compliance stack test results on pouring and cooling operations, the manganese and total metallic HAP emission

factors in pound per ton obtained from the IDEM approved stack test results shall be used for the variables identified above as EF_{PCMn} and EF_{PCTM}.

(b) Compliance with the organic HAP limit in Condition D.2.5 shall be demonstrated using the following equation:

Total Organic HAP Emissions from the pouring and cooling operations and the shakeout operations (tons/yr) = 1.21 pounds of organic HAP per ton of metal melted x tons of metal melted x (1 ton / 2000 pounds)

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

D.2.10 Visible Emissions Notations

(a) Visible emission notations of stacks V17, V18, V25, V26, V27, V28, and stack A 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, Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reporting required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.2.11 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouse, identified as CE-A, used in conjunction with the shakeout, casting cleaning, and sand handling processes, at least once per day when the process is in operation. When, for any one reading, the pressure drop across the baghouse is outside of the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.5 and 7.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps 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 OES, and shall be calibrated or replaced at least once every six (6) months.

D.2.12 Broken or Failed Bag Detection

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

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the

processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

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

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

D.2.13 Record Keeping Requirements

(a) To document the compliance status with Conditions D.2.2, D.2.3, and D.2.4, the Permittee shall maintain monthly records of the tons of metal to the pouring and cooling operations (EU-05) and the shakeout and shot blast operations (EU-06A and EU-06B).

(b) To document the compliance status with Condition D.2.4, the Permittee shall maintain records of the following:

(1) Metallic HAP stack test results for the pouring and cooling operations (EU-05) and the shakeout and shot blast operations (EU-06A and EU-06B) as applicable;
(2) Metallic HAP emission calculations performed using the equations in Condition D.2.9(a); and
(3) Metallic HAP emissions in tons per year.

(c) To document the compliance status with Condition D.2.5, the Permittee shall maintain records of the following:

(1) Organic HAP stack test results for the pouring and cooling operations (EU-05) and the shakeout operations (EU-06A) as applicable;
(2) Organic HAP emission calculations performed using the equation in Condition D.2.9(b); and
(3) Organic HAP emissions in tons per year.

(d) To document the compliance status with Condition D.2.10, the Permittee shall maintain daily records of visible emission notations of stacks V17, V18, V25, V26, V27, V28, and stack A exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (i.e. the process did not operate that day).

(e) To document the compliance status with Condition D.2.11, the Permittee shall maintain daily records of the pressure drop across the baghouse. 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, (i.e. the process did not operate that day).

(f) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.2.14 Reporting Requirements

A quarterly summary of the information to document the compliance status with Conditions D.2.2, D.2.3, D.2.4, and D.2.5 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meet the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.3 FACILITY OPERATION CONDITIONS

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

(f) Core Making Operations consisting of the following three (3) core making processes:

(1) Two (2) Redford shell core machines identified as EU-09A and EU-09B, each with a maximum capacity 35.75 pounds of shell sand per hour and constructed in February 2002;

(2) One (1) air set core making process, identified as EU-07, constructed in 1982, with a maximum operating capacity of 0.5 tons of cores per hour. In the air set core making process, sand, catalyst, and resin are blended together in a sand mixer. Following blending, the blended sand is placed in the core boxes. Cores are then formed into the desired shape in the core machine. If required, the cores are placed in the core oven in order to harden the cores. The air set core oven is fired with natural gas and has a maximum heat input capacity of 0.115 million Btu per hour; and

(3) One (1) oil sand core making process, identified as EU-08, constructed in 1958, with a maximum operating capacity of 0.05 tons of cores per hour. In the oil core making process, sand and core oil are blended together in a sand mixer and placed in core molds to produce the desired shape. If required, the oil cores are then baked in a core oven in order to harden and strengthen the cores. The oil sand core oven is fired with natural gas and has a maximum heat input capacity of 1.6 million Btu per hour.

Emissions are collected by building ventilation hoods located in the core making area and exhaust through uncontrolled stacks V4, V5, and V38.

(g) One (1) airset mechanical sand reclamation unit, identified as emission unit EU-10, approved for construction in 2008, with a maximum capacity of twelve (12) tons per hour, using a cartridge filter identified as CE-D as control, and exhausting to a stack identified as stack/vent D.

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

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

D.3.1 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a), the PM emissions from the core making operations and the airset mechanical sand reclamation unit (EU-07, EU-08, EU-9A, EU-9B and EU-10) shall each not exceed 0.03 grains per dry standard cubic foot of exhaust gas. For the purposes of demonstrating compliance with 326 IAC 6.5-1-2(a) only the filterable fraction of PM shall be counted.

D.3.2 FESOP Limit [326 IAC 2-8-4] [326 IAC 2-2] [326 IAC 2-1.1-5]

Pursuant to 326 IAC 2-8-4 (FESOP), the Permittee shall comply with the following for EU-10 and the sand usage and emission limits for the core making operations:

(a) The amount of sand at the air set core making process (EU-07) shall be limited to less than 4,500 tons per twelve consecutive month period with compliance determined at the end of each month.

(b) The amount of sand at the oil sand core making process (EU-08) shall be limited to less than 730 tons per twelve consecutive month period with compliance determined at the end of each month.

(c) The amount of shell sand at the Redford shell core making processes (EU-09A and EU-09B) shall be limited to less than 120 tons per twelve consecutive month period with compliance determined at the end of each month.

(d) The PM10 emissions from the air set core making process, oil sand core making process, and the Redford shell core making processes (EU-07, EU-08, EU-09A, and EU-09B) shall each not exceed 0.81 lbs PM10/ton sand.

(e) The PM2.5 emissions from the air set core making process, oil sand core making process, and the Redford shell core making processes (EU-07, EU-08, EU-09A, and EU-09B) shall each not exceed 0.81 lbs PM2.5/ton sand.

(f) The potential to emit PM10 and PM2.5 from the one (1) airset mechanical sand reclamation unit, identified as emission unit EU-10, shall not exceed 0.86 pounds per hour.

Combined with the PM10 emissions and PM2.5 emissions from other emission units, the PM10 emissions and PM2.5 emissions from the entire source are each limited to less than 100 tons per year. Therefore, compliance with this Condition and Conditions D.1.2, D.2.2, and D.4.1 makes the Part 70 Operating Permit requirements (326 IAC 2-7) Prevention of Significant Deterioration (PSD) (326 IAC 2-2), and Nonattainment NSR (326 IAC 2-1.1-5) not applicable.

D.3.3 PSD Minor Source Limit [326 IAC 2-2]

(a) The amount of sand used in the air set core making process (EU-07) shall be limited to less than 4,500 tons per twelve consecutive month period with compliance determined at the end of each month.

(b) The amount of sand used in the oil sand core making process (EU-08) shall be limited to less than 730 tons per twelve consecutive month period with compliance determined at the end of each month.

(c) The amount of shell sand used in the Redford shell core making processes (EU-09A and EU-09B) shall be limited to less than 120 tons per twelve consecutive month period with compliance determined at the end of each month.

(d) The PM emissions from the air set, core oil, and Redford shell core making operations (EU-07, EU-08, EU-09A, and EU-09B) shall be limited to 3.6 lbs PM/ton sand.

(e) The potential to emit PM from the one (1) airset mechanical sand reclamation unit, identified as emission unit EU-10, shall not exceed 0.01 grains per dry standard cubic foot of exhaust air and shall not exceed 0.86 pounds per hour.

Compliance with these limitations renders the requirements of 326 IAC 2-2, Prevention of Significant Deterioration not applicable.

D.3.4 Organic HAP Minor Limit

(a) Emissions of any combination of organic HAPs from the air set core making process (EU-07) shall not exceed 0.133 pounds per ton of sand.

(b) Emissions of any combination of organic HAPs from the Redford shell core making processes (EU-09A and EU-09B) shall not exceed 0.191 pounds per ton of sand.

(c) The oil sand core making process (EU-08) shall not emit any combination of organic HAPs.

Compliance with these limits and the throughput limits in D.3.3(a) and (c), in conjunction with the other combined HAP limits included in this permit limit source-wide emissions of any combination of HAPs to less than 25 tons per year.

Compliance Determination Requirements

D.3.5 Particulate Matter (PM)

(a) In order to demonstrate compliance with Conditions D.3.2 and D.3.3, the cartridge filter identified as CE-D, shall be in operation and control emissions from the airset mechanical sand reclamation unit, identified as emission unit EU-10 at all times that EU-10 is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse or cyclone failure is observed, 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 2-8-4] [326 IAC 2-8-5(a)(1)]

D.3.6 Visible Emissions Notations

(a) Visible emission notations of stacks V4, V5, V38 and D 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.3.7 Parametric Monitoring

The Permittee shall record the pressure drop across the cartridge filter, identified as CE-D, used in conjunction with the one (1) airset mechanical sand reclamation unit, identified as emission unit EU-10, at least once per day when the process is in operation. When for any one reading, the pressure drop across the cartridge filter is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps 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.3.8 Broken or Failed Bag Detection

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the

event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

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

D.3.9 Record Keeping Requirements

(a) To document the compliance status with Conditions D.3.2, D.3.3, and D.3.4, the Permittee shall maintain monthly records of the tons of sand used in each core making process.

(b) To document the compliance status with Condition D.3.6, the Permittee shall maintain daily records of visible emission notations of stacks V4, V5, V38 and D exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (i.e. the process did not operate that day).

(c) To document the compliance status with Condition D.3.7, the Permittee shall maintain daily records of the pressure drop across the baghouse. 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, (i.e. the process did not operate that day).

(d) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.3.10 Reporting Requirements

A quarterly summary of the information to document the compliance status with Conditions D.3.2, D.3.3, and D.3.4 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meet the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.4 FACILITY OPERATION CONDITIONS

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

(a) Old Conference Room Boiler, with a heat input capacity of 0.106 MMBtu/hr. [326 IAC 6.5-1-2(b)(3)]

(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 6.5-1]

(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.

(1) Woodworking operation consisting of one (1) bandsaw and one (1) oscillating vertical sand. The emissions from this operation are controlled by a dust collector with a design flow rate of 55 cubic feet per minute. [326 IAC 6.5-1]

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

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

D.4.1 FESOP PM10 and PM2.5 Limit [326 IAC 2-8-4] [326 IAC 2-2] [326 IAC 2-1.1-5]

(a) Pursuant to 326 IAC 2-8-4 (FESOP), the PM10 emissions from the woodworking operation shall not exceed 0.14 pounds per hour. Combined with the PM10 emissions from other emission units, the PM10 emissions from the entire source are limited to less than 100 tons per year.

(b) Pursuant to 326 IAC 2-8-4 (FESOP), the PM2.5 emissions from the woodworking operation shall not exceed 0.14 pounds per hour. Combined with the PM2.5 emissions from other emission units, the PM2.5 emissions from the entire source are limited to less than 100 tons per year.

Therefore, compliance with this Condition and Conditions D.1.2, D.2.2, D.3.2, and D.4.2 makes the Part 70 Operating Permit requirements (326 IAC 2-7), 326 IAC 2-2 (PSD), 326 IAC 2-1.1-5 (Nonattainment NSR), and 326 IAC 2-4.1 (MACT) not applicable.

D.4.2 Particulate Matter (PM) [326 IAC 6.5-1]

(a) Pursuant to 326 IAC 6.5-1-2(a), the PM emissions from the woodworking, and welding and brazing operations shall not exceed 0.03 grains per dry standard cubic foot of exhaust gas. For the purposes of demonstrating compliance with 326 IAC 6.5-1-2(a) only the filterable fraction of PM shall be counted.

(b) Pursuant to 326 IAC 6.5-1-2(b)(3), the PM emissions from the old conference room boiler shall not exceed 0.01 grains per dry standard cubic foot of exhaust gas. For purposes of demonstrating compliance with 326 IAC 6.5-1-2(b)(3) only the filterable fraction of PM shall be counted.

Compliance Determination Requirements

D.4.3 Particulate Matter (PM)

In order to demonstrate the compliance status with Conditions D.4.1 and D.4.2(a), the dust collector shall be in operation and control emissions from the woodworking operation at all times that the woodworking equipment are in operation.

SECTION E.1 FACILITY OPERATION CONDITIONS

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

(a) Melt Operations, installed in 1972, consisting of the following:

(1) Two (2) electric induction furnaces, collectively identified as EU-01, with emissions collected by a canopy hood located directly over the furnaces and controlled by a settling tank followed by a cyclone which exhausts through one stack identified as stack B. Only one furnace can be operated at any time because there is only one transformer to supply electrical energy;

Under 40 CFR 63, Subpart ZZZZZ (5Z), this unit is considered an affected source/facility.

(2) One (1) charge handling system, identified as EU-02, with a maximum charge capacity of 5 tons of metal per hour. The maximum capacity of the charge handling system is limited by the source's ability to melt metal;

(3) One (1) natural gas preheater, identified as EU-03, with a maximum heat input capacity of 25 million Btu per hour; and

(4) One (1) reaction/holding ladle, identified as EU-04, where inoculation takes place.

Emissions from the charge handling system, preheater, and holding ladle are collected by the general furnace area ventilation system that exhausts through two uncontrolled stacks identified as stacks V11 and V12.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-8-4(1)]

E.1.1 General Provisions Relating to NESHAP ZZZZZ [326 IAC 20-1-1] [40 CFR 63, Subpart A]

Pursuant to 40 CFR 63.10880, 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, as specified in Table 3 of 40 CFR Part 63, Subpart ZZZZZ in accordance with schedule in 40 CFR 63 Subpart ZZZZZ.

E.1.2 National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources NESHAP [40 CFR 63, Subpart ZZZZZ]

The Permittee, which operates a stationary gray and ductile iron castings manufacturing plant, shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZZ (included as Attachment B of this permit). The Permittee is a small foundry, with a compliance date of January 2, 2009 for the pollution prevention management practices for metallic scrap and January 4, 2010 for the pollution prevention management practices for mercury:

(1) 40 CFR 63.10880 (a), (b,) (e) and (f)
(2) 40 CFR 63.10881(a) and (d)
(3) 40 CFR 63.10885
(4) 40 CFR 63.10886
(5) 40 CFR 63.10890
(6) 40 CFR 63.10905
(7) 40 CFR 63.10906

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave. Indianapolis, Indiana 46218
FESOP No.: F097-18317-00063

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:
Date:

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

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave. Indianapolis, Indiana 46218
FESOP No.: F097-18317-00063

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

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

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

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

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

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

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM10, 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: _____

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

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218
FESOP No.: F097-18317-00063
Facility: Two (2) Induction Furnaces (EU-01), charge handling (EU-02), and the reaction/holding ladle (EU-04) processes
Parameter: Metal throughput
Limit: The throughput of metal to the two (2) electric induction furnaces (EU-01), charge handling (EU-02), and the reaction/holding ladle (EU-04) processes per twelve consecutive month period shall each be limited to less than 20,000 tons with compliance determined at the end of each month.

QUARTER:_____ YEAR:_____

Month	Metal Throughput This Month (tons)			Metal Throughput Previous 11 Months (tons)			12 Month Total Metal Throughput (tons)		
	Electric Induction Furnaces	Charge Handling	Reaction/ Holding Ladle	Electric Induction Furnaces	Charge Handling	Reaction/ Holding Ladle	Electric Induction Furnaces	Charge Handling	Reaction/ Holding Ladle

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

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

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218
FESOP No.: F097-18317-00063
Facility: pouring and cooling operations (EU-05)
Parameter: Metal throughput
Limit: The throughput of metal to the pouring and cooling operations (EU-05) shall be limited to less than 20,000 tons per twelve consecutive month period with compliance determined at the end of each month.

QUARTER:_____ 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: _____

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

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218
FESOP No.: F097-18317-00063
Facility: shakeout and shot blast operations (EU-06A and EU-06B)
Parameter: Metal throughput
Limit: The throughput of metal to the shakeout and shot blast operations (EU-06A and EU-06B) shall be limited to less than 20,000 tons per twelve consecutive month period with compliance determined at the end of each month.

QUARTER:_____ 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: _____

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

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218
FESOP No.: F097-18317-00063
Facility: Two (2) electric induction furnaces (EU-01)
Parameter: Manganese and total HAP emissions
Limit: Emissions of manganese from the two (2) electric induction furnaces (EU-01) exhausting through Stack B shall not exceed 0.207 ton per twelve (12) consecutive month period, with compliance determined at the end of each month.
Emission of any combination of HAPs from the two (2) electric induction furnaces (EU-01) exhausting through Stack B shall not exceed 2.40 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
Compliance with the above limits shall be determined using the equations in Condition D.1.8(a) and (c). Please attach supporting calculations and data used for determining HAP emissions reported.

QUARTER:_____ YEAR: _____

Month	Column 1a	Column 1b	Column 1c	Column 2a	Column 1a + Column 1c	Column 1b + Column 2b
	Manganese Emissions This Month (tons)	Total HAP Emissions This Month (tons)	Manganese Emissions Previous 11 Months (tons)	Total HAP Emissions Previous 11 Months (tons)	12 Month Total Mn Emissions (tons)	12 Month Total HAP Emissions (tons)

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on:

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

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

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218
FESOP No.: F097-18317-00063
Facility: Charge handling (EU-02) and reaction/holding ladle (EU-04) processes
Parameter: Manganese and total HAP emissions
Limit: Emissions of manganese from the charge handling (EU-02) and reaction/holding ladle (EU-04) processes exhausting through stacks V11 and V12 shall not exceed 0.744 ton per twelve (12) consecutive month period, with compliance determined at the end of each month.
Emission of any combination of HAPs from the charge handling (EU-02) and reaction/holding ladle (EU-04) processes exhausting through stacks V11 and V12 shall not exceed 1.01 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
Compliance with the above limits shall be determined using the equations in Condition D.1.8(b) and (d). Please attach supporting calculations and data used for determining HAP emissions reported.

QUARTER:_____ YEAR: _____

Month	Column 1a	Column 1b	Column 1c	Column 2a	Column 1a + Column 1c	Column 1b + Column 2b
	Manganese Emissions This Month (tons)	Total HAP Emissions This Month (tons)	Manganese Emissions Previous 11 Months (tons)	Total HAP Emissions Previous 11 Months (tons)	12 Month Total Mn Emissions (tons)	12 Month Total HAP Emissions (tons)

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on:

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

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

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218
FESOP No.: F097-18317-00063
Facility: Pouring and cooling operations (EU-05)
Parameter: Manganese and total metal HAP emissions
Limit: Total emissions of manganese from the pouring and cooling operations shall not exceed 1.30 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
Total emissions of any combination of metal HAPs from the pouring and cooling operations shall not exceed 1.77 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the above limits shall be determined using the equations in Condition D.2.9(a)(1) and D.2.9(a)(2). Please attach supporting calculations and data used for determining HAP emissions reported.

QUARTER:_____ YEAR: _____

Month	Column 1a	Column 1b	Column 1c	Column 2a	Column 1a + Column 1c	Column 1b + Column 2b
	Manganese Emissions This Month (tons)	Total HAP Emissions This Month (tons)	Manganese Emissions Previous 11 Months (tons)	Total HAP Emissions Previous 11 Months (tons)	12 Month Total Mn Emissions (tons)	12 Month Total HAP Emissions (tons)

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on:

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

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

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218
FESOP No.: F097-18317-00063
Facility: Shakeout and shot blast operations (EU-06A and EU-06B)
Parameter: Manganese and total metal HAP emissions
Limit: Total emissions of manganese from the shakeout and shot blast operations shall not exceed 0.0626 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
Total emissions of any combination of metal HAPs from shakeout and shot blast operations shall not exceed 2.39 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
Compliance with the above limits shall be determined using the equations in Condition D.2.9(a)(3) and D.2.9(a)(4). Please attach supporting calculations and data used for determining HAP emissions reported.

QUARTER:_____ YEAR: _____

Month	Column 1a	Column 1b	Column 1c	Column 2a	Column 1a + Column 1c	Column 1b + Column 2b
	Manganese Emissions This Month (tons)	Total HAP Emissions This Month (tons)	Manganese Emissions Previous 11 Months (tons)	Total HAP Emissions Previous 11 Months (tons)	12 Month Total Mn Emissions (tons)	12 Month Total HAP Emissions (tons)

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on:

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

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

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218
FESOP No.: F097-18317-00063
Facility: Pouring and cooling (EU-05) and the shakeout operations (EU-06A)
Parameter: Total organic HAP emissions
Limit: Emissions of any combination of organic HAPs from the pouring and cooling operations (EU-05) and the shakeout operations (EU-06A) combined shall not exceed 12.1 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. Compliance with the above limits shall be determined using the equation in Condition D.2.8(b).

QUARTER:_____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	Total Organic HAP Emissions This Month (tons)	Total Organic HAP Emissions Previous 11 Months (tons)	12 Month Total Organic HAP Emissions (tons)
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on:

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

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

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218
FESOP No.: F097-18317-00063
Facility: Air Set Core Making Process
Parameter: Sand Used
Limit: 4,500 tons of sand per twelve consecutive month period with compliance determined at the end of each month

QUARTER:_____ YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	Tons of sand used this Month	Tons of sand used previous 11 Months	Tons of sand used 12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

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

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218
FESOP No.: F097-18317-00063
Facility: Oil Sand Core Oil Making Process
Parameter: Sand Used
Limit: 730 tons of sand per twelve consecutive month period with compliance determined at the end of each month

QUARTER: _____ YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	Tons of sand used this Month	Tons of sand used previous 11 Months	Tons of sand used 12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

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

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218
FESOP No.: F097-18317-00063
Facility: Redford Shell Core Machines
Parameter: Shell Sand Used
Limit: 120 tons of shell sand per twelve consecutive month period with compliance determined at the end of each month

QUARTER: _____ YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	Tons of sand used this Month	Tons of sand used previous 11 Months	Tons of sand used 12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

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

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

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave. Indianapolis, Indiana 46218
FESOP No.: F097-18317-00063

Months: _____ to _____ Year: _____

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C-General Reporting. Any deviation from the requirements of this permit, 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:	

Page 2 of 2

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: _____

ATTACHMENT A

FUGITIVE DUST PLAN
INTERSTATE CASTINGS
3823 MASSACHUSETTS AVENUE
INDIANAPOLIS, INDIANA 46218
OPERATION PERMIT NUMBER F097-18317-00063

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FUGITIVE DUST PLAN
INTERSTATE CASTINGS
3823 MASSACHUSETTS AVENUE
INDIANAPOLIS, INDIANA 46218
OPERATION PERMIT NUMBER F097-18317-00063

INTRODUCTION

Interstate Castings has prepared this fugitive dust plan (FDP) in order to satisfy the regulatory requirements codified in Title 326 of the Indiana Administrative Code Article 6 Rule 5 Section 3 (326 IAC 6-5-3). The purpose of this FDP is to ensure that reasonable control measures (RCM) are being utilized at the facility to minimize the quantity of fugitive dust generated at the source. The FDP includes the descriptions of all processes which have the potential to emit fugitive dust, the locations of the potential fugitive emission units, descriptions of the control measures to be implemented, a schedule of compliance and the record keeping requirements of the FDP.

SOURCE DESCRIPTION

Interstate Castings operates an iron casting facility located in Marion County that consists of the following operations: melting, pouring, cooling, shakeout, cleaning, sand handling, and core making. Marion County is classified as nonattainment area for the PM2.5 and 8-hour ozone standards. Marion County is classified as attainment for PM10, SO_2, NO_2, CO and Lead. Interstate Castings currently operates cyclones, dust collectors and settling tanks to control fugitive dust emissions generated at the melt operations, pouring and cooling operations, shakeout, casting cleaning operations, sand handling operations, and core making operations. Fugitive emissions can also occur from the plant driveways (paved and unpaved), parking lots and aggregate storage piles.

REGULATORY OVERVIEW

Pursuant to 326 IAC 6-5, each source which has not received all the necessary preconstruction approvals before December 13, 1985 is responsible for preparation and submission of a FDP to the Indiana Department of Environmental Management (IDEM) Office of Air Quality (OAQ). The FDP consists of the identification of all processes, operations and areas which have the potential to emit fugitive dust; a map of the source showing potential fugitive emission units; the descriptions and quantities of vehicular traffic and materials handled at the source; the measures to be implemented to control fugitive dust; the specifications of the dust suppressant material or dust collection equipment used to control fugitive emissions; a schedule of compliance; and, the record keeping requirements.

FUGITIVE DUST PLAN

Interstate Castings currently operates melt operations, pouring and cooling operations, shakeout, casting cleaning operations, sand handling operations, core making operations and associated settling tanks, cyclones, and dust collectors that have the potential to generate fugitive emissions. Fugitive emissions can also occur from the plant driveways (paved and unpaved), parking lots (paved and unpaved) and aggregate storage piles. Interstate Castings' processes that emit fugitive emissions can be found in the site map provided in Attachment.

FACILITY INFORMATION

Source Owner/ Operator:	Mr. Leo J. Meyer President
Source Address:	Interstate Castings 3823 Massachusetts Avenue Indianapolis, Indiana 46218

Melt Operations

Description of Emission Unit

Interstate Castings operates a process called Melt Operations. The Melt Operations consists of one (1) charge handling system, one (1) preheater, two (2) electric induction furnaces and one (1) holding ladle. The maximum capacity of the charge handling system is limited by the source's ability to melt metal. The preheater has a maximum heat input capacity of 25 million Btu per hour and is fired with natural gas. The melt operation has a maximum melt rate of 5 tons of metal per hour. Only one furnace can be operated at a time because there is only one transformer to supply electrical energy. Ductile iron can be produced by adding inoculants to the molten metals in the reaction ladle. The emissions from the induction furnaces are collected by a canopy hood located directly over the furnaces. The emissions collected by the furnace hood system are controlled by a settling tank followed by a cyclone which exhausts out one stack, identified as stack B. A portion of fugitive emissions from charge handling, preheater, furnace, and inoculation processes are collected by the general furnace area ventilation system which exhausts to two (2) roof top exhaust fans, identified as V11 and V12. The preheater, two induction furnaces and holding ladle were installed in 1972.

Types and Quantities of Material Handled

Interstate Castings' Melt Operation melts gray and ductile iron. The facility uses #1 busheling scrap. Interstate Castings' will add carbon and silicon to the #1 busheling to produce the gray and ductile iron that is needed. It has a maximum melt rate of 5 tons of metal per hour.

Fugitive Dust Control Measures

Interstate Castings will ensure that the visible emissions from stack B and fans V11 and V12 are normal. Interstate Castings will monitor the visible emissions on a daily basis.

Interstate Castings will maintain and utilize the furnace hood system to ensure that capture particulate matter emissions released from melting operations are adequately captured. In addition, Interstate Castings will operate the settling tank and cyclone at all times during melting operations.

Interstate Castings will perform preventive maintenance inspections on the cyclone and settling tank to ensure proper operation of the emissions control system.

Interstate Castings will monitor visible emissions escaping the furnace hood system. If the visible emissions are abnormal, Interstate Castings will take corrective actions as necessary.

Compliance Schedule

Interstate Castings is currently in compliance with all fugitive dust regulations and limitations listed in their Federally Enforceable Source Operating Permit (FESOP) for the melting operations; therefore a compliance schedule is not required.

Recordkeeping and Reporting Requirements

Interstate Castings will record the results of the visible emission notations of stack B and fans V11 and V12 exhausts. Interstate Castings will also record the results of the preventive maintenance inspections conducted on the dust collection system. If any abnormal conditions are noted Interstate Castings will take corrective actions and record the response steps taken to correct the problem.

Pouring and Cooling Operations

Description of Emission Unit

Interstate Castings has pouring and cooling operations. This operation is where the molten metal from the melting operation are poured from ladles into molds and allowed to cool. The maximum operating capacity is limited by the source's ability to melt metal. The emissions generated from pouring and cooling are uncontrolled and are emitted into the building. A portion of these emissions are collected by hoods located on the ceiling above the pouring deck and exhausts to roof top exhaust fans V17, V18, V25, V26, V27, and V28. These operations have been conducted since the 1930s.

Types and Quantities of Material Handled

Interstate Castings utilizes a pouring and cooling operation. This operation takes the molten metal and pours it into molds. These molds are then allowed to cool. The maximum capacity of this operation is 5 tons of metal per hour.

Fugitive Dust Control Measures

Interstate Castings will ensure that the visible emissions from the exhaust fans V17, V18, V25, V26, V27, and V28 are normal. Interstate Castings will monitor the visible emissions on a daily basis.

Interstate Castings will maintain and utilize the exhaust fans V17, V18, V25, V26, V27, and V28 above the pouring deck.

Interstate Castings will monitor visible emissions from the exhaust fans above the pouring deck. If the visible emissions are abnormal, Interstate Castings will take corrective actions as necessary.

The areas around the pouring and cooling operations will be cleaned and swept as needed in order to minimize the generation of fugitive dust.

Compliance Schedule

Interstate Castings is currently in compliance with all fugitive dust regulations and limitations listed in their FESOP for the pouring and cooling operations; therefore a compliance schedule is not required.

Recordkeeping and Reporting Requirements

Interstate Castings will record the results of the visible emission notations of exhaust fans. If any abnormal conditions are noted, Interstate Castings will take corrective actions and record the response steps taken to correct the problem.

Shakeout

Description of Emission Unit

Interstate Castings operates a shakeout process. The shakeout process is where the molding sand is separated from the casting by mechanical shaking. The maximum operating capacity is limited by the source's ability to melt metal. Emissions are collected by hoods located over the shakeout area. The emissions collected by the hoods are controlled by a cyclone, identified as control device C, and dust collector (east baghouse), identified as control device A, in a series. The emissions from the dust collector are exhausted to the east baghouse discharge, identified as stack A. The emissions not collected by the hood collection system are emitted in the building and are exhausted out the general building ventilation system. This process was installed in 1972.

Types and Quantities of Materials Handled

Interstate Castings' shakeout process is where the molding sand is separated from the casting by mechanical shaking. The maximum operating capacity is limited by the source's ability to melt metal, which is 5 tons of metal per hour.

Fugitive Dust Control Measures

Interstate Castings will ensure that the visible emissions from the exhaust stack A are normal. Interstate Castings will monitor the visible emissions on a daily basis.

Interstate Castings will maintain and utilize the shakeout area hoods to ensure that they adequately capture particulate matter emissions released from the shakeout operations. In addition, Interstate Castings will operate the cyclone and dust collector at all times during shakeout operations.

Interstate Castings will perform preventive maintenance inspections on the cyclone and dust collector to ensure proper operation of the emissions control system.

Interstate Castings will monitor visible emissions escaping the shakeout area hoods. If the visible emissions are abnormal, Interstate Castings will take corrective actions as necessary.

The areas around the shakeout will be cleaned and swept as needed to minimize the generation of fugitive dust.

Compliance Schedule

Interstate Castings is currently in compliance with all fugitive dust regulations and limitations listed in their FESOP for the shakeout; therefore a compliance schedule is not required.

Recordkeeping and Reporting Requirements

Interstate Castings will record the results of the visible emission notations of stack A exhaust. Interstate Castings will also record the results of the preventive maintenance inspections conducted on the dust collection system. If any abnormal conditions are noted, Interstate Castings will take corrective actions and record the response steps taken to correct the problem.

Casting Cleaning Operation

Description of Emission Units

Interstate Castings operates a casting cleaning operation. This operation consists of one (1) table blast, one (1) shot blast machine, five (5) grinders, one (1) I.D. grinder, one (1) second grinder and one (1) cutoff saw. The maximum operating capacity is limited by the source's ability to melt metal. The emissions are collected by various hoods located throughout the casting cleaning operation and are controlled by dust collector, identified as control device A, which exhausts to east baghouse discharge stack, identified as stack A. The emissions not collected by the hood collection system are emitted into the building and are exhausted out the general building ventilation system. The casting cleaning processes were installed prior to 1982.

Types and Quantities of Material Handled

Interstate Castings' casting cleaning operation is limited by the source's ability to melt metal. The source's ability to melt metal is 5 tons of metal per hour.

Fugitive Dust Control Measures

Interstate Castings will ensure that the visible emissions from the exhaust stack A are normal. Interstate Castings will monitor the visible emissions on a daily basis.

Interstate Castings will maintain and utilize the casting cleaning hoods to ensure that it adequately captures particulate matter emissions released from its casting cleaning operation. In addition, Interstate Castings will operate the dust collector at all times during casting cleaning operation.

Interstate Castings will perform preventive maintenance inspections on the dust collector to ensure proper operation of the emissions control system.

Interstate Castings will monitor visible emissions escaping the casting cleaning hoods. If the visible emissions are abnormal Interstate Castings will take corrective actions as necessary.

The areas around the casting cleaning operation will be cleaned and swept as needed to minimize the generation of fugitive dust.

Compliance Schedule

Interstate Castings is currently in compliance with all fugitive dust regulations and limitations listed in their FESOP for the casting cleaning; therefore a compliance schedule is not required.

Recordkeeping and Reporting Requirements

Interstate Castings will record the results of the visible emission notations of stack A exhaust. Interstate Castings will also record the results of the preventive maintenance inspections conducted on the dust collection system. If any abnormal conditions are noted, Interstate Castings will take corrective actions and record the response steps taken to correct the problem.

Sand Handling Operation

Description of Emission Units

Interstate Castings operates a sand handling operation. This operation consists of one sand muller, thirteen hopper stations, one sand elevator, one sand tank, eight (8) belts, and one molding line. The maximum capacity of the sand handling system is 20.63 tons of sand per hour. The emissions are collected by various hoods located throughout the sand handling process line and are controlled by a dust collector, identified as control device A, which exhausts out east baghouse discharge stack, identified as stack A. The emissions not collected by the hood collection system are emitted in the building and are exhausted out the general building ventilation system. The sand handling processes were installed prior to 1967 and modified in 2002.

Types and Quantities of Material Handled

Interstate Castings operates a sand handling operation. The maximum capacity of the sand handling systems is 20.63 tons of sand per hour.

Fugitive Dust Control Measures

Interstate Castings will ensure that the visible emissions from exhaust stack A are normal. Interstate Castings will monitor the visible emissions on a daily basis.

Interstate Castings will maintain and utilize the dust collector to ensure that it adequately captures particulate matter emissions released from the sand handling operation. In addition, Interstate Castings will operate the dust collector at all times during sand handling operation.

Interstate Castings will perform preventive maintenance inspections on the dust collector to ensure proper operation of the emissions control system.

Interstate Castings will monitor visible emissions escaping the capture hood. If the visible emissions are abnormal Interstate Castings will take corrective actions as necessary.

The areas around the sand handling operation will be cleaned and swept as needed to minimize the generation of fugitive dust.

Compliance Schedule

Interstate Castings is currently in compliance with all fugitive dust regulations and limitations listed in their FESOP for the sand handling; therefore a compliance schedule is not required.

Recordkeeping and Reporting Requirements

Interstate Castings will record the results of the visible emission notations of stack A exhausts. Interstate Castings will also record the results of the preventive maintenance inspections conducted on the dust collection system. If any abnormal conditions are noted, Interstate Castings will take corrective actions and record the response steps taken to correct the problem.

Core Making Operations

Description of Emission Units

Interstate Castings operates a core making operation. This operation consists of two heat cure processes: shell core making process and oil sand core making process. At the two Redford shell core machines, the heated shell core box is filled with resin coated sand. In the oil core making process, sand and core oil are blended together in a sand mixer and placed in core molds to produce the desired shape. The oil cores are then baked in a core oven in order to harden and strengthen the cores. The oil sand core oven is fired with natural gas and has a maximum heat input capacity of 1.6 million Btu per hour. In the air set core making process, sand, catalyst, and resin are blended together in a sand mixer. Following blending, the blended sand is placed in the core boxes. Cores are then formed into the desired shape in the core box. If required in colder weather, cores are placed in the core oven ("easy bake oven") in order to speed up the curing process. The air set core oven is fired with natural gas and has a maximum heat input capacity of 0.115 million Btu per hour. Emissions from the shell core making process, oil sand core making process, and air set core making process are uncontrolled and are emitted in the building. A portion of these emissions are collected by building ventilation hoods located in the core making area and are exhausted to one (1) ceiling/wall exhaust fan (V38), one (1) oven hood exhaust blower (V5) and one (1) oven exhaust blower (V4).

Types and Quantities of Material Handled

Interstate Castings core making operation is limited to the amount of sand each process can use. The airset core making process is limited to using 4,500 tons per year of sand. The oil sand process is limited to 730 tons per year of sand.

Fugitive Dust Control Measures

Interstate Castings will ensure that the visible emissions from the exhaust fan, V38, and blowers, V5 and V4, are normal. Interstate Castings will monitor the visible emissions on a daily basis.

The areas around the core making operations will be cleaned and swept as needed.

Compliance Schedule

Interstate Castings is currently in compliance with all fugitive dust regulations and limitations listed in their FESOP for the core making operation; therefore a compliance schedule is not required.

Recordkeeping and Reporting Requirements

Interstate Castings will record the results of the visible emission notations of the fan, V38, and blowers, V4 and V5, exhaust. If any abnormal conditions are noted, Interstate Castings will take corrective actions and record the response steps taken to correct the problem.

Wood Working Operation

Description of Emission Source

Interstate Castings operates a wood working operation. The wood working operation consists of one (1) bandsaw, one (1) oscillating vertical sander, and one 24" disc sander with bag collector. The emissions from this operation are controlled by a dust collector with a design flow rate of 55 cubic feet per minute.

Types and Quantities of Materials Handled

Interstate Castings operates a wood working operation. In this operation, they repair and rig wood patterns and wood core boxes for the molding and core making processes.

Fugitive Dust Control Measures

Interstate Castings will ensure that the visible emissions from the dust collector are normal. Interstate Castings will monitor the visible emissions on a daily basis.

Interstate Castings will maintain and utilize the dust collector to ensure that it adequately captures particulate matter emissions released from the wood working operation. In addition, Interstate Castings will operate the dust collector at all times during wood working operation.

Interstate Castings will perform preventive maintenance inspections on the dust collector to ensure proper operation of the emissions control system.

Interstate Castings will monitor visible emissions escaping the capture system. If the visible emissions are abnormal Interstate Castings will take corrective actions as necessary.

The areas around the wood working operation will be cleaned and swept as needed to minimize the generation of fugitive dust.

Compliance Schedule

Interstate Castings is currently in compliance with all fugitive dust regulations and limitations listed in their FESOP for the wood working operation at their facility; therefore a compliance schedule is not required.

Recordkeeping and Reporting Requirements

Interstate Castings will record the results of the visible emission notations of the dust collector. If any abnormal conditions are noted, Interstate Castings will take corrective actions and record the response steps taken to correct the problem.

Unpaved Roads

Description of Emission Source

Interstate Castings has unpaved roads, located around the building, from the main entrance of the facility to the back of the furnace building. The unpaved roads are hard packed gravel.

Vehicular Activity

Interstate Castings utilizes the unpaved roads for parking lots and deliveries of sand and other material. Vehicles that travel on the unpaved roads at the facility include:

Employee vehicles – 12 to 14 vehicles
12,000 pound vehicle – Once per day
34,000 pound vehicle – Three times per week
30,000 pound vehicle – Twice per week
34,000 pound vehicle – Three times per week
40,000 pound vehicle – Four times per week

It is estimated that approximately 4 miles per week are traveled on the unpaved roads by the vehicles listed above.

Fugitive Dust Control Measures

Interstate Castings will observe a speed limit of 5 miles per hour to control fugitive dust emissions.

Compliance Schedule

Interstate Castings is currently in compliance with all fugitive dust regulations and limitations listed in their FESOP for the unpaved roads at their facility; therefore a compliance schedule is not required.

Recordkeeping and Reporting Requirements

Interstate Castings will document awareness training of the speed limit for the facility.

Paved Roads

Description of Emission Source

Interstate Castings has paved roads, consisting of concrete located around and inside the building.

Vehicular Activity

Interstate Castings utilizes the paved roads for transfer of material (located either inside or outside the building) to and from different areas in the facility. Equipment utilized at the facility includes:

4 Fork lifts
1 Fork truck
2 Front end loaders

It is estimated that approximately 10 miles per day are traveled on the paved roads by the vehicles listed above.

Fugitive Dust Control Measures

Interstate Castings will observe a speed limit of 5 miles per hour to control fugitive dust emissions.

Compliance Schedule

Interstate Castings is currently in compliance with all fugitive dust regulations and limitations listed in their FESOP for the paved roads at their facility; therefore a compliance schedule is not required.

Recordkeeping and Reporting Requirements

Interstate Castings will document awareness training of the speed limit for the facility.

Parking Lots

Description of Emission Source

Interstate Castings has parking lots, consisting of gravel or asphalt. The west office and east plant lots are asphalt parking lots. The west plant parking lot is gravel.

Vehicular Activity

Interstate Castings utilizes the parking lots for employee and visitor parking. It is estimated that approximately 40 vehicles per day utilize the parking lots.

Fugitive Dust Control Measures

Interstate Castings will observe a speed limit of 5 miles per hour to control fugitive dust emissions.

Compliance Schedule

Interstate Castings is currently in compliance with all fugitive dust regulations and limitations listed in their FESOP for the parking lots at their facility; therefore a compliance schedule is not required.

Recordkeeping and Reporting Requirements

Interstate Castings will document awareness training of the speed limit for the facility.

Aggregate Storage Piles

Description of Emission Source

Interstate Castings maintains aggregate storage piles of steel scrap, cast scrap, foundry sand, spent airset sand, and new sand inside the building.

Types and Quantities of Materials Handled

Interstate Castings maintains aggregate storage piles of steel scrap, cast scrap, foundry sand, spent airset sand, and new sand inside the building. These piles are stored in bins under cover of a roof. The steel scrap and cast scrap are contained in bins inside the building, south of the furnace area. Foundry and new sand are also stored in bins inside the building. The foundry and new sand are located close to sand handling area. The spent airset sand is in a pile on the floor, inside the building, south of the furnace area.

Fugitive Dust Control Measures

Interstate Castings will maintain the storage piles indoors when feasible.

Interstate Castings will sweep and clean the areas around the aggregate storage piles on an as needed basis.

Interstate Castings will limit to the extent possible the vehicle transfer distance between the facility and the storage piles.

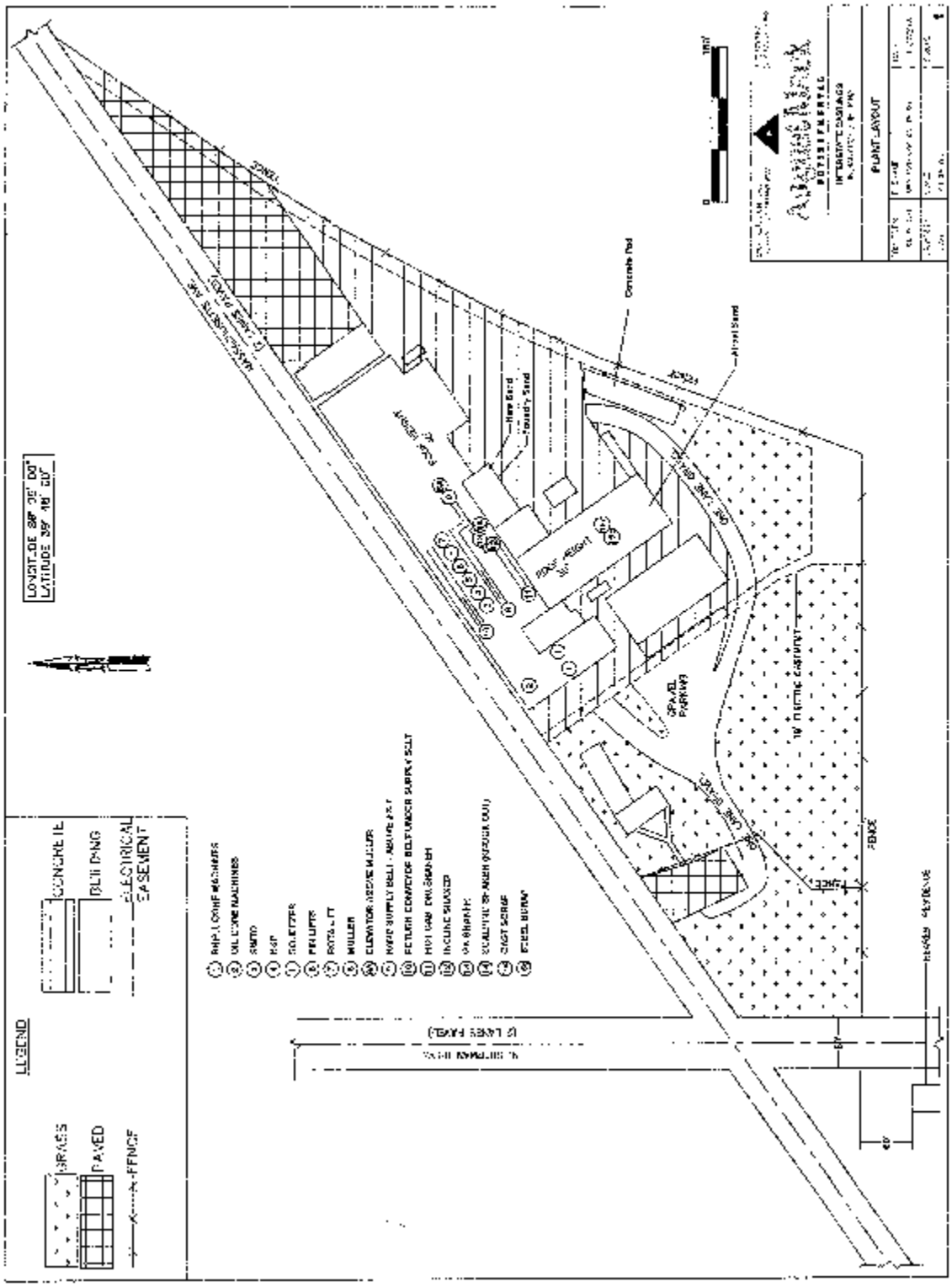
Compliance Schedule

Interstate Castings is currently in compliance with all fugitive dust regulations and limitations listed in their FESOP for the storage piles at their facility; therefore a compliance schedule is not required.

Recordkeeping and Reporting Requirements

Interstate Castings will record the results of visible emission from aggregate storage piles. If any abnormal conditions are noted, Interstate Castings will take corrective actions and record the response steps taken to correct the problem.

Site Map


LEGEND
GRASS
PAVED
FENCE
CONCRETE
BUILDING
ELECTRICAL EASEMENT
LONGITUDE 86° 09' 00"
LATITUDE 39° 48' 00"
Concrete Pad
Alluvial Sand
New Sand
Foundry Sand
GRAVEL PARKING
FENCE

Indiana Department of Environmental Management
Office of Air Quality

Attachment B

National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources - Subpart ZZZZZ

for Interstate Castings

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (CONTINUED)

Subpart ZZZZZ—National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources

Source: 73 FR 252, Jan. 2, 2008, unless otherwise noted.

Applicability and Compliance Dates

§ 63.10880 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate an iron and steel foundry that is an area source of hazardous air pollutant (HAP) emissions.

(b) This subpart applies to each new or existing affected source. The affected source is each iron and steel foundry.

(1) An affected source is existing if you commenced construction or reconstruction of the affected source before September 17, 2007.

(2) An affected source is new if you commenced construction or reconstruction of the affected source on or after September 17, 2007. If an affected source is not new pursuant to the preceding sentence, it is not new as a result of a change in its compliance obligations pursuant to §**63**.10881(d).

(c) On and after January 2, 2008, if your iron and steel foundry becomes a major source as defined in §**63**.2, you must meet the requirements of 40 CFR part **63**, subpart EEEEE.

(d) This subpart does not apply to research and development facilities, as defined in section 112(c)(7) of the Clean Air Act.

(e) You are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not otherwise required by law to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a). Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart.

(f) If you own or operate an existing affected source, you must determine the initial applicability of the requirements of this subpart to a small foundry or a large foundry based on your facility's metal melt production for calendar year 2008. If the metal melt production for calendar year 2008 is 20,000 tons or less, your area source is a small foundry. If your metal melt production for calendar year 2008 is greater than 20,000 tons, your area source is a large foundry. You must submit a written notification to the Administrator that identifies your area source as a small foundry or a large foundry no later than January 2, 2009.

(g) If you own or operate a new affected source, you must determine the initial applicability of the requirements of this subpart to a small foundry or a large foundry based on your facility's annual metal melting capacity at startup. If the annual metal melting capacity is 10,000 tons or less, your area source is a small foundry. If the annual metal melting capacity is greater than 10,000 tons, your area source is a large foundry. You must submit a written notification to the Administrator that identifies your area source as a small foundry or a large foundry no later than 120 days after startup.

§ 63.10881 What are my compliance dates?

(a) If you own or operate an existing affected source, you must achieve compliance with the applicable provisions of this subpart by the dates in paragraphs (a)(1) through (3) of this section.

(1) Not later than January 2, 2009 for the pollution prevention management practices for metallic scrap in §**63**.10885(a) and binder formulations in §**63**.10886.

(2) Not later than January 4, 2010 for the pollution prevention management practices for mercury in §**63**.10885(b).

(3) Except as provided in paragraph (d) of this section, not later than 2 years after the date of your large foundry's notification of the initial determination required in §**63**.10880(f) for the standards and management practices in §**63**.10895.

(b) If you have a new affected source for which the initial startup date is on or before January 2, 2008, you must achieve compliance with the provisions of this subpart not later than January 2, 2008.

(c) If you own or operate a new affected source for which the initial startup date is after January 2, 2008, you must achieve compliance with the provisions of this subpart upon startup of your affected source.

(d) Following the initial determination for an existing affected source required in §**63**.10880(f),

(1) Beginning January 1, 2010, if the annual metal melt production of your small foundry exceeds 20,000 tons during the preceding calendar year, you must submit a notification of foundry reclassification to the Administrator within 30 days and comply with the requirements in paragraphs (d)(1)(i) or (ii) of this section, as applicable.

(i) If your small foundry has never been classified as a large foundry, you must comply with the requirements for a large foundry no later than 2 years after the date of your foundry's notification that the annual metal melt production exceeded 20,000 tons.

(ii) If your small foundry had previously been classified as a large foundry, you must comply with the requirements for a large foundry no later than the date of your foundry's most recent notification that the annual metal melt production exceeded 20,000 tons.

(2) If your facility is initially classified as a large foundry (or your small foundry subsequently becomes a large foundry), you must comply with the requirements for a large foundry for at least 3 years before reclassifying your facility as a small foundry, even if your annual metal melt production falls below 20,000 tons. After 3 years, you may reclassify your facility as a small foundry provided your annual metal melt production for the preceding calendar year was 20,000 tons or less. If you reclassify your large foundry as a small foundry, you must submit a notification of reclassification to the Administrator within 30 days and comply with the requirements for a small foundry no later than the date you notify the Administrator of the reclassification. If the annual metal melt production exceeds 20,000 tons during a subsequent year, you must submit a notification of reclassification to the Administrator within 30 days and comply with the requirements for a large foundry no later than the date you notify the Administrator of the reclassification.

(e) Following the initial determination for a new affected source required in §**63**.10880(g),

(1) If you increase the annual metal melt capacity of your small foundry to exceed 10,000 tons, you must submit a notification of reclassification to the Administrator within 30 days and comply with the requirements for a large foundry no later than the startup date for the new equipment, if applicable, or the date of issuance for your revised State or Federal operating permit.

(2) If your facility is initially classified as a large foundry (or your small foundry subsequently becomes a large foundry), you must comply with the requirements for a large foundry for at least 3 years before reclassifying your facility as a small foundry. After 3 years, you may reclassify your facility as a small foundry provided your most recent annual metal melt capacity is 10,000 tons or less. If you reclassify your large foundry as a small foundry, you must notify the Administrator within 30 days and comply with the requirements for a small foundry no later than the date your melting equipment was removed or taken out of service, if applicable, or the date of issuance for your revised State or Federal operating permit.

Pollution Prevention Management Practices for New and Existing Affected Sources

§ 63.10885 What are my management practices for metallic scrap and mercury switches?

(a) *Metallic scrap management program.* For each segregated metallic scrap storage area, bin or pile, you must comply with the materials acquisition requirements in paragraph (a)(1) or (2) of this section. You must keep a copy of the material specifications onsite and readily available to all personnel with material acquisition duties, and provide a copy to each of your scrap providers. You may have certain scrap subject to paragraph (a)(1) of this section and other scrap subject to paragraph (a)(2) of this section at your facility provided the metallic scrap remains segregated until charge make-up.

(1) *Restricted metallic scrap.* You must prepare and operate at all times according to written material specifications for the purchase and use of 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, chlorinated plastics, or free liquids. For the purpose of this subpart, “free liquids” is defined as material that fails the paint filter test by EPA Method 9095B, “Paint Filter Liquids Test” (revision 2), November 2004 (incorporated by reference—see §**63**.14). The requirements for no free liquids do not apply if the owner or operator can demonstrate that the free liquid is water that resulted from scrap exposure to rain.

(2) *General iron and steel scrap.* You must prepare and operate at all times according to written material specifications for the purchase and use of only iron and steel scrap that has been depleted (to the extent practicable) of organics and HAP metals in the charge materials used by the iron and steel foundry. The materials specifications must include at minimum the information specified in paragraph (a)(2)(i) or (ii) of this section.

(i) Except as provided in paragraph (a)(2)(ii) of this section, specifications for metallic scrap materials charged to a scrap preheater or metal melting furnace to be depleted (to the extent practicable) of the presence of used oil filters, chlorinated plastic parts, accessible lead-containing components (such as batteries and wheel weights), and a program to ensure the scrap materials are drained of free liquids.

(ii) For scrap charged to a cupola metal melting furnace that is equipped with an afterburner, specifications for metallic scrap materials to be depleted (to the extent practicable) of the presence of chlorinated plastics, accessible lead-containing components (such as batteries and wheel weights), and a program to ensure the scrap materials are drained of free liquids.

(b) *Mercury requirements.* For scrap containing motor vehicle scrap, you must procure the scrap pursuant to one of the compliance options in paragraphs (b)(1), (2), or (3) of this section for each scrap provider, contract, or shipment. For scrap that does not contain motor vehicle scrap, you must procure the scrap pursuant to the requirements in paragraph (b)(4) of this section for each scrap provider, contract, or shipment. You may have one scrap provider, contract, or shipment subject to one compliance provision and others subject to another compliance provision.

(1) *Site-specific plan for mercury switches.* You must comply with the requirements in paragraphs (b)(1)(i) through (v) of this section.

(i) You must include a requirement in your scrap specifications for removal of mercury switches from vehicle bodies used to make the scrap.

(ii) You must prepare and operate according to a plan demonstrating how your facility will implement the scrap specification in paragraph (b)(1)(i) of this section for removal of mercury switches. You must submit the plan to the Administrator for approval. You must operate according to the plan as submitted during the review and approval process, operate according to the approved plan at all times after approval, and address any deficiency identified by the Administrator or delegated authority within 60 days following disapproval of a plan. You may request approval to revise the plan and may operate according to the revised plan unless and until the revision is disapproved by the Administrator or delegated authority. The Administrator or delegated authority may change the approval status of the plan upon 90-days written notice based upon the semiannual report or other information. The plan must include:

(A) A means of communicating to scrap purchasers and scrap providers the need to obtain or provide motor vehicle scrap from which mercury switches have been removed and the need to ensure the proper management of the mercury switches removed from the scrap as required under the rules implementing subtitle C of the Resource Conservation and Recovery Act (RCRA) (40 CFR parts 261 through 265 and 268). The plan must include documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need to promote the removal of mercury switches from end-of-life vehicles. Upon the request of the Administrator or delegated authority, you must provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols;

(B) Provisions for obtaining assurance from scrap providers motor vehicle scrap provided to the facility meet the scrap specification;

(C) Provisions for periodic inspections or other means of corroboration to ensure that scrap providers and dismantlers are implementing appropriate steps to minimize the presence of mercury switches in motor vehicle scrap and that the mercury switches removed are being properly managed, including the minimum frequency such means of corroboration will be implemented; and

(D) Provisions for taking corrective actions (i.e., actions resulting in scrap providers removing a higher percentage of mercury switches or other mercury-containing components) if needed, based on the results of procedures implemented in paragraph (b)(1)(ii)(C) of this section).

(iii) You must require each motor vehicle scrap provider to provide an estimate of the number of mercury switches removed from motor vehicle scrap sent to the facility during the previous year and the basis for the estimate. The Administrator may request documentation or additional information at any time.

(iv) You must establish a goal for each scrap supplier to remove at least 80 percent of the mercury switches. Although a site-specific plan approved under paragraph (b)(1) of this section may require only the removal of convenience light switch mechanisms, the Administrator will credit all documented and verifiable mercury-containing components removed from motor vehicle scrap (such as sensors in anti-locking brake systems, security systems, active ride control, and other applications) when evaluating progress towards the 80 percent goal.

(v) For each scrap provider, you must submit semiannual progress reports to the Administrator that provide the number of mercury switches removed or the weight of mercury recovered from the switches, the estimated number of vehicles processed, an estimate of the percent of mercury switches removed, and certification that the removed mercury switches were recycled at RCRA-permitted facilities or otherwise properly managed pursuant to RCRA subtitle C regulations referenced in paragraph (b)(1)(ii)(A) of this section. This information can be submitted in aggregate form and does not have to be submitted for each shipment. The Administrator may change the approval status of a site-specific plan following 90-days notice based on the progress reports or other information.

(2) *Option for approved mercury programs.* You must certify in your notification of compliance status that you participate in and purchase motor vehicle scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the Administrator based on the criteria in paragraphs (b)(2)(i) through (iii) of this section. If you purchase motor vehicle scrap from a broker, you must certify that all scrap received from that broker was obtained from other scrap providers who participate in a program for the removal of mercury switches that has been approved by the Administrator based on the criteria in paragraphs (b)(2)(i) through (iii) of this section. The National Mercury Switch Recovery Program and the State of Maine Mercury Switch Removal Program are EPA-approved programs under

paragraph (b)(2) of this section unless and until the Administrator disapproves the program (in part or in whole) under paragraph (b)(2)(iii) of this section.

(i) The program includes outreach that informs the dismantlers of the need for removal of mercury switches and provides training and guidance for removing mercury switches;

(ii) The program has a goal to remove at least 80 percent of mercury switches from motor vehicle scrap the scrap provider processes. Although a program approved under paragraph (b)(2) of this section may require only the removal of convenience light switch mechanisms, the Administrator will credit all documented and verifiable mercury-containing components removed from motor vehicle scrap (such as sensors in anti-locking brake systems, security systems, active ride control, and other applications) when evaluating progress towards the 80 percent goal; and

(iii) The program sponsor agrees to submit progress reports to the Administrator no less frequently than once every year that provide the number of mercury switches removed or the weight of mercury recovered from the switches, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and certification that the recovered mercury switches were recycled at facilities with permits as required under the rules implementing subtitle C of RCRA (40 CFR parts 261 through 265 and 268). The progress reports must be based on a database that includes data for each program participant; however, data may be aggregated at the State level for progress reports that will be publicly available. The Administrator may change the approval status of a program or portion of a program (e.g., at the State level) following 90-days notice based on the progress reports or on other information.

(iv) You must develop and maintain onsite a plan demonstrating the manner through which your facility is participating in the EPA-approved program.

(A) The plan must include facility-specific implementation elements, corporate-wide policies, and/or efforts coordinated by a trade association as appropriate for each facility.

(B) You must provide in the plan documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need to promote the removal or mercury switches from end-of-life vehicles. Upon the request of the Administrator or delegated authority, you must provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols.

(C) You must conduct periodic inspections or other means of corroboration to ensure that scrap providers are aware of the need for and are implementing appropriate steps to minimize the presence of mercury in scrap from end-of-life vehicles.

(3) *Option for specialty metal scrap.* You must certify in your notification of compliance status and maintain records of documentation that the only materials from motor vehicles in the scrap are materials recovered for their specialty alloy (including, but not limited to, chromium, nickel, molybdenum, or other alloys) content (such as certain exhaust systems) and, based on the nature of the scrap and purchase specifications, that the type of scrap is not reasonably expected to contain mercury switches.

(4) *Scrap that does not contain motor vehicle scrap.* For scrap not subject to the requirements in paragraphs (b)(1) through (3) of this section, you must certify in your notification of compliance status and maintain records of documentation that this scrap does not contain motor vehicle scrap.

§ 63.10886 What are my management practices for binder formulations?

For each furfuryl alcohol warm box mold or core making line at a new or existing iron and steel foundry, you must use a binder chemical formulation that does not use methanol as a specific ingredient of the catalyst formulation. This requirement does not apply to the resin portion of the binder system.

Requirements for New and Existing Affected Sources Classified as Small Foundries

§ 63.10890 What are my management practices and compliance requirements?

(a) You must comply with the pollution prevention management practices for metallic scrap and mercury switches in §**63**.10885 and binder formulations in §**63**.10886.

(b) You must submit an initial notification of applicability according to §**63**.9(b)(2).

(c) You must submit a notification of compliance status according to §**63**.9(h)(1)(i). You must send the notification of compliance status before the close of business on the 30th day after the applicable compliance date specified in §**63**.10881. The notification must include the following compliance certifications, as applicable:

(1) “This facility has prepared, and will operate by, written material specifications for metallic scrap according to §**63**.10885(a)(1)” and/or “This facility has prepared, and will operate by, written material specifications for general iron and steel scrap according to §**63**.10885(a)(2).”

(2) “This facility has prepared, and will operate by, written material specifications for the removal of mercury switches and a site-specific plan implementing the material specifications according to §**63**.10885(b)(1) and/or “This facility participates in and purchases motor vehicle scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the Administrator according to §**63**.10885(b)(2) and has prepared a plan for participation in the EPA-approved program according to §**63**.10885(b)(2)(iv)” and/or “The only materials from motor vehicles in the scrap charged to a metal melting furnace at this facility are materials recovered for their specialty alloy content in accordance with §**63**.10885(b)(3) which are not reasonably expected to contain mercury switches” and/or “This facility complies with the requirements for scrap that does not contain motor vehicle scrap in accordance with §**63**.10885(b)(4).”

(3) “This facility complies with the no methanol requirement for the catalyst portion of each binder chemical formulation for a furfuryl alcohol warm box mold or core making line according to §**63**.10886.”

(d) As required by §**63**.10(b)(1), you must maintain files of all information (including all reports and notifications) for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

(e) You must maintain records of the information specified in paragraphs (e)(1) through (7) of this section according to the requirements in §**63**.10(b)(1).

(1) Records supporting your initial notification of applicability and your notification of compliance status according to §**63**.10(b)(2)(xiv).

(2) Records of your written materials specifications according to §**63**.10885(a) and records that demonstrate compliance with the requirements for restricted metallic scrap in §**63**.10885(a)(1) and/or for the use of general scrap in §**63**.10885(a)(2) and for mercury in §**63**.10885(b)(1) through (3), as applicable. You must keep records documenting compliance with §**63**.10885(b)(4) for scrap that does not contain motor vehicle scrap.

(3) If you are subject to the requirements for a site-specific plan for mercury switch removal under §**63**.10885(b)(1), you must:

(i) Maintain records of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, and an estimate of the percent of mercury switches recovered; and

(ii) Submit semiannual reports of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and a certification that the recovered mercury switches were recycled at RCRA-permitted facilities. The semiannual reports must include a certification that you have conducted periodic inspections or taken other means of corroboration as required under §**63**.10885(b)(1)(ii)(C). You must identify which option in paragraph §**63**.10885(b) applies to each scrap provider, contract, or shipment. You may include this information in the semiannual compliance reports required under paragraph (f) of this section.

(4) If you are subject to the option for approved mercury programs under §**63**.10885(b)(2), you must maintain records identifying each scrap provider and documenting the scrap provider's participation in an approved mercury switch removal program. If you purchase motor vehicle scrap from a broker, you must maintain records identifying each broker and documentation that all scrap provided by the broker was obtained from other scrap providers who participate in an approved mercury switch removal program.

(5) Records to document use of binder chemical formulation that does not contain methanol as a specific ingredient of the catalyst formulation for each furfuryl alcohol warm box mold or core making line as required by §**63**.10886. These records must be the Material Safety Data Sheet (provided that it contains appropriate information), a certified product data sheet, or a manufacturer's hazardous air pollutant data sheet.

(6) Records of the annual quantity and composition of each HAP-containing chemical binder or coating material used to make molds and cores. These records must be copies of purchasing records, Material Safety Data Sheets, or other documentation that provides information on the binder or coating materials used.

(7) Records of metal melt production for each calendar year.

(f) You must submit semiannual compliance reports to the Administrator according to the requirements in §**63**.10(e). The report must clearly identify any deviation from the pollution prevention management practices in §**63**.10885 or §**63**.10886 and the corrective action taken.

(g) You must submit a written notification to the Administrator of the initial classification of your facility as a small foundry as required in §**63**.10880(f) and (g), as applicable, and for any subsequent reclassification as required in §**63**.10881(d)(1) or (e), as applicable.

(h) Following the initial determination for an existing affected source as a small foundry, if the annual metal melt production exceeds 20,000 tons during the preceding year, you must comply with the requirements for large foundries by the applicable dates in §**63**.10881(d)(1)(i) or (d)(1)(ii). Following the initial determination for a new affected source as a small foundry, if you increase the annual metal melt capacity to exceed 10,000 tons, you must comply with the requirements for a large foundry by the applicable dates in §**63**.10881(e)(1).

(i) You must comply with the following requirements of the General Provisions (40 CFR part **63**, subpart A): §§**63**.1 through **63**.5; §**63**.6(a), (b), (c), and (e)(1); §**63**.9; §**63**.10(a), (b)(1), (b)(2)(xiv), (b)(3), (d)(1), (d)(4), and (f); and §§**63**.13 through **63**.16. Requirements of the General Provisions not cited in the preceding sentence do not apply to the owner or operator of a new or existing affected source that is classified as a small foundry.

Requirements for New and Existing Affected Sources Classified as Large Iron and Steel Foundries

§ 63.10895 What are my standards and management practices?

(a) If you own or operate an affected source that is a large foundry as defined in §**63**.10906, you must comply with the pollution prevention management practices in §§**63**.10885 and **63**.10886, the requirements in paragraphs (b) through (e) of this section, and the requirements in §§**63**.10896 through **63**.10900.

(b) You must operate a capture and collection system for each metal melting furnace at a new or existing iron and steel foundry unless that furnace is specifically uncontrolled as part of an emissions averaging group. Each capture and collection system must meet accepted engineering standards, such as those published by the American Conference of Governmental Industrial Hygienists.

(c) You must not discharge to the atmosphere emissions from any metal melting furnace or group of all metal melting furnaces that exceed the applicable limit in paragraph (c)(1) or (2) of this section. When an alternative emissions limit is provided for a given emissions source, you are not restricted in the selection of which applicable alternative emissions limit is used to demonstrate compliance.

(1) For an existing iron and steel foundry, 0.8 pounds of particulate matter (PM) per ton of metal charged or 0.06 pounds of total metal HAP per ton of metal charged.

(2) For a new iron and steel foundry, 0.1 pounds of PM per ton of metal charged or 0.008 pounds of total metal HAP per ton of metal charged.

(d) If you own or operate a new affected source, you must comply with each control device parameter operating limit in paragraphs (d)(1) and (2) of this section that applies to you.

(1) For each wet scrubber applied to emissions from a metal melting furnace, you must maintain the 3-hour average pressure drop and scrubber water flow rate at or above the minimum levels established during the initial or subsequent performance test.

(2) For each electrostatic precipitator applied to emissions from a metal melting furnace, you must maintain the voltage and secondary current (or total power input) to the control device at or above the level established during the initial or subsequent performance test.

(e) If you own or operate a new or existing iron and steel foundry, you must not discharge to the atmosphere fugitive emissions from foundry operations that exhibit opacity greater than 20 percent (6-minute average), except for one 6-minute average per hour that does not exceed 30 percent.

§ 63.10896 What are my operation and maintenance requirements?

(a) You must prepare and operate at all times according to a written operation and maintenance (O&M) plan for each control device for an emissions source subject to a PM, metal HAP, or opacity emissions limit in §**63**.10895. You must maintain a copy of the O&M plan at the facility and make it available for review upon request. At a minimum, each plan must contain the following information:

(1) General facility and contact information;

(2) Positions responsible for inspecting, maintaining, and repairing emissions control devices which are used to comply with this subpart;

(3) Description of items, equipment, and conditions that will be inspected, including an inspection schedule for the items, equipment, and conditions. For baghouses that are equipped with bag leak detection systems, the O&M plan must include the site-specific monitoring plan required in §**63**.10897(d)(2).

(4) Identity and estimated quantity of the replacement parts that will be maintained in inventory; and

(5) For a new affected source, procedures for operating and maintaining a CPMS in accordance with manufacturer's specifications.

(b) You may use any other O&M, preventative maintenance, or similar plan which addresses the requirements in paragraph (a)(1) through (5) of this section to demonstrate compliance with the requirements for an O&M plan.

§ 63.10897 What are my monitoring requirements?

(a) You must conduct an initial inspection of each PM control device for a metal melting furnace at an existing affected source. You must conduct each initial inspection no later than 60 days after your applicable compliance date for each installed control device which has been operated within 60 days of the compliance date. For an installed control device which has not operated within 60 days of the compliance date, you must conduct an initial inspection prior to startup of the control device. Following the initial inspections, you must perform periodic inspections and maintenance of each PM control device for a metal melting furnace at an existing affected source. You must perform the initial and periodic inspections according to the requirements in paragraphs (a)(1) through (4) of this section. You must record the results of each initial and periodic inspection and any maintenance action in the logbook required in §**63**.10899(b)(13).

(1) For the initial inspection of each baghouse, you must visually inspect the system ductwork and baghouse units for leaks. You must also inspect the inside of each baghouse for structural integrity and fabric filter condition. Following the initial inspections, you must inspect and maintain each baghouse according to the requirements in paragraphs (a)(1)(i) and (ii) of this section.

(i) You must conduct monthly visual inspections of the system ductwork for leaks.

(ii) You must conduct inspections of the interior of the baghouse for structural integrity and to determine the condition of the fabric filter every 6 months.

(2) For the initial inspection of each dry electrostatic precipitator, you must verify the proper functioning of the electronic controls for corona power and rapper operation, that the corona wires are energized, and that adequate air pressure is present on the rapper manifold. You must also visually inspect the system ductwork and electrostatic housing unit and hopper for leaks and inspect the interior of the electrostatic precipitator to determine the condition and integrity of corona wires, collection plates, hopper, and air diffuser plates. Following the initial inspection, you must inspect and maintain each dry electrostatic precipitator according to the requirements in paragraphs (a)(2)(i) through (iii) of this section.

(i) You must conduct a daily inspection to verify the proper functioning of the electronic controls for corona power and rapper operation, that the corona wires are energized, and that adequate air pressure is present on the rapper manifold.

(ii) You must conduct monthly visual inspections of the system ductwork, housing unit, and hopper for leaks.

(iii) You must conduct inspections of the interior of the electrostatic precipitator to determine the condition and integrity of corona wires, collection plates, plate rappers, hopper, and air diffuser plates every 24 months.

(3) For the initial inspection of each wet electrostatic precipitator, you must verify the proper functioning of the electronic controls for corona power, that the corona wires are energized, and that water flow is present. You must also visually inspect the system ductwork and electrostatic precipitator housing unit and hopper for leaks and inspect the interior of the electrostatic precipitator to determine the condition and integrity of corona wires, collection plates, plate wash spray heads, hopper, and air diffuser plates. Following the initial inspection, you must inspect and maintain each wet electrostatic precipitator according to the requirements in paragraphs (a)(3)(i) through (iii) of this section.

(i) You must conduct a daily inspection to verify the proper functioning of the electronic controls for corona power, that the corona wires are energized, and that water flow is present.

(ii) You must conduct monthly visual inspections of the system ductwork, electrostatic precipitator housing unit, and hopper for leaks.

(iii) You must conduct inspections of the interior of the electrostatic precipitator to determine the condition and integrity of corona wires, collection plates, plate wash spray heads, hopper, and air diffuser plates every 24 months.

(4) For the initial inspection of each wet scrubber, you must verify the presence of water flow to the scrubber. You must also visually inspect the system ductwork and scrubber unit for leaks and inspect the interior of the scrubber for structural integrity and the condition of the demister and spray nozzle. Following the initial inspection, you must inspect and maintain each wet scrubber according to the requirements in paragraphs (a)(4)(i) through (iii) of this section.

(i) You must conduct a daily inspection to verify the presence of water flow to the scrubber.

(ii) You must conduct monthly visual inspections of the system ductwork and scrubber unit for leaks.

(iii) You must conduct inspections of the interior of the scrubber to determine the structural integrity and condition of the demister and spray nozzle every 12 months.

(b) For each wet scrubber applied to emissions from a metal melting furnace at a new affected source, you must use a continuous parameter monitoring system (CPMS) to measure and record the 3-hour average pressure drop and scrubber water flow rate.

(c) For each electrostatic precipitator applied to emissions from a metal melting furnace at a new affected source, you must measure and record the hourly average voltage and secondary current (or total power input) using a CPMS.

(d) If you own or operate an existing affected source, you may install, operate, and maintain a bag leak detection system for each negative pressure baghouse or positive pressure baghouse as an alternative to the baghouse inspection requirements in paragraph (a)(1) of this section. If you own or operate a new affected source, you must install, operate, and maintain a bag leak detection system for each negative pressure baghouse or positive pressure baghouse. You must install, operate, and maintain each bag leak detection system according to the requirements in paragraphs (d)(1) through (3) of this section.

(1) Each bag leak detection system must meet the requirements in paragraphs (d)(1)(i) through (vii) of this section.

(i) 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 (0.00044 grains per actual cubic foot) or less.

(ii) 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 a strip chart recorder, data logger, or other means.

(iii) 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.

(iv) 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. If the system is equipped with an alarm delay time feature, you also must adjust the alarm delay time.

(v) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set point, or alarm delay time. 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 monitoring plan required by paragraph (d)(2) of this section.

(vi) For negative pressure baghouses, 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.

(vii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(2) You must prepare a site-specific monitoring plan for each bag leak detection system to be incorporated in your O&M plan. You must operate and maintain each bag leak detection system according to the plan at all times. Each plan must address all of the items identified in paragraphs (d)(2)(i) through (vi) 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) Maintenance of the bag leak detection system including a routine maintenance schedule and spare parts inventory list.

(v) How the bag leak detection system output will be recorded and stored.

(vi) Procedures for determining what corrective actions are necessary in the event of a bag leak detection alarm as required in paragraph (d)(3) of this section.

(3) In the event that 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 corrective action as soon as practicable, but no later than 10 calendar days from the date of the alarm. You must record the date and time of each valid alarm, the time you initiated corrective action, the correction action taken, and the date on which corrective action was completed. Corrective actions may include, but are not limited to:

(i) Inspecting the bag house 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 department.

(v) Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system.

(vi) Shutting down the process producing the particulate emissions.

(e) You must make 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). You must repair any defect or deficiency in the capture system as soon as practicable, but no later than 90 days. You must record the date and results of each inspection and the date of repair of any defect or deficiency.

(f) You must install, operate, and maintain each CPMS or other measurement device according to your O&M plan. You must record all information needed to document conformance with these requirements.

(g) In the event of an exceedance of an established emissions limitation (including an operating limit), you must restore operation of the emissions source (including the control device and associated capture system) to its normal or usual manner or operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. 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 exceedance. You must record the date and time correction action was initiated, the correction action taken, and the date corrective action was completed.

(h) If you choose to comply with an emissions limit in §**63**.10895(c) using emissions averaging, you must calculate and record for each calendar month the pounds of PM or total metal HAP per ton of metal melted from the group of all metal melting furnaces at your foundry. You must calculate and record the weighted average pounds per ton emissions rate for the group of all metal melting furnaces at the foundry determined from the performance test procedures in §**63**.10898(d) and (e).

§ 63.10898 What are my performance test requirements?

(a) You must conduct a performance test to demonstrate initial compliance with the applicable emissions limits for each metal melting furnace or group of all metal melting furnaces that is subject to an emissions limit in §**63**.10895(c) and for each building or structure housing foundry operations that is subject to the opacity limit for fugitive emissions in §**63**.10895(e). You must conduct the test within 180 days of your compliance date and report the results in your notification of compliance status.

(1) If you own or operate an existing iron and steel foundry, you may choose to submit the results of a prior performance test for PM or total metal HAP that demonstrates compliance with the applicable emissions limit for a metal melting furnace or group of all metal melting furnaces provided the test was conducted within the last 5 years using the methods and procedures specified in this subpart and either no process changes have been made since the test, or you can demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance with the applicable emissions limit despite such process changes.

(2) If you own or operate an existing iron and steel foundry and you choose to submit the results of a prior performance test according to paragraph (a)(1) of this section, you must submit a written notification to the Administrator of your intent to use the previous test data no later than 60 days after your compliance date. The notification must contain a full copy of the performance test and contain information to demonstrate, if applicable, that either no process changes have been made since the test, or that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite such process changes.

(3) If you have an electric induction furnace equipped with an emissions control device at an existing foundry, you may use the test results from another electric induction furnace to demonstrate compliance with the applicable PM or total metal HAP emissions limit in §**63**.10895(c) provided the furnaces are similar with respect to the type of emission control device that is used, the composition of the scrap charged, furnace size, and furnace melting temperature.

(4) If you have an uncontrolled electric induction furnace at an existing foundry, you may use the test results from another electric induction furnace to demonstrate compliance with the applicable PM or total metal HAP emissions limit in §**63**.10895(c) provided the test results are prior to any control device and the electric induction furnaces are similar with respect to the composition of the scrap charged, furnace size, and furnace melting temperature.

(5) For electric induction furnaces that do not have emission capture systems, you may install a temporary enclosure for the purpose of representative sampling of emissions. A permanent enclosure and capture system is not required for the purpose of the performance test.

(b) You must conduct subsequent performance tests to demonstrate compliance with all applicable PM or total metal HAP emissions limits in §**63**.10895(c) for a metal melting furnace or group of all metal melting furnaces no less frequently than every 5 years and each time you elect to change an operating limit or make a process change likely to increase HAP emissions.

(c) You must conduct each performance test according to the requirements in §**63**.7(e)(1), Table 1 to this subpart, and paragraphs (d) through (g) of this section.

(d) To determine compliance with the applicable PM or total metal HAP emissions limit in §**63**.10895(c) for a metal melting furnace in a lb/ton of metal charged format, compute the process-weighted mass emissions (E^p) for each test run using Equation 1 of this section:

$$E_p = \frac{C \times Q \times T}{P \times K} \qquad (Eq.\ 1)$$

Where:

E_p= Process-weighted mass emissions rate of PM or total metal HAP, pounds of PM or total metal HAP per ton (lb/ton) of metal charged;

C = Concentration of PM or total metal HAP measured during performance test run, grains per dry standard cubic foot (gr/dscf);

Q = Volumetric flow rate of exhaust gas, dry standard cubic feet per hour (dscf/hr);

T = Total time during a test run that a sample is withdrawn from the stack during melt production cycle, hr;

P = Total amount of metal charged during the test run, tons; and

K = Conversion factor, 7,000 grains per pound.

(e) To determine compliance with the applicable emissions limit in §**63**.10895(c) for a group of all metal melting furnaces using emissions averaging,

(1) Determine and record the monthly average charge rate for each metal melting furnace at your iron and steel foundry for the previous calendar month; and

(2) Compute the mass-weighted PM or total metal HAP using Equation 2 of this section.

$$E_c = \frac{\sum_{i=1}^{n} \left(E_{pi} \times T_{ti}\right)}{\sum_{i=1}^{n} T_{ti}} \qquad (Eq.\ 2)$$

Where:

E_C= The mass-weighted PM or total metal HAP emissions for the group of all metal melting furnaces at the foundry, pounds of PM or total metal HAP per ton of metal charged;

E_{pi}= Process-weighted mass emissions of PM or total metal HAP for individual emission unit i as determined from the performance test and calculated using Equation 1 of this section, pounds of PM or total metal HAP per ton of metal charged;

T_{ti}= Total tons of metal charged for individual emission unit i for the calendar month prior to the performance test, tons; and

n = The total number of metal melting furnaces at the iron and steel foundry.

(3) For an uncontrolled electric induction furnace that is not equipped with a capture system and has not been previously tested for PM or total metal HAP, you may assume an emissions factor of 2 pounds per ton of PM or 0.13 pounds of total metal HAP per ton of metal melted in Equation 2 of this section instead of a measured test value. If the uncontrolled electric induction furnace is equipped with a capture system, you must use a measured test value.

(f) To determine compliance with the applicable PM or total metal HAP emissions limit for a metal melting furnace in §**63**.10895(c) when emissions from one or more regulated furnaces are combined with other non-regulated emissions sources, you may demonstrate compliance using the procedures in paragraphs (f)(1) through (3) of this section.

(1) Determine the PM or total metal HAP process-weighted mass emissions for each of the regulated streams prior to the combination with other exhaust streams or control device.

(2) 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 3 of this section.

$$\%\ \text{reduction} = \frac{E_i - E_o}{E_i} \times 100\% \qquad (\text{Eq. } 3)$$

Where:

E_i= Mass emissions rate of PM or total metal HAP at the control device inlet, lb/hr;

E_o= Mass emissions rate of PM or total metal HAP at the control device outlet, lb/hr.

(3) Meet the applicable emissions limit based on the calculated PM or total metal HAP process-weighted mass emissions for the regulated emissions source using Equation 4 of this section:

$$E_{p1,\ldots} E_{p1} \times \left(1 - \frac{\%\ \text{reduction}}{100}\right) \qquad (\text{Eq. } 4)$$

Where:

$E_{p1released}$= Calculated process-weighted mass emissions of PM (or total metal HAP) predicted to be released to the atmosphere from the regulated emissions source, pounds of PM or total metal HAP per ton of metal charged; and

E_{p1i}= Process-weighted mass emissions of PM (or total metal HAP) in the uncontrolled regulated exhaust stream, pounds of PM or total metal HAP per ton of metal charged.

(g) To determine compliance with an emissions limit for situations when multiple sources are controlled by a single control device, but only one source operates at a time or other situations that are not expressly considered in paragraphs (d) through (f) of this section, you must submit a site-specific test plan to the Administrator for approval according to the requirements in §**63**.7(c)(2) and (3).

(h) You must conduct each opacity test for fugitive emissions according to the requirements in §**63**.6(h)(5) and Table 1 to this subpart.

(i) You must conduct subsequent performance tests to demonstrate compliance with the opacity limit in §**63**.10895(e) no less frequently than every 6 months and each time you make a process change likely to increase fugitive emissions.

(j) In your performance test report, you must certify that the capture system operated normally during the performance test.

(k) You must establish operating limits for a new affected source during the initial performance test according to the requirements in Table 2 of this subpart.

(l) You may change the operating limits for a wet scrubber, electrostatic precipitator, or baghouse if you meet the requirements in paragraphs (l)(1) through (3) of this section.

(1) Submit a written notification to the Administrator of your plan to conduct a new performance test to revise the operating limit.

(2) Conduct a performance test to demonstrate compliance with the applicable emissions limitation in §**63**.10895(c).

(3) Establish revised operating limits according to the applicable procedures in Table 2 to this subpart.

§ 63.10899 What are my recordkeeping and reporting requirements?

(a) As required by §**63**.10(b)(1), you must maintain files of all information (including all reports and notifications) for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

(b) In addition to the records required by 40 CFR **63**.10, you must keep records of the information specified in paragraphs (b)(1) through (13) of this section.

(1) You must keep records of your written materials specifications according to §**63**.10885(a) and records that demonstrate compliance with the requirements for restricted metallic scrap in §**63**.10885(a)(1) and/or for the use of general scrap in §**63**.10885(a)(2) and for mercury in §**63**.10885(b)(1) through (3), as applicable. You must keep records documenting compliance with §**63**.10885(b)(4) for scrap that does not contain motor vehicle scrap.

(2) If you are subject to the requirements for a site-specific plan for mercury under §**63**.10885(b)(1), you must:

(i) Maintain records of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, and an estimate of the percent of mercury switches recovered; and

(ii) Submit semiannual reports of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and a certification that the recovered mercury switches were recycled at RCRA-permitted facilities. The semiannual reports must include a certification that you have conducted periodic inspections or taken other means of corroboration as required under §**63**.10885(b)(1)(ii)(C). You must identify which option in §**63**.10885(b) applies to each scrap provider, contract, or shipment. You may include this information in the semiannual compliance reports required under paragraph (c) of this section.

(3) If you are subject to the option for approved mercury programs under §**63**.10885(b)(2), you must maintain records identifying each scrap provider and documenting the scrap provider's participation in an approved mercury switch removal program. If your scrap provider is a broker, you must maintain records identifying each of the broker's scrap suppliers and documenting the scrap supplier's participation in an approved mercury switch removal program.

(4) You must keep records to document use of any binder chemical formulation that does not contain methanol as a specific ingredient of the catalyst formulation for each furfuryl alcohol warm box mold or core making line as required by §**63**.10886. These records must be the Material Safety Data Sheet (provided that it contains appropriate information), a certified product data sheet, or a manufacturer's hazardous air pollutant data sheet.

(5) You must keep records of the annual quantity and composition of each HAP-containing chemical binder or coating material used to make molds and cores. These records must be copies of purchasing records, Material Safety Data Sheets, or other documentation that provide information on the binder or coating materials used.

(6) You must keep records of monthly metal melt production for each calendar year.

(7) You must keep a copy of the operation and maintenance plan as required by §**63**.10896(a) and records that demonstrate compliance with plan requirements.

(8) If you use emissions averaging, you must keep records of the monthly metal melting rate for each furnace at your iron and steel foundry, and records of the calculated pounds of PM or total metal HAP per ton of metal melted for the group of all metal melting furnaces required by §**63**.10897(h).

(9) If applicable, you must keep records for bag leak detection systems as follows:

(i) Records of the bag leak detection system output;

(ii) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and

(iii) The date and time of all bag leak detection system alarms, and for each valid alarm, the time you initiated corrective action, the corrective action taken, and the date on which corrective action was completed.

(10) You must keep records of capture system inspections and repairs as required by §**63**.10897(e).

(11) You must keep records demonstrating conformance with your specifications for the operation of CPMS as required by §**63**.10897(f).

(12) You must keep records of corrective action(s) for exceedances and excursions as required by §**63**.10897(g).

(13) You must record the results of each inspection and maintenance required by §**63**.10897(a) for PM control devices in a logbook (written or electronic format). You must keep the logbook onsite and make the logbook available to the Administrator upon request. You must keep records of the information specified in paragraphs (b)(13)(i) through (iii) of this section.

(i) The date and time of each recorded action for a fabric filter, the results of each inspection, and the results of any maintenance performed on the bag filters.

(ii) The date and time of each recorded action for a wet or dry electrostatic precipitator (including ductwork), the results of each inspection, and the results of any maintenance performed for the electrostatic precipitator.

(iii) The date and time of each recorded action for a wet scrubber (including ductwork), the results of each inspection, and the results of any maintenance performed on the wet scrubber.

(c) You must submit semiannual compliance reports to the Administrator according to the requirements in §**63**.10(e). The reports must include, at a minimum, the following information as applicable:

(1) Summary information on the number, duration, and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective action taken;

(2) Summary information on the number, duration, and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other calibration checks, if applicable); and

(3) Summary information on any deviation from the pollution prevention management practices in §§**63**.10885 and **63**.10886 and the operation and maintenance requirements §**63**.10896 and the corrective action taken.

(d) You must submit written notification to the Administrator of the initial classification of your new or existing affected source as a large iron and steel facility as required in §**63**.10880(f) and (g), as applicable, and for any subsequent reclassification as required in §**63**.10881(d) or (e), as applicable.

§ 63.10900 What parts of the General Provisions apply to my large foundry?

(a) If you own or operate a new or existing affected source that is classified as a large foundry, you must comply with the requirements of the General Provisions (40 CFR part **63**, subpart A) according to Table 3 of this subpart.

(b) If you own or operator a new or existing affected source that is classified as a large foundry, your notification of compliance status required by §**63**.9(h) must include each applicable certification of compliance, signed by a responsible official, in Table 4 of this subpart.

Other Requirements and Information

§ 63.10905 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by EPA or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency 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 40 CFR part **63**, subpart E, the authorities contained in paragraph (c) of this section are retained by the EPA Administrator 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 (6) of this section.

(1) Approval of an alternative non-opacity emissions standard under 40 CFR **63**.6(g).

(2) Approval of an alternative opacity emissions standard under §**63**.6(h)(9).

(3) Approval of a major change to test methods under §**63**.7(e)(2)(ii) and (f). A “major change to test method” is defined in §**63**.90.

(4) Approval of a major change to monitoring under §**63**.8(f). A “major change to monitoring” under is defined in §**63**.90.

(5) Approval of a major change to recordkeeping and reporting under §**63**.10(f). A “major change to recordkeeping/reporting” is defined in §**63**.90.

(6) Approval of a local, State, or national mercury switch removal program under §**63**.10885(b)(2).

§ 63.10906 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, in §**63**.2, and in this section.

Annual metal melt capacity means the lower of the total metal melting furnace equipment melt rate capacity assuming 8,760 operating hours per year summed for all metal melting furnaces at the foundry or, if applicable, the maximum permitted metal melt production rate for the iron and steel foundry calculated on an annual basis. Unless otherwise specified in the permit, permitted metal melt production rates that are not specified on an annual basis must be annualized assuming 24 hours per day, 365 days per year of operation. If the permit limits the operating hours of the furnace(s) or foundry, then the permitted operating hours are used to annualize the maximum permitted metal melt production rate.

Annual metal melt production means the quantity of metal melted in a metal melting furnace or group of all metal melting furnaces at the iron and steel foundry in a given calendar year. For the purposes of this subpart, metal melt production is determined on the basis on the quantity of metal charged to each metal melting furnace; the sum of the metal melt production for each furnace in a given calendar year is the annual metal melt production of the foundry.

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.

Chlorinated plastics means solid polymeric materials that contain chlorine in the polymer chain, such as polyvinyl chloride (PVC) and PVC copolymers.

Control device means the air pollution control equipment used to remove particulate matter from the effluent gas stream generated by a metal melting furnace.

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), management practice, 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 management 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.

Exhaust stream means gases emitted from a process through a conveyance as defined in this subpart.

Foundry operations mean all process equipment and practices used to produce metal castings for shipment. *Foundry operations* include: Mold or core making and coating; scrap handling and preheating; metal melting and inoculation; pouring, cooling, and shakeout; shotblasting, grinding, and other metal finishing operations; and sand handling.

Free liquids means material that fails the paint filter liquids test by EPA Method 9095B, Revision 2, November 1994 (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* .

Fugitive emissions means any pollutant released to the atmosphere that is not discharged through a system of equipment that is specifically designed to capture pollutants at the source, convey them through ductwork, and exhaust them using forced ventilation. *Fugitive emissions* include pollutants released to the atmosphere through windows, doors, vents, or other building openings. *Fugitive emissions* also include pollutants released to the atmosphere through other general building ventilation or exhaust systems not specifically designed to capture pollutants at the source.

Furfuryl alcohol 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 furfuryl alcohol warm box system by the foundry industry.

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, operations that only produce non-commercial castings, and operations associated with nonferrous metal production are not included in this definition.

Large foundry means, for an existing affected source, an iron and steel foundry with an annual metal melt production greater than 20,000 tons. For a new affected source, *large foundry* means an iron and steel foundry with an annual metal melt capacity greater than 10,000 tons.

Mercury switch means each mercury-containing capsule or switch assembly that is part of a convenience light switch mechanism installed in a vehicle.

Metal charged means the quantity of scrap metal, pig iron, metal returns, alloy materials, and other solid forms of iron and steel placed into a metal melting furnace. Metal charged does not include the quantity of fluxing agents or, in the case of a cupola, the quantity of coke that is placed into the metal melting furnace.

Metal melting furnace means a cupola, electric arc furnace, electric induction furnace, or similar device 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 greensand molds or cores.

Motor vehicle means an automotive vehicle not operated on rails and usually is operated with rubber tires for use on highways.

Motor vehicle scrap means vehicle or automobile bodies, including automobile body hulks, that have been processed through a shredder. *Motor vehicle scrap* does not include automobile manufacturing bundles, or miscellaneous vehicle parts, such as wheels, bumpers, or other components that do not contain mercury switches.

Nonferrous metal means any pure metal other than iron or any metal alloy for which an element other than iron is its major constituent in percent by weight.

On blast means those periods of cupola operation when combustion (blast) air is introduced to the cupola furnace and the furnace is capable of producing molten metal. On blast conditions are characterized by both blast air introduction and molten metal production.

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 volatile impurities or other tramp materials by direct flame heating or similar means of heating. Scrap dryers, which solely remove moisture from metal scrap, are not considered to be scrap preheaters for purposes of this subpart.

Scrap provider means the person (including a broker) who contracts directly with an iron and steel foundry to provide motor vehicle scrap. Scrap processors such as shredder operators or vehicle dismantlers that do not sell scrap directly to a foundry are not *scrap providers* .

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.

Small foundry means, for an existing affected source, an iron and steel foundry that has an annual metal melt production of 20,000 tons or less. For a new affected source, *small foundry* means an iron and steel foundry that has an annual metal melt capacity of 10,000 tons or less.

Total metal HAP means, for the purposes of this subpart, the sum of the concentrations of compounds of antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, mercury, nickel, and selenium as measured by EPA Method 29 (40 CFR part 60, appendix A–8). Only the measured concentration of the listed analytes that are present at concentrations exceeding one-half the quantitation limit of the analytical method are to be used in the sum. If any of the analytes are not detected or are detected at concentrations less than one-half the quantitation limit of the analytical method, the concentration of those analytes will be assumed to be zero for the purposes of calculating the total metal HAP for this subpart.

Table 1 to Subpart ZZZZZ of Part 63—Performance Test Requirements for New and Existing Affected Sources Classified as Large Foundries

As required in §**63**.10898(c) and (h), you must conduct performance tests according to the test methods and procedures in the following table:

For. . .	You must. . .	According to the following requirements. . .
1. Each metal melting furnace subject to a PM or total metal HAP limit in §**63**.10895(c)	a. Select sampling port locations and the number of traverse points in each stack or duct using EPA Method 1 or 1A (40 CFR part 60, appendix A) b. Determine volumetric flow rate of the stack gas using Method 2, 2A, 2C, 2D, 2F, or 2G (40 CFR part 60, appendix A) c. Determine dry molecular weight of the stack gas using EPA Method 3, 3A, or 3B (40 CFR part 60, appendix A).[1] d. Measure moisture content of the stack gas using EPA Method 4 (40 CFR part 60, A) e. Determine PM concentration using EPA Method 5, 5B, 5D, 5F, or 5I, as applicable or total metal HAP concentration using EPA Method 29 (40 CFR part 60,	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. i. Collect a minimum sample volume of 60 dscf of gas during each PM sampling run. The PM concentration is determined using only the front-half (probe rinse and filter) of the PM catch. ii. For Method 29, only the measured concentration of the listed metal HAP analytes that are present at concentrations exceeding one-half the quantification limit of the analytical method are to be used in the sum. If any of the analytes are not detected or are detected at concentrations less than one-half the quantification limit of the analytical

	appendix A)	method, the concentration of those analytes is assumed to be zero for the purposes of calculating the total metal HAP.
		iii. A minimum of three valid test runs are needed to comprise a PM or total metal HAP performance test.
		iv. For cupola metal melting furnaces, sample PM or total metal HAP only during times when the cupola is on blast.
		v. For electric arc and electric induction metal melting furnaces, sample PM or total metal HAP only during normal melt production conditions, which may include, but are not limited to the following operations: Charging, melting, alloying, refining, slagging, and tapping.
		vi. Determine and record the total combined weight of tons of metal charged during the duration of each test run. You must compute the process-weighted mass emissions of PM according to Equation 1 of §**63**.10898(d) for an individual furnace or Equation 2 of §**63**.10898(e) for the group of all metal melting furnaces at the foundry.
2. Fugitive emissions from buildings or structures housing any iron and steel foundry emissions sources subject to opacity limit in §**63**.10895(e)	a. Using a certified observer, conduct each opacity test according to EPA Method 9 (40 CFR part 60, appendix A–4) and 40 CFR **63**.6(h)(5)	i. The certified observer may identify a limited number of openings or vents that appear to have the highest opacities and perform opacity observations on the identified openings or vents in lieu of performing observations for each opening or vent from the building or structure. Alternatively, a single opacity observation for the entire building or structure may be performed, if the fugitive release

		points afford such an observation.
		ii. During testing intervals when PM or total metal HAP performance tests, if applicable, are being conducted, conduct the opacity test such that the opacity observations are recorded during the PM or total metal HAP performance tests.
	b. As alternative to Method 9 performance test, conduct visible emissions test by Method 22 (40 CFR part 60, appendix A–7). The test is successful if no visible emissions are observed for 90 percent of the readings over 1 hour. If VE is observed greater than 10 percent of the time over 1 hour, then the facility must conduct another performance test as soon as possible, but no later than 15 calendar days after the Method 22 test, using Method 9 (40 CFR part 60, appendix A–4)	i. The observer may identify a limited number of openings or vents that appear to have the highest visible emissions and perform observations on the identified openings or vents in lieu of performing observations for each opening or vent from the building or structure. Alternatively, a single observation for the entire building or structure may be performed, if the fugitive release points afford such an observation. ii. During testing intervals when PM or total metal HAP performance tests, if applicable, are being conducted, conduct the visible emissions test such that the observations are recorded during the PM or total metal HAP performance tests.

[1]You may also use as an alternative to EPA Method 3B (40 CFR part 60, appendix A), the manual method for measuring the oxygen, carbon dioxide, and carbon monoxide content of exhaust gas, ANSI/ASME PTC 19.10–1981, "Flue and Exhaust Gas Analyses" (incorporated by reference—see §**63**.14).

Table 2 to Subpart ZZZZZ of Part 63—Procedures for Establishing Operating Limits for New Affected Sources Classified as Large Foundries

As required in §**63**.10898(k), you must establish operating limits using the procedures in the following table:

For . . .	You must . . .
1. Each wet scrubber subject to the operating limits in §**63**.10895(d)(1) for pressure drop and scrubber water flow rate.	Using the CPMS required in §**63**.10897(b), measure and record the pressure drop and scrubber water flow rate in intervals of no more than 15 minutes during each PM or total metal HAP test run. Compute and record the average pressure drop and average scrubber water flow rate for all the valid

	sampling runs in which the applicable emissions limit is met.
2. Each electrostatic precipitator subject to operating limits in §**63**.10895(d)(2) for voltage and secondary current (or total power input).	Using the CPMS required in §**63**.10897(c), measure and record voltage and secondary current (or total power input) in intervals of no more than 15 minutes during each PM or total metal HAP test run. Compute and record the minimum hourly average voltage and secondary current (or total power input) from all the readings for each valid sampling run in which the applicable emissions limit is met.

Table 3 to Subpart ZZZZZ of Part 63—Applicability of General Provisions to New and Existing Affected Sources Classified as Large Foundries

As required in §**63**.10900(a), you must meet each requirement in the following table that applies to you:

Citation	Subject	Applies to large foundry?	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)(i)–(j)	Compliance extension and Presidential compliance exemption	Yes.	
63.7(a)(3), (b)–(h)	Performance testing requirements	Yes.	
63.7(a)(1)–(a)(2)	Applicability and performance test dates	No	Subpart **ZZZZZ** specifies applicability and performance test dates.
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.	
63.8(a)(4)	Additional monitoring requirements for	No.	

	control devices in §**63**.11		
63.8(c)(4)	Continuous monitoring system (CMS) requirements	No.	
63.8(c)(5)	Continuous opacity monitoring system (COMS) minimum procedures	No.	
63.8(g)(5)	Data reduction	No.	
63.9	Notification requirements	Yes.	
63.10(a), (b)(1)–(b)(2)(xii) –(b)(2)(xiv), (b)(3), (d)(1)–(2), (e)(1)–(2), (f)	Recordkeeping and reporting requirements	Yes.	
63.10(c)(1)–(6), (c)(9)–(15)	Additional records for continuous monitoring systems	No.	
63.10(c)(7)–(8)	Records of excess emissions and parameter monitoring exceedances for CMS	Yes.	
63.10(d)(3)	Reporting opacity or visible emissions observations	Yes.	
63.10(e)(3)	Excess emissions reports	Yes.	
63.10(e)(4)	Reporting COMS data	No.	
63.11	Control device requirements	No.	
63.12	State authority and delegations	Yes.	
63.13–**63**.16	Addresses of State air pollution control agencies and EPA regional offices. Incorporation by reference. Availability of information and confidentiality. Performance track provisions	Yes.	

Table 4 to Subpart ZZZZZ of Part 63—Compliance Certifications for New and Existing Affected Sources Classified as Large Iron and Steel Foundries

As required by §**63**.10900(b), your notification of compliance status must include certifications of compliance according to the following table:

For. . .	Your notification of compliance status required by §63.9(h) must include this certification of compliance, signed by a responsible official:
Each new or existing affected source classified as a large	"This facility has prepared, and will operate by, written material specifications for metallic scrap according to

foundry and subject to scrap management requirements in §**63**.10885(a)(1) and/or (2)	§**63**.10885(a)(1)" and/or "This facility has prepared, and will operate by, written material specifications for general iron and steel scrap according to §**63**.10885(a)(2)."
Each new or existing affected source classified as a large foundry and subject to mercury switch removal requirements in §**63**.10885(b)	"This facility has prepared, and will operate by, written material specifications for the removal of mercury switches and a site-specific plan implementing the material specifications according to §**63**.10885(b)(1)" and/or "This facility participates in and purchases motor vehicles scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the EPA Administrator according to §**63**.10885(b)(2) and have prepared a plan for participation in the EPA approved program according to §**63**.10885(b)(2)(iv)" and/or "The only materials from motor vehicles in the scrap charged to a metal melting furnace at this facility are materials recovered for their specialty alloy content in accordance with §**63**.10885(b)(3) which are not reasonably expected to contain mercury switches" and/or "This facility complies with the requirements for scrap that does not contain motor vehicle scrap in accordance with §**63**.10885(b)(4)."
Each new or existing affected source classified as a large foundry and subject to §**63**.10886	"This facility complies with the no methanol requirement for the catalyst portion of each binder chemical formulation for a furfuryl alcohol warm box mold or core making line according to §**63**.10886."
Each new or existing affected source classified as a large foundry and subject to §**63**.10895(b)	"This facility operates a capture and collection system for each emissions source subject to this subpart according to §**63**.10895(b)."
Each existing affected source classified as a large foundry and subject to §**63**.10895(c)(1)	"This facility complies with the PM or total metal HAP emissions limit in §**63**.10895(c) for each metal melting furnace or group of all metal melting furnaces based on a previous performance test in accordance with §**63**.10898(a)(1)."
Each new or existing affected source classified as a large foundry and subject to §**63**.10896(a)	"This facility has prepared and will operate by an operation and maintenance plan according to §**63**.10896(a)."
Each new or existing (if applicable) affected source classified as a large foundry and subject to §**63**.10897(d)	"This facility has prepared and will operate by a site-specific monitoring plan for each bag leak detection system and submitted the plan to the Administrator for approval according to §**63**.10897(d)(2)."

Indiana Department of Environmental Management
Office of Air Quality

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

Source Description and Location

Source Name:	**Interstate Castings**
Source Location:	**3823 Massachusetts Avenue, Indianapolis, Indiana 46218**
County:	**Marion**
SIC Code:	**3321 (Gray and Ductile Iron Foundries)**
Operation Permit No.:	**F 097-18317-00063**
Operation Permit Issuance Date:	**April 16, 2007**
Significant Permit Revision No.:	**097-31761-00063**
Permit Reviewer:	**Bruce Farrar**

On April 20, 2012, the Office of Air Quality (OAQ) received an application from Interstate Castings related to a modification to an existing gray and ductile iron castings manufacturing plant.

Existing Approvals

The source was issued FESOP Renewal No. F097-18317-00063 on April 16, 2007. The source has since received the following approval:

(a) First Administrative Amendment No. 097-25719-00063, issued on January 14, 2008; and

(b) Minor Permit Revision No. 097-27070-00063, issued on December 19, 2008; and

(c) Second Administrative Amendment No. 097-27676-00063, issued on May 21, 2009.

County Attainment Status

The source is located in Marion County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Attainment effective February 18, 2000, for the part of the city of Indianapolis bounded by 11th Street on the north; Capitol Avenue on the west; Georgia Street on the south; and Delaware Street on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of Indianapolis and Marion County.
O_3	Attainment effective November 8, 2007, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Attainment effective July 10, 2000, for the part of Franklin Township bounded by Thompson Road on the south; Emerson Avenue on the west; Five Points Road on the east; and Troy Avenue on the north. Attainment effective July 10, 2000, for the part of Wayne Township bounded by Rockville Road on the north; Girls School Road on the east; Washington Street on the south; and Bridgeport Road on the west. The remainder of the county is not designated.
[1]Attainment effective October 18, 2000, for the 1-hour ozone standard for the Indianapolis area, including Marion County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X*. The 1-hour designation was revoked effective June 15, 2005. Basic nonattainment designation effective federally April 5, 2005, for PM2.5.	

(a) Ozone Standards
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 and NOx emissions are considered when evaluating the rule applicability relating to ozone. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
Marion County has been classified as nonattainment for $PM_{2.5}$ in 70 FR 943 dated January 5, 2005. On May 8, 2008, U.S. EPA promulgated specific New Source Review rules for $PM_{2.5}$ emissions. These rules became effective on July 15, 2008. Therefore, direct $PM_{2.5}$ and SO_2 emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.

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

Fugitive Emissions

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 and 326 IAC 2-7. Therefore, fugitive emissions are counted toward the determination of PSD and Part 70 Permit applicability.

Status of the Existing Source

The table below summarizes the potential to emit of the entire source, prior to the proposed revision, after consideration of all enforceable limits established in the effective permits:

Process/Emission Unit	Potential To Emit of the Entire Source Prior to Revision (tons/year)								
	PM	PM10 *	PM2.5 **	SO_2	NO_X	VOC	CO	Total HAPs	Highest Single HAP
Furnaces (EU-01) - Stack B	6.7(1)	6.4(1)	6.4(1)	0	0	0	0	19.96	3.31(4)
Furnaces (EU-01) - Not Captured	0.1	0.1	0.1	0	0	0	0		
Charge Handling (EU-02)	6.0(1)	5.4(1)	5.4(1)	0	0	0	0		
Preheater (EU-03)	0.83	1.24	1.24	0.07	10.9	0.60	9.20		
Inoculation (EU-04)	18.0(1)	27(1)	27(1)	0	0	0	0		
Shakeout, Casting Cleaning, Sand Handling (EU-06A, EU-06B, EU-06C)									
Stack A - Emissions	5.22(2)	1.31(2)	1.31(2)	0	0	26.5	0		
Emissions Not Captured	5.27	0.88	0.88	0	0	0.26	0(3)		
Pouring/Cooling (EU-05)	42.0(1)	30.9(1)	30.9(1)	0.44	0.22	(6)	60		
Core Oil Core Making (EU-08)	1.31(5)	0.29(5)	0.29(5)	0	0	16.3	0		
Redford Shell Core Machines (EU-09A, EU-09B)	0.22(5)	0.05(5)	0.05(5)	0	0	0.04	0		
Air Set Core Making (EU-07)	8.10(5	1.82(5)	1.82(5)	0	0	13.6	0		
Airset mechanical sand reclamation unit (EU-10)	3.75	3.75	3.75	0	0	0	0	0	0
Insignificant									
Wood Working	0.6	0.6	0.6	0	0	0	0		
Paved Roads	0.1	0.01	0.01						
Natural Gas Combustion	0.23	0.23	0.23	0.02	3.08	0.17	2.59	0	0
Total PTE of Entire Source	**98.45**	**79.9**	**79.9**	**0.53**	**14.2**	**57.4**	**71.8**	**< 25.0**	**< 10.0**
Title V Major Source Thresholds	NA	100	100	100	100	100	100	25	10
PSD Major Source Thresholds	100	100	NA	100	100	100	100	NA	NA
Nonattainment NSR Major Source Thresholds	NA	NA	100	NA	NA	NA	NA	NA	NA

negl. = negligible
These emissions are based upon MPR No.: 097-27070-00063, issued on December 19, 2008.
* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".
**Direct PM2.5 emissions are assumed to be equal to PM10 emissions.

(1) PTE based on 20,000 tons of metal melted per 12 month period, (20,000 tons of metal melted is equivalent to 4,000 hours of operation at 5 tons per hour).
(2) PTE based on 99% capture efficiency, FIRE 6.25 emission factors and 20,000 tons of metal melted per 12 month period.
(3) The CO emissions were accounted for in the pouring and cooling calculations.
(4) PTE for Toluene was based on 20,000 tons of metal melted per 12 month period and emissions factors obtained from the Speciate V3.2 Database and the September 2007 stack test data.
(5) PTE based on sand usage limits per 12 month period.
(6) Pouring/Cooling (EU-05) emissions are included as Stack A emissions for the purposes of this review.

(a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no attainment 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(ff)(1).

(b) This existing source is not a major stationary source under Emission Offset (326 IAC 2-3), because no nonattainment regulated pollutant is emitted at a rate of 100 tons per year or more.

(c) This existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because the Permittee has accepted limits on HAPs emissions to less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

Description of Proposed Revision

The Office of Air Quality (OAQ) has reviewed an application, submitted by Interstate Castings, Inc. on April 20, 2012, requesting the following:

(a) To delete the testing requirement for the charge handling system. The charge handling system uses no control and the original requirement for the test was to confirm the PM and PM10 emissions (stack test conducted 18-21 September 2007). IDEM, OAQ Compliance section has agreed to the request. However, any change in the melting operation may require retesting. *This is a Title I change.*

(b) To replace baghouse CE-A and Cyclone CE-C with a new baghouse that will be identified as CE-A controlling particulate emissions for the Shakeout, Casting Cleaning, Sand Handling operation (EU-06A, EU-06B, EU-06C). *This is a Title I change.*

(c) To increase the PM, PM10 and PM2.5 limits for the Shakeout, Casting Cleaning, Sand Handling operation (EU-06A, EU-06B, EU-06C) controlled by the baghouse CE-A. PM emission limits will increase from 5.22 tons/year to 6.75 tons/year. PM10 and PM2.5 emission limits will increase from 1.31 tons/year to 2.62 tons/year. This will change will not increase the PM, PM10 or PM2.5 source wide limits to over 100 tons per year. *This is a Title I change.*

(d) To replace the B&P auto mold machine, this is included in emission unit EU-06C sand handling operation, with a like kind replacement. This replacement was previously approved in MPR 097-27070-00063 issued on December 19, 2008, however, the unit was not installed. The source has now decided to install the replacement.

Upon review of the permit, IDEM OAQ determined that the following additional revisions were required.

(d) Starting July 1, 2011, (pursuant to 326 IAC 2-7-1(39)) greenhouse gases (GHGs) emissions are subject to regulation at a source with a potential to emit 100,000 tons per year or more of CO2 equivalent emissions (CO2e). Therefore, CO2e emissions have been calculated for this source (see TSD Appendix A.1 for detailed calculations). Based on the calculations, the unlimited potential to emit greenhouse gases from the entire source is less than 17,000 tons, which is less than 100,000 tons of CO2e per year. No change has been made to the permit as a result of this review. *This is a Title I change.*

(e) The insignificant natural gas combustion calculation have been revised to reflect PM emission factor as filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.

(f) The provisions of 40 CFR 63, Subpart ZZZZZ (5Z) have been added as section E.1 to this permit. In FESOP Minor Permit Revision 097-27070-00063 issued December 19, 2008, the source requested that the applicable provisions of 40 CFR 63.10880, Subpart ZZZZZ not be included in the permit, because the first significant compliance date for this source is in calendar year 2009. *This is a Title I change.*

(g) Language in the permit has been updated to reflect current models, as described "Proposed Changes" section of this TSD.

The following is a list of the modified emission unit and pollution control device:

Shakeout Operations, collectively identified as EU-06A, where the molding sand is separated from the casting by mechanical shaking. These units were installed in 1972, approved for modification in 2012, and have a maximum throughput of 5 tons of metal per hour. Emissions are collected by hoods located over the shakeout area and controlled by a dust collector, identified as CE-A; exhausting through stack A.

Enforcement Issues

There are no pending enforcement actions related to this revision.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – FESOP Significant Permit Revision

This FESOP is being revised through a FESOP Significant Permit Revision:

(a) pursuant to 326 IAC 2-8-11.1(f)(1)(I), because the revision involves a modification that removes or reduces compliance monitoring, testing, record keeping, reporting, or its frequency.

(b) pursuant to 326 IAC 2-8-11.1(g), because the revision involves a modification that require an adjustment to the FESOP emission limitations shall be required to be reviewed in accordance with the procedures in subsection 326 IAC 2-8-11.1(f).

PTE of the Entire Source After Issuance of the FESOP Revision

The table below summarizes the potential to emit of the entire source reflecting adjustment of existing limits, with updated emissions shown as **bold** values and previous emissions shown as ~~strikethrough~~ values.

	Potential To Emit of the Entire Source to accommodate the Proposed Revision (tons/year)									
Process/Emission Unit	PM	PM10*	PM2.5**	SO_2	NO_X	VOC	CO	**GHGs as CO_2e*** **	Total HAPs	Highest Single HAP
Furnaces (EU-01) - Stack B	6.7[1]	6.4[1]	6.4[1]	0	0	0	0	**12,961**	19.96	3.31[4]
Furnaces (EU-01) - Not Captured	0.1	0.1	0.1	0	0	0	0			
Charge Handling (EU-02)	6.0[1]	5.4[1]	5.4[1]	0	0	0	0			
Preheater (EU-03)	~~0.83~~ **0.2**	~~1.24~~ **1.22**	~~1.24~~ **1.22**	~~0.07~~ **0.06**	~~10.9~~ **10.74**	0.60	~~9.20~~ **9.02**			
Inoculation (EU-04)	18.0[1]	27[1]	27[1]	0	0	0	0			
Shakeout, Casting Cleaning, Sand Handling (EU-06A, EU-06B, EU-06C)	~~5.22~~[2] **6.75**	~~1.31~~[2] **2.62**	~~1.31~~[2] **2.62**	0	0	26.5	0			
Stack A - Emissions	5.27	0.88	0.88	0	0	0.26	0[3]			
Emissions Not Captured										
Pouring/Cooling (EU-05)	42.0[1]	30.9[1]	30.9[1]	0.44	0.22	~~[6]~~ **3.07**	60			
Core Oil Core Making (EU-08)	1.31[5]	0.29[5]	0.29[5]	0	0	16.3	0			
Redford Shell Core Machines (EU-09A, EU-09B)	0.22[5]	0.05[5]	0.05[5]	0	0	0.04	0			
Air Set Core Making (EU-07)	8.10[5]	1.82[5]	1.82[5]	0	0	13.6	0			
Airset mechanical sand reclamation unit (EU-10)	3.75	3.75	3.75	0	0	0	0		0	0
Insignificant										
Wood Working	0.6	0.6	0.6	0	0	0	0			
Paved Roads	0.1	0.01	0.01							
Natural Gas Combustion	~~0.23~~ **0.06**	0.23	0.23	0.02	~~3.08~~ **3.02**	0.17	~~2.59~~ **2.54**	**3,650**	0	0
Total PTE of Entire Source	~~**98.45**~~ **99.11**	~~**79.9**~~ **81.28**	~~**79.9**~~ **81.28**	**0.52**	~~**14.2**~~ **13.98**	~~**57.4**~~ **59.98**	~~**71.8**~~ **71.56**	**16,611**	**< 25.0**	**< 10.0**
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds	100	100	NA	100	100	100	100	100,000	NA	NA

Process/Emission Unit	Potential To Emit of the Entire Source to accommodate the Proposed Revision (tons/year)									
	PM	PM10*	PM2.5**	SO_2	NO_X	VOC	CO	**GHGs as CO_2e*** **	Total HAPs	Highest Single HAP
Nonattainment NSR Major Source Thresholds	NA	NA	100	NA	NA	NA	NA	NA	NA	NA

negl. = negligible
These emissions are based upon MPR No.: 097-27070-00063, issued on December 19, 2008.
* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".
**Direct PM2.5 emissions are assumed to be equal to PM10 emissions.
*****The 100,000 CO_2e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.**

(1) PTE based on 20,000 tons of metal melted per 12 month period, (20,000 tons of metal melted is equivalent to 4,000 hours of operation at 5 tons per hour).
(2) PTE based on 99% capture efficiency, FIRE 6.25 emission factors and 20,000 tons of metal melted per 12 month period.
(3) The CO emissions were accounted for in the pouring and cooling calculations.
(4) PTE for Toluene was based on 20,000 tons of metal melted per 12 month period and emissions factors obtained from the Speciate V3.2 Database and the September 2007 stack test data.
(5) PTE based on sand usage limits per 12 month period.
~~(6) Pouring/Cooling (EU-05) emissions are included as Stack A emissions for the purposes of this review.~~

The table below summarizes the potential to emit of the entire source after issuance of this revision, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this FESOP permit revision, and only to the extent that the effect of the control equipment is made practically enforceable in the permit. (Note: the table below was generated from the above table, with bold text un-bolded and strikethrough text deleted)

Process/Emission Unit	Potential To Emit of the Entire Source After Issuance of Revision (tons/year)									
	PM	PM10*	PM2.5**	SO_2	NO_X	VOC	CO	GHGs as CO_2e***	Total HAPs	Highest Single HAP
Furnaces (EU-01) - Stack B Furnaces (EU-01) - Not Captured Charge Handling (EU-02) Preheater (EU-03) Inoculation (EU-04)	6.7(1) 0.1 6.0(1) 0.20 18.0(1)	6.4(1) 0.1 5.4(1) 1.24 27(1)	6.4(1) 0.1 5.4(1) 1.24 27(1)	0 0 0 0.07 0	0 0 0 10.9 0	0 0 0 0.60 0	0 0 0 9.20 0	12,961	19.96	3.31(4)
Shakeout, Casting Cleaning, Sand Handling (EU-06A, EU-06B, EU-06C) Stack A - Emissions Emissions Not Captured	6.75(2) 5.27	2.62(2) 0.88	2.62(2) 0.88	0 0	0 0	26.5 0.26	0 0(3)			
Pouring/Cooling (EU-05) Core Oil Core Making (EU-08) Redford Shell Core Machines (EU-09A, EU-09B) Air Set Core Making (EU-07)	42.0(1) 1.31(5) 0.22(5) 8.10(5	30.9(1) 0.29(5) 0.05(5) 1.82(5)	30.9(1) 0.29(5) 0.05(5) 1.82(5)	0.44 0 0 0	0.22 0 0 0	3.07 16.3 0.04 13.6	60 0 0 0			
Airset mechanical sand reclamation unit (EU-10)	3.75	3.75	3.75	0	0	0	0		0	0
Insignificant Wood Working Paved Roads Natural Gas Combustion	0.6 0.1 0.06	0.6 0.01 0.23	0.6 0.01 0.23	0 0.02	0 3.08	0 0.17	0 2.59	3,634	0	0
Total PTE of Entire Source	**99.11**	**81.28**	**81.28**	**0.52**	**13.98**	**59.98**	**71.56**	**16,611**	**< 25.0**	**< 10.0**
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,00	25	10

Process/Emission Unit	Potential To Emit of the Entire Source After Issuance of Revision (tons/year)									
	PM	PM10*	PM2.5**	SO_2	NO_X	VOC	CO	GHGs as CO_2e***	Total HAPs	Highest Single HAP
PSD Major Source Thresholds	100	100	NA	100	100	100	100	100,000	NA	NA
Nonattainment NSR Major Source Thresholds	NA	NA	100	NA	NA	NA	NA	NA	NA	NA

negl. = negligible
These emissions are based upon MPR No.: 097-27070-00063, issued on December 19, 2008.
* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".
**Direct PM2.5 emissions are assumed to be equal to PM10 emissions.
***The 100,000 CO_2e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.

(1) PTE based on 20,000 tons of metal melted per 12 month period, (20,000 tons of metal melted is equivalent to 4,000 hours of operation at 5 tons per hour).
(2) PTE based on 99% capture efficiency, FIRE 6.25 emission factors and 20,000 tons of metal melted per 12 month period.
(3) The CO emissions were accounted for in the pouring and cooling calculations.
(4) PTE for Toluene was based on 20,000 tons of metal melted per 12 month period and emissions factors obtained from the Speciate V3.2 Database and the September 2007 stack test data.
(5) PTE based on sand usage limits per 12 month period.

(a) FESOP Status
This revision to an existing Title V minor stationary source will not change the minor status, because the potential to emit criteria pollutants from the entire source will still be limited to less than the Title V major source threshold levels. Therefore, the source will still be subject to the provisions of 326 IAC 2-8 (FESOP).

(b) PSD Minor Source
This modification to an existing PSD minor stationary source will not change the PSD minor status, because the potential to emit of all attainment regulated pollutants from the entire source will continue to be less than the PSD major source threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

(c) Emission Offset Minor Source
This modification to an existing Emission Offset minor stationary source will not change the Emission Offset minor status, because the potential to emit of all nonattainment regulated pollutants from the entire source will continue to be less than the Emission Offset major source threshold levels. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

(a) The requirements of the Standards of Performance for Calciners and Dryers in Mineral Industries (40 CFR 60 Subpart UUU (3U)) are not included in the permit, because the sand reclaim system, is entirely mechanical and has no thermal component.

(b) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included for this proposed revision.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

(c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Iron and Steel Foundries (40 CFR 63 Subpart EEEEE (5E) (326 IAC 20-92)) are not included

in the permit, since this source is not a major source of HAPs.

(d) This source is subject to the National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources (40 CFR 63, Subpart ZZZZZ (5Z)), because the source operates an iron and steel foundry that is an area source of hazardous air pollutant (HAP) emissions and is classified as a small foundry because annual metal melt production is less than 20,000 tons per year.

The existing electric induction furnaces, collectively identified as EU-01, process steel alloy or ducite iron are still subject to this rule. Because the source is classified as a small foundry there is no testing requirement.

Applicable portions of the NESHAP are the following:

(1) 40 CFR 63.10880 (a), (b,) (e) and (f)
(2) 40 CFR 63.10881(a) and (d)
(3) 40 CFR 63.10885
(4) 40 CFR 63.10886
(5) 40 CFR 63.10890
(6) 40 CFR 63.10905
(7) 40 CFR 63.10906

The requirements of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the source except as otherwise specified in 40 CFR 63, Subpart ZZZZZZ.

(e) The requirements of the National Emission Standards for Hazardous Air Pollutants for Primary Copper Smelting Area Sources, (40 CFR 63 Subpart EEEEEE (6E)), are not included in the permit, since this source is not a primary copper smelter.

(f) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Copper Smelting Area Sources (40 CFR 63 Subpart FFFFFF (6F)) are not included in the permit, since this source is not a secondary copper smelter.

(g) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Primary Nonferrous Metals Area Sources—Zinc, Cadmium, and Beryllium (40 CFR 63 Subpart GGGGGG (6G)), are not included in the permit, since this source is not a primary zinc production facility or primary beryllium production facility.

(h) The requirements National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources (40 CFR 63 Subpart JJJJJJ (6J)) are not included in the permit, because this source uses natural gas for its boiler.

(i) The requirements of the National Emission Standards for Hazardous Air Pollutants for Secondary Nonferrous Metals Processing Area Sources (40 CFR 63 Subpart TTTTTT (6T)) are not included in the permit, since this source is not a secondary nonferrous metals processing facility.

(j) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included for this proposed revision.

<u>Compliance Assurance Monitoring (CAM)</u>

(k) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the potential to emit of the source is limited to less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability Determination

The following state rules are applicable to the proposed revision:

(a) 326 IAC 2-8-4 (FESOP)
This revision to an existing Title V minor stationary source will not change the minor status, because the potential to emit criteria pollutants from the entire source will still be limited to less than the Title V major source threshold levels. Therefore, the source will still be subject to the provisions of 326 IAC 2-8 (FESOP). See PTE of the Entire Source After Issuance of the FESOP Revision Section above.

(b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
This modification to an existing PSD minor stationary source will not change the PSD minor status, because the potential to emit of all attainment regulated pollutants from the entire source will continue to be less than the PSD major source threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply. See PTE of the Entire Source After Issuance of the FESOP Revision Section above.

(c) 326 IAC 2-3 (Emission Offset) and (for PM2.5 nonattainment counties) 326 IAC 2-1.1-5 (Nonattainment New Source Review)
This modification to an existing Emission Offset minor stationary source will not change the Emission Offset minor status, because the potential to emit of all nonattainment regulated pollutants from the entire source will continue to be less than the Emission Offset major source threshold levels. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply. See PTE of the Entire Source After Issuance of the FESOP Revision Section above.

This modification to an existing minor stationary source under 326 IAC 2-1.1-5 (Nonattainment New Source Review) will not change the minor status, because the potential to emit of PM2.5 from the entire source will continue to be less than 100 tons per year. Therefore, pursuant to 326 IAC 2-1.1-5, the Nonattainment New Source Review requirements do not apply. See PTE of the Entire Source After Issuance of the FESOP Revision Section above.

(d) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The proposed revision is not subject to the requirements of 326 IAC 2-4.1, since the limited potential to emit of HAPs will remain less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs.

(e) 326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

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

(1) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(2) 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.

(g) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.

(h) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source will remain subject to the requirements of 326 IAC 6-5, because the source continues to have potential fugitive particulate emissions greater than 25 tons per year. Pursuant to 326 IAC 6-5, fugitive particulate matter emissions shall be controlled according to the Fugitive Dust Control Plan, which is included as Attachment A to the permit.

(i) 326 IAC 20 (Hazardous Air Pollutants)
See Federal Rule Applicability Section of this TSD.

Compliance Determination, Monitoring and Testing Requirements

The existing compliance requirements will change as a result of this revision. The source shall continue to comply with the applicable requirements and permit conditions as contained in FESOP No: 097-27676-00063, issued on May 21, 2009, except for the testing requirements for charge handling system that has been deleted.

Proposed Changes

(a) The following changes listed below are due to the proposed revision. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text:

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

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

(a) Melt Operations, installed in 1972, consisting of the following:

(1) Two (2) electric induction furnaces, collectively identified as EU-01, with emissions collected by a canopy hood located directly over the furnaces and controlled by a settling tank followed by a cyclone which exhausts through one stack identified as stack B. Only one furnace can be operated at any time because there is only one transformer to supply electrical energy;

Under 40 CFR 63, Subpart ZZZZZ (5Z), this unit is considered an affected source/facility.

***

(c) Shakeout Operations, collectively identified as EU-06A, where the molding sand is separated from the casting by mechanical shaking. These units were installed in 1972 and have a maximum throughput of 5 tons of metal per hour. Emissions are collected by hoods located over the shakeout area and controlled by ~~a cyclone, identified as CE-C, in series with~~ a dust collector, identified as CE-A**, approved for modification in 2012**, exhausting through stack A.

(d) Casting Cleaning Operations, collectively identified as EU-06B, with a maximum throughput of 5 tons of metal per hour, consisting of the following:

(1) One (1) table blast installed in 1981;

(2) One (1) shot blast machine installed in June 1960;

(3) Five (5) grinders installed in 1960; and

(4) One (1) cutoff saw installed in 1981.

Emissions are collected by various hoods located throughout the casting cleaning operation and are controlled by a dust collector, identified as CE-A**, approved for modification in 2012**, which exhausts through stack A.

(e) Sand Handling Operations, collectively identified as EU-06C, installed prior to 1967 and modified in 1998 and in 2000, with a maximum capacity of 20.63 tons of sand per hour, consisting of the following:

(1) One (1) sand muller;

(2) Thirteen (13) hopper stations;

(3) One (1) sand elevator;

(4) One (1) sand tank;

(5) One (1) sand cooler;

(6) Seven (7) belts;

(7) One (1) molding line consisting of a B & P 16 X 20 mold machine, ~~approved to construct in 2008~~ **approved for construction in 2012**, with a maximum production capacity of 80 molds per hour, each mold weighing 140 pounds;

(8) One (1) molding line consisting of a Sinto FB03 20 X 24 mold machine, constructed in 1998, with a maximum production capacity of 80 molds per hour, each mold weighing 240 pounds; and

(9) Five (5) manual mold machines, consisting of one (1) squeezer mold machine, two (2) PinLift mold machines, and two (2) RotoLift mold machines, constructed prior to 1967 and modified in 1998 and 2002**.**

Emissions are collected by various hoods located throughout the sand handling process line and are controlled by a dust collector, identified as CE-A**, approved for modification in 2012**, which exhausts through stack A.

SECTION D.1 FACILITY OPERATION CONDITIONS

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

(a) Melt Operations, installed in 1972, consisting of the following:

(1) Two (2) electric induction furnaces, collectively identified as EU-01, with emissions collected by a canopy hood located directly over the furnaces and controlled by a settling tank followed by a cyclone which exhausts through one stack identified as stack B. Only one furnace can be operated at any time because there is only one transformer to supply electrical energy;

Under 40 CFR 63, Subpart ZZZZZ (5Z), this unit is considered an affected source/facility.

***

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

***

D.1.2 Particulate Matter (PM10) **and PM2.5** [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 2-8-4, the PM10 **and PM2.5** emissions from the melt operations are limited as follows:

(a) The throughput of metal to the two (2) electric induction furnaces (EU-01), charge handling (EU-02), and the reaction/holding ladle (EU-04) shall each be limited to less than 20,000 tons per twelve consecutive month period with compliance determined at the end of each month.

(b) The combined PM10 emissions from the two (2) electric induction furnaces (EU-01) exhausting through Stack B shall not exceed 0.64 lbs PM10/ton metal. For the purposes of demonstrating compliance with this condition the filterable and condensable fractions of PM10 shall be counted.

(c) The combined PM10 emissions from the charge handling (EU-02) and reaction/holding ladle (EU-04) processes exhausting through stacks V11 and V12 shall not exceed 3.24 lbs PM10/ton metal. For the purposes of demonstrating compliance with this condition the filterable and condensable fractions of PM10 shall be counted.

(d) The combined PM2.5 emissions from the two (2) electric induction furnaces (EU-01) exhausting through Stack B shall not exceed 0.64 lbs PM2.5/ton metal. For the purposes of demonstrating compliance with this condition the filterable and condensable fractions of PM2.5 shall be counted.

(e) The combined PM2.5 emissions from the charge handling (EU-02) and reaction/holding ladle (EU-04) processes exhausting through stacks V11 and V12 shall not exceed 3.24 lbs PM2.5/ton metal. For the purposes of demonstrating compliance with this condition the filterable and condensable fractions of PM2.5 shall be counted.

Combined with the PM10 **and PM2.5** emissions from other emission units, the PM10 **and PM2.5** emissions from the entire source are limited to less than 100 tons per year. Therefore, compliance with this Condition and Conditions D.2.2, D.3.2, and D.4.1 makes the Part 70 Operating Permit requirements (326 IAC 2-7) and 326 IAC 2-2 (PSD) not applicable.

D.1.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan~~, in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for the two (2) electric induction furnaces and the associated Settling Tank and Cyclone. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

***

D.1.7 Testing Requirements [326 IAC 2-8-4(3)]

(a) Within twelve (12) months after the issuance of this permit and in order to demonstrate

compliance with Condition D.1.2 and D.1.3, the Permittee shall perform PM/PM10**/PM2.5** testing on one (1) of the two (2) identical electric induction furnaces ~~and the charge handling system, identified as EU-02~~ utilizing methods as approved by the Commissioner~~. PM10 shall include filterable and condensable PM10. This test shall be repeated~~ at least once every five (5) years from the date of the most recent valid compliance demonstration. ~~Testing shall be conducted in accordance with Section C - Performance Testing.~~ **PM10/PM2.5 shall include filterable and condensable PM10/PM2.5. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.**

(b) ~~Within~~ ~~**No later than**~~ ~~twelve (12) months after issuance of this permit and in~~ In order to demonstrate compliance with Condition D.1.4, the Permittee shall perform manganese testing on one (1) of the two (2) identical electric induction furnaces utilizing methods as approved by the Commissioner~~. Testing shall be conducted in accordance with Section C - Performance Testing. This test shall be repeated~~ at least once every five (5) years from the date of the most recent valid compliance demonstration. **Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.**

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

D.1.9 Visible Emissions Notations

***

(e) If abnormal emissions are observed, the ~~Permittee shall take reasonable response steps in accordance with~~ Section C - Response to Excursions or Exceedances **contains the Permittee's obligation with regard to the reporting required by this condition.** Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances~~ shall be considered a deviation from this permit.

D.1.10 Record Keeping Requirements

(a) To document **the** compliance **status** with Conditions D.1.2, D.1.3, and D.1.4, the Permittee shall maintain monthly records of the tons of metal to the two (2) electric induction furnaces (EU-01), charge handling (EU-02), and the reaction/holding ladle (EU-04).

(b) To document **the** compliance **status** with condition D.1.4, the Permittee shall maintain records of the following:

(1) HAP stack test results for one (1) of the two (2) electric induction furnaces;

(2) HAP emission calculations performed using the equations in condition D.1.8; and

(3) HAP emissions in tons per year.

(c) To document **the** compliance **status** with Condition D.1.9, the Permittee shall maintain daily records of visible emission notations for stack B, V11, and V12 exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (i.e. the process did not operate that day).

(d) ~~All records shall be maintained in accordance with~~ Section C - General Record Keeping Requirements ~~of this permit~~ **contains the Permittee's obligations with regard to the records required by this condition.**

D.1.11 Reporting Requirements

A quarterly summary of the information to document compliance **status** with Conditions D.1.2, D.1.3, and D.1.4 shall be submitted ~~to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within~~ **not later than** thirty (30) days after the end of the quarter being reported. **Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.** The report submitted by the Permittee does require ~~the~~ **a** certification **that meet the requirements of 326 IAC 2-8-5(a)(1)** by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.2 FACILITY OPERATION CONDITIONS

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

(b) ***

(c) Shakeout Operations, collectively identified as EU-06A, where the molding sand is separated from the casting by mechanical shaking. These units were installed in 1972 and have a maximum throughput of 5 tons of metal per hour. Emissions are collected by hoods located over the shakeout area and controlled by a ~~cyclone, identified as CE-C, in series~~ ~~with a~~ dust collector, identified as CE-A, **approved for modification in 2012**; exhausting through stack A.

(d) Casting Cleaning Operations, collectively identified as EU-06B, with a maximum throughput of 5 tons of metal per hour, consisting of the following:

(1) One (1) table blast installed in 1981;

(2) One (1) shot blast machine installed in June 1960;

(3) Five (5) grinders installed in 1960; and

(4) One (1) cutoff saw installed in 1981.

Emissions are collected by various hoods located throughout the casting cleaning operation and are controlled by a dust collector, identified as CE-A**, approved for modification in 2012**, which exhausts through stack A.

(e) Sand Handling Operations, collectively identified as EU-06C, installed prior to 1967 and modified in 1998 and in 2002, with a maximum capacity of 20.63 tons of sand per hour, consisting of the following:

(1) One (1) sand muller;

(2) Thirteen (13) hopper stations;

(3) One (1) sand elevator;

(4) One (1) sand tank;

(5) One (1) sand cooler;

(6) Seven (7) belts;

(7) One (1) molding line consisting of a B & P 16 X 20 mold machine, ~~approved to construct~~

~~in 2008~~ **approved for construction in 2012**,, with a maximum production capacity of 80 molds per hour, each mold weighing 140 pounds;

(8) One (1) molding line consisting of a Sinto FB03 20 X 24 mold machine, constructed in 1998, with a maximum production capacity of 80 molds per hour, each mold weighing 240 pounds; and

(9) Five (5) manual mold machines, consisting of one (1) squeezer mold machine, two (2) PinLift mold machines, and two (2) RotoLift mold machines, constructed prior to 1967 and modified in 1998 and 2002.

Emissions are collected by various hoods located throughout the sand handling process line and are controlled by a dust collector, identified as CE-A**, approved for modification in 2012**, which exhausts through stack A.

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

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

D.2.1 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]

***

D.2.2 Particulate Matter (PM10)**, PM2.5** and Carbon Monoxide (CO) [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 2-8-4 (FESOP), and in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following emission limits:

(a) The throughput of metal to the pouring and cooling operations (EU-05) and the shakeout and shot blast operations (EU-06A and EU-06B) shall each be limited to less than 20,000 tons per twelve consecutive month period with compliance determined at the end of each month.

(b) The PM10 emissions from the pouring and cooling operations (EU-05) exhausting through stacks V17, V18, V25, V26, V27, and V28 shall not exceed 3.09 lbs PM10/ton Metal. For the purposes of demonstrating compliance with this condition the filterable and condensable fractions of PM10 shall be counted.

(c) The combined CO emissions from the pouring and cooling operations (EU-05) exhausting through stacks V17, V18, V25, V26, V27, and V28 and the shakeout operations (EU-06A) exhausting through stack A shall not exceed 6.0 lbs CO/ton Metal.

(d) The combined PM10 emissions from the shakeout, casting cleaning, and sand handling operations (EU-06A, EU-06B, and EU-06C) exhausting through stack A shall not exceed ~~0.30~~ **0.598** lbs/hr. For the purposes of demonstrating compliance with this condition the filterable and condensable fractions of PM10 shall be counted.

(e) The combined PM2.5 emissions from the shakeout, casting cleaning, and sand handling operations (EU-06A, EU-06B, and EU-06C) exhausting through stack A shall not exceed 0.598 lbs/hr. For the purposes of demonstrating compliance with this condition the filterable and condensable fractions of PM2.5 shall be counted.

Combined within the PM10, **PM2.5** and CO emissions from other emission units, the PM10**, PM2.5** and CO emissions from the entire source are limited to less than 100 tons per year. Therefore, compliance with this Condition and Conditions D.1.2, D.3.2, and D.4.1 makes the Part 70 Operating Permit requirements (326 IAC 2-7) and 326 IAC 2-2 (PSD), not applicable.

D.2.3 PSD Minor Source Limit [326 IAC 2-2]

(a) ***

(b) The PM emissions from the shakeout, casting cleaning, and sand handling operations (EU-06A, EU-06B, and EU-06C) shall be limited to ~~1.19~~ **1.54** lbs/hr.

***

D.2.6 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan~~, in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for the shakeout, casting cleaning, and sand handling operations, including ~~the associated cyclone identified as CE-C and~~ the baghouse identified as CE-A. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

Compliance Determination Requirements

D.2.7 Particulate Matter (PM)

(a) In order to demonstrate compliance with Conditions D.2.1, D.2.2, D.2.3, and D.2.4 ~~the cyclone identified as CE-C and~~ the Baghouse identified as CE-A, shall be in operation and control emissions from the sand handling, casting cleaning, and shakeout operations at all times that these units are in operation.

(b) ***

D.2.8 Testing Requirements [326 IAC 2-8-4(3)]

~~Within one hundred and eighty (180) days after the issuance of this permit and in~~ In order to demonstrate compliance with Conditions D.2.1, D.2.2, D.2.3, and D.2.4 the Permittee shall perform PM, PM10, **PM2.5** and Manganese testing on the shakeout, casting cleaning, and sand handling operations (EU-06A, EU-06B, and EU-06C) using methods as approved by the Commissioner. ~~Testing shall be conducted in accordance with Section C - Performance Testing. PM10 shall include filterable and condensable PM10. This test shall be repeated~~ at least once every five (5) years from the date of the most recent valid compliance demonstration. **PM10/PM2.5 shall include filterable and condensable PM10/PM2.5. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.**

***

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

D.2.10 Visible Emissions Notations

***

(e) If abnormal emissions are observed, the ~~Permittee shall take reasonable response steps in accordance with~~ Section C - Response to Excursions or Exceedances **contains the Permittee's obligation with regard to the reporting required by this condition.** Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances~~ shall be considered a deviation from this permit.

D.2.11 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouse, identified as CE-A, used in conjunction with the shakeout, casting cleaning, and sand handling processes, at least once per

day when the process is in operation. ~~When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.5 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.~~ **When, for any one reading, the pressure drop across the baghouse is outside of the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.5 and 7.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition.** 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 and 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 **or replaced** at least once every six (6) months.

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

D.2.13 Record Keeping Requirements

(a) To document **the** compliance **status** with Conditions D.2.2, D.2.3, and D.2.4, the Permittee shall maintain monthly records of the tons of metal to the pouring and cooling operations (EU-05) and the shakeout and shot blast operations (EU-06A and EU-06B).

(b) To document **the** compliance **status** with Condition D.2.4, the Permittee shall maintain records of the following:

(1) Metallic HAP stack test results for the pouring and cooling operations (EU-05) and the shakeout and shot blast operations (EU-06A and EU-06B) as applicable;
(2) Metallic HAP emission calculations performed using the equations in Condition D.2.9(a); and
(3) Metallic HAP emissions in tons per year.

(c) To document **the** compliance **status** with Condition D.2.5, the Permittee shall maintain records of the following:

(1) Organic HAP stack test results for the pouring and cooling operations (EU-05) and the shakeout operations (EU-06A) as applicable;
(2) Organic HAP emission calculations performed using the equation in Condition D.2.9(b); and
(3) Organic HAP emissions in tons per year.

(d) To document **the** compliance **status** with Condition D.2.10, the Permittee shall maintain daily records of visible emission notations of stacks V17, V18, V25, V26, V27, V28, and stack A exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (i.e. the process did not operate that day).

(e) To document **the** compliance **status** with Condition D.2.11, the Permittee shall maintain daily records of the pressure drop across the baghouse. 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, (i.e. the process did not operate that day).

(f) ~~All records shall be maintained in accordance with~~ Section C - General Record Keeping Requirements ~~of this permit~~ **contains the Permittee's obligations with regard to the records required by this condition.**

D.2.14 Reporting Requirements

A quarterly summary of the information to document **the** compliance **status** with Conditions D.2.2, D.2.3, D.2.4, and D.2.5 shall be submitted ~~to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within~~ **not later than** thirty (30) days after the end of the quarter being reported. **Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.** The report submitted by the Permittee does require ~~the~~ **a** certification **that meet the requirements of 326 IAC 2-8-5(a)(1)** by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

***

D.3.2 FESOP Limit [326 IAC 2-8-4] [326 IAC 2-2] [326 IAC 2-1.1-5]

Pursuant to 326 IAC 2-8-4 (FESOP), the Permittee shall comply with the following for EU-10 and the sand usage and emission limits for the core making operations:

(a) The amount of sand at the air set core making process (EU-07) shall be limited to less than 4,500 tons per twelve consecutive month period with compliance determined at the end of each month.

(b) The amount of sand at the oil sand core making process (EU-08) shall be limited to less than 730 tons per twelve consecutive month period with compliance determined at the end of each month.

(c) The amount of shell sand at the Redford shell core making processes (EU-09A and EU-09B) shall be limited to less than 120 tons per twelve consecutive month period with compliance determined at the end of each month.

(d) The PM10 emissions from the air set core making process, oil sand core making process, and the Redford shell core making processes (EU-07, EU-08, EU-09A, and EU-09B) shall each not exceed 0.81 lbs PM10/ton sand.

(e) The PM2.5 emissions from the air set core making process, oil sand core making process, and the Redford shell core making processes (EU-07, EU-08, EU-09A, and EU-09B) shall each not exceed 0.81 lbs PM2.5/ton sand.

~~(e)~~**(f)** The potential to emit PM10 and PM2.5 from the one (1) airset mechanical sand reclamation unit, identified as emission unit EU-10, ~~shall not exceed 0.01 grains per dry standard cubic foot of exhaust air and~~ shall not exceed 0.86 pounds per hour.

Combined with the PM10 emissions and PM2.5 emissions from other emission units, the PM10 emissions and PM2.5 emissions from the entire source are each limited to less than 100 tons per year. Therefore, compliance with this Condition and Conditions D.1.2, D.2.2, and D.4.1 makes the Part 70 Operating Permit requirements (326 IAC 2-7) Prevention of Significant Deterioration (PSD) (326 IAC 2-2), and Nonattainment NSR (326 IAC 2-1.1-5) not applicable.

***

D.3.7 Parametric Monitoring

The Permittee shall record the pressure drop across the cartridge filter, identified as CE-D, used in conjunction with the one (1) airset mechanical sand reclamation unit, identified as emission unit EU-10, at least once per day when the process is in operation. When for any one reading, the pressure drop across the cartridge filter is outside the normal range of 1.0 and 8.0 inches of water

or a range established during the latest stack test, the Permittee shall take reasonable response steps**.** ~~in accordance with~~ Section C- Response to Excursions or Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition.** 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 and 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 **or replaced** at least once every six (6) months.

***

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

D.3.9 Record Keeping Requirements

(a) To document **the** compliance **status** with Conditions D.3.2, D.3.3, and D.3.4, the Permittee shall maintain monthly records of the tons of sand used in each core making process.

(b) To document **the** compliance **status** with Condition D.3.6, the Permittee shall maintain daily records of visible emission notations of stacks V4, V5, V38 and D exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (i.e. the process did not operate that day).

(c) To document **the** compliance **status** with Condition D.3.7, the Permittee shall maintain daily records of the pressure drop across the baghouse. 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, (i.e. the process did not operate that day).

(d) ~~All records shall be maintained in accordance with~~ Section C - General Record Keeping Requirements ~~of this permit~~ **contains the Permittee's obligations with regard to the records required by this condition.**

D.3.10 Reporting Requirements

A quarterly summary of the information to document **the** compliance **status** with Conditions D.3.2, D.3.3, and D.3.4 shall be submitted ~~to the addresses listed in Section C – General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within~~ **not later than** thirty (30) days after the end of the quarter being reported. **Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.** The report submitted by the Permittee does require ~~the~~ **a** certification **that meet the requirements of 326 IAC 2-8-5(a)(1)** by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

***

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

D.4.1 FESOP PM10 Limit [326 IAC 2-8-4] [326 IAC 2-2] [326 IAC 2-1.1-5]

(a) Pursuant to 326 IAC 2-8-4 (FESOP), the PM10 **and PM2.5** emissions from the woodworking operation shall not exceed 0.14 pounds per hour. Combined with the PM10 **and PM2.5** emissions from other emission units, the PM10 **and PM2.5** emissions from the entire source are limited to less than 100 tons per year. Therefore, compliance with this Condition and Conditions D.1.2, D.2.2, D.3.2, and D.4.2 makes the Part 70 Operating

Permit requirements (326 IAC 2-7), 326 IAC 2-2 (PSD), 326 IAC 2-1.1-5 (Nonattainment NSR), and 326 IAC 2-4.1 (MACT) not applicable.

(b) Pursuant to 326 IAC 2-8-4 (FESOP), the PM2.5 emissions from the woodworking operation shall not exceed 0.14 pounds per hour. Combined with the PM2.5 emissions from other emission units, the PM2.5 emissions from the entire source are limited to less than 100 tons per year.

***

D.4.3 Particulate Matter (PM)

In order to demonstrate **the** compliance **status** with Condition**s** D.4.1 **and D.4.2**(a), the dust collector shall be in operation and control emissions from the woodworking operation at all times that the woodworking equipment are in operation.

SECTION E.1 FACILITY OPERATION CONDITIONS

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

(a) Melt Operations, installed in 1972, consisting of the following:

(1) Two (2) electric induction furnaces, collectively identified as EU-01, with emissions collected by a canopy hood located directly over the furnaces and controlled by a settling tank followed by a cyclone which exhausts through one stack identified as stack B. Only one furnace can be operated at any time because there is only one transformer to supply electrical energy;

Under 40 CFR 63, Subpart ZZZZZ (5Z), this unit is considered an affected source/facility.

(2) One (1) charge handling system, identified as EU-02, with a maximum charge capacity of 5 tons of metal per hour. The maximum capacity of the charge handling system is limited by the source's ability to melt metal;

(3) One (1) natural gas preheater, identified as EU-03, with a maximum heat input capacity of 25 million Btu per hour; and

(4) One (1) reaction/holding ladle, identified as EU-04, where inoculation takes place.

Emissions from the charge handling system, preheater, and holding ladle are collected by the general furnace area ventilation system that exhausts through two uncontrolled stacks identified as stacks V11 and V12.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-8-4(1)]

E.1.1 General Provisions Relating to NESHAP ZZZZZ [326 IAC 20-1-1] [40 CFR 63, Subpart A]

Pursuant to 40 CFR 63.10880, 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, as specified in Table 3 of 40 CFR Part 63, Subpart ZZZZZ in accordance with schedule in 40 CFR 63 Subpart ZZZZZ.

E.1.2 National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources NESHAP [40 CFR 63, Subpart ZZZZZ]

The Permittee, which operates a stationary gray and ductile iron castings manufacturing plant, shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZZ (included as Attachment B of this permit). The Permittee is a small foundry, with a compliance date of January 2, 2009 for the pollution prevention management practices for metallic scrap and January 4, 2010 for the pollution prevention management practices for mercury:

(1) 40 CFR 63.10880 (a), (b,) (e) and (f)
(2) 40 CFR 63.10881(a) and (d)
(3) 40 CFR 63.10885
(4) 40 CFR 63.10886
(5) 40 CFR 63.10890
(6) 40 CFR 63.10905
(7) 40 CFR 63.10906

(b) Upon further review, IDEM, OAQ has decided to make the following changes to the permit. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text:

(1) For clarity, IDEM has changed references to the general conditions: *"in accordance with Section B*", "*in accordance with Section C*", or other similar language, to “Section *C ... contains the Permit tee’s obligations with regard to the records required by this condition*."

(2) IDEM has decided that the phrases "*no later than*" and "*not later than*" are clearer than "*within*" in relation to the end of a timeline. Therefore all timeline have been switched to "*no later than*" or "*not later than*".

(3) Section B -Duty to Provide Information has been revised.

(4) IDEM has determined that rather than having a Certification condition and various references throughout the permit as to whether a particular report, notice, or correspondence needs to include a certification, the specific conditions that require an affirmation of truth and completeness shall state so. The certification condition has been removed. All statements to whether a certification, pursuant to the former Section B - Certification, is needed or not have been removed.
Section B - Credible Evidence and Section C - Asbestos Abatement Projects still require certification as the underlying rules also require certifications.

(5) To clarify that Section B - Certification only states what a certification must be, IDEM has revised the condition.

(6) IDEM has decided to clarify what rule requirements a certification needs to meet. IDEM has decide to remove the last sentence dealing with the need for certification from the forms because the Conditions requiring the forms already addresses this issue.

(7) IDEM has decided to clarify Section B - Preventive Maintenance Plan.

(8) IDEM is revising Section B - Emergency Provisions to delete paragraph (h). 326 IAC 2-8-4(3) (C) (ii) allows that deviations reported under an independent requirement do not have to be included in the Quarterly Deviation and Compliance Monitoring Report.

(9) IDEM has decided to state which rule establishes the authority to set a deadline for the Permittee to submit additional information. Therefore, Section B - Permit Renewal has been revised.

(10) IDEM has added 326 IAC 5-1-1 to the exception clause of Section C - Opacity, since 326 IAC 5-1-1 does list exceptions.

(11) IDEM has revised Section C - Incineration to more closely reflect the two underlying rules.

(12) IDEM has removed the first paragraph of Section C - Performance Testing due to the fact that specific testing conditions elsewhere in the permit will specify the timeline and procedures.

(13) IDEM has removed Section C - Monitoring Methods. The conditions that require the monitoring or testing, if required, state what methods shall be used.

(14) IDEM has revised Section C - Compliance Monitoring. The reference to recordkeeping has been removed due to the fact that other conditions already address recordkeeping. The voice of the condition has been change to clearly indicate that it is the Permittee that must follow the requirements of the condition.

(15) IDEM has revised Section C - Response to Excursions or Exceedances. The introduction sentence has been added to clarify that it is only when an excursion or exceedance is detected that the requirements of this condition need to be followed. The word "excess" was added to the last sentence of paragraph (a) because the Permittee only has to minimize excess emissions. The middle of paragraph (b) has been deleted as it was duplicative of paragraph (a). The phrase "or are returning" was added to subparagraph (b)(2) as this is an acceptable response assuming the operation or emission unit does return to normal or its usual manner of operation. The phrase "within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable" was replaced with "normal or usual manner of operation" because the first phrase is just a limited list of the second phrase. The recordkeeping required by paragraph (e) was changed to require only records of the response because the previously listed items are required to be recorded elsewhere in the permit.

(16) DEM has revised Section C - Actions Related to Noncompliance Demonstrated by a Stack Test. The requirements to take response steps and minimize excess emissions have been removed because Section C - Response to Excursions or Exceedances already requires response steps related to exceedances and excess emissions minimization. The start of the timelines was switched from "the receipt of the test results" to "the date of the test." There was confusion if the "receipt" was by IDEM, the Permittee, or someone else. Since the start of the timelines has been moved up, the length of the timelines was increased. The new timelines require action within a comparable timeline; and the new timelines still ensure that the Permittee will return to compliance within a reasonable timeframe.

(17) Paragraph (b) of Section C - Emission Statement has been removed. It was duplicative of the requirement in Section C - General Reporting Requirements.

(18) The voice of paragraph (b) of Section C - General Record Keeping Requirements has been change to clearly indicate that it is the Permittee that must follow the requirements of the paragraph.

(19) IDEM, OAQ has decided that having a separate condition for the reporting of deviations is unnecessary. Therefore, IDEM has removed Section B - Deviation form Permit Requirements and Conditions and added the requirements of that condition to Section C - General Reporting Requirements. Paragraph (d) of Section C - General Reporting Requirements has been removed because IDEM already states the timeline and certification needs of each report in the condition requiring the report.

(20) IDEM has decided to simplify the referencing in Section C - Compliance with 40 CFR 82 and 326 IAC 22-1.

(21) IDEM has decided to clarify Section D - Testing Requirements.

(22) IDEM has included the replacement of an instrument as an acceptable action.

(23) IDEM has decided to allow the Permittee the option of using manufacturer's recommendations for the calibration frequency.

(24) The word "status" has been added to Section D - Reporting Requirements. The Permittee has the obligation to document the compliance status. The wording has been revised to properly reflect this.

(25) The phrase "of this permit" has been added to the paragraph of the Quarterly Deviation and Compliance Monitoring Report to match the underlying rule.

(26) On October 27, 2010, the Indiana Air Pollution Control Board issued revisions to 326 IAC 2. These revisions resulted in changes to the rule sites listed in the permit. These changes are not changes to the underlining provisions. The change is only to site of these rules in Section B - Operational Flexibility. IDEM, OAQ has clarified the rule sites for the Preventive Maintenance Plan.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary Gray & Ductile Iron Foundry.

Source Address: 3823 Massachusetts Ave. Indianapolis, Indiana 46218
~~Mailing Address: 3823 Massachusetts Ave. Indianapolis, Indiana 46218~~
General Source Phone: 317-546-2427
SIC Code: 3321
County Location: Marion County
Source Location Status: Nonattainment for PM2.5
Attainment for all other criteria pollutants
Source Status: Federally Enforceable State Operating Permit (FESOP)
Minor Source, under PSD Rule, Emission Offset, and Nonattainment NSR
Minor Source, section 112 of the Clean Air Act
1 of 28 source categories

B.9 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

(a) ~~Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.~~ **A certification required by this permit meets the requirements of 326 IAC 2-8-5(a)(1) if:**

(i) it contains a certification by an "authorized individual", as defined by 326 IAC 2-1.1-1(1), and

(ii) the certification is 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 Permittee may use** the attached Certification Form, **or its equivalent** with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

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

B.10 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

***

~~The notification which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~ **The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).**

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

(a) **A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:** ~~If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) 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.

(b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

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

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

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

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

Indiana Department of Environmental Management
Compliance and Enforcement 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 a certification that meets the requirements

of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2- 1.1- 1(1).

The Permittee shall implement the PMPs.

(c) 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~~ **PMPs and their submittal** do not require ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-8-5(a)(1)** by "authorized individual" as defined by 326 IAC 2- 1.1- 1(1).

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

***

B.12 Emergency Provisions [326 IAC 2-8-12]

***

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

***

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

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

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

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

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

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

***

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

***

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the

deadline specified**, pursuant to 326 IAC 2-8-3(g),** in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

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

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

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

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

(4) The Permittee notifies the:

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

and

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

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

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15~~(b)(2), (c)(1), and (d)~~ **(b)(1) and (c)**. The Permittee shall make such records available, upon reasonable request, for public review.

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

(b) Emission Trades [326 IAC 2-8-15 ~~(c)~~ **(b)**]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15 ~~(c)~~ **(b)**.

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

***

C.2 Opacity [326 IAC 5-1]

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

***

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~~ **or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.**

***

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

(a) ~~Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. 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~~ **For performance testing required by this permit, a** test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require **a** certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

***

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

Unless otherwise specified in this permit, **for** all monitoring ~~and record keeping~~ requirements not already legally required**, the Permittee shall be allowed up to** ~~shall be implemented within~~ ninety (90) days ~~of~~ **from the date of** permit issuance or ~~ninety (90) days~~ of initial start-up, whichever is later**, to begin such monitoring**. ~~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~~ **the Permittee's** control, ~~that~~ **any monitoring** equipment **required by this permit** cannot be installed and operated ~~within~~ **no later than** ninety (90) days **after permit issuance or the date of initial startup, whichever is later**, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

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

The notification which shall be submitted by the Permittee does require ~~the~~ **a** certification **that meet the requirements of 326 IAC 2-8-5(a)(1)** by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

C.12 **Reserved** ~~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.16 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(a) ~~Upon detecting an excursion or exceedance,~~ the Permittee shall **take reasonable response steps to** 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 **excess** 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~~ **The response** may include, but ~~are~~ **is** not limited to, the following:

(1) initial inspection and evaluation;

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

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

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

(1) monitoring results;

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

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

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

(e) The Permittee shall **record** ~~maintain the following records~~ **the reasonable responses steps taken.** ~~:~~

~~(1) monitoring data;~~

~~(2) monitor performance data, if applicable; and~~

~~(3) corrective actions taken.~~

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

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the ~~Permittee shall take appropriate response actions. The~~ Permittee shall submit a description of **its** ~~these~~ response actions to IDEM, OAQ, ~~within~~ **no later than** ~~thirty (30) days of receipt of the test results~~ **seventy-five (75) days after the date of the test**. ~~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~~ **no later than** one hundred **eighty (180)** ~~twenty (120) days of receipt of the original test results~~ **days after the date of the test**. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred **eighty (180)** ~~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~~ **a** certification **that meets the requirements of 326 IAC 2-8-5(a)(1)** by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.18 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. **Support information includes the following:**

(AA) All calibration and maintenance records.
(BB) All original strip chart recordings for continuous monitoring instrumentation.
(CC) Copies of all reports required by the FESOP.

Records of required monitoring information include the following:

(AA) The date, place, as defined in this permit, and time of sampling or measurements.
(BB) The dates analyses were performed.
(CC) The company or entity that performed the analyses.
(DD) The analytical techniques or methods used.
(EE) The results of such analyses.
(FF) The operating conditions as existing at the time of sampling or measurement.

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, **for** all record keeping requirements not already legally required**, the Permittee shall be allowed up to** ~~shall be implemented within~~ ninety (90) days **from the date** of permit issuance or ~~ninety (90) days~~ **the date** of initial start-up, whichever is later**, to begin such record keeping**.

C.19 General Reporting Requirements [326 IAC 2-8-4 (3)(C)] [326 IAC 2-1.1-11]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. **Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph**. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported **except that 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.** This report shall be submitted ~~within~~ **not later than** thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-8-5(a)(1)** by an "authorized individual" as defined by 326 IAC 2-1.1-11(1). **A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.**

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

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

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

(d) **Reserved** ~~Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

(e) 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.

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~~ **applicable** 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.~~

***

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave. Indianapolis, Indiana 46218
~~Mailing Address: 3823 Massachusetts Ave. Indianapolis, Indiana 46218~~
FESOP No.: F097-18317-00063

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:
Date:

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

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave. Indianapolis, Indiana 46218
~~Mailing Address: 3823 Massachusetts Ave. Indianapolis, Indiana 46218~~
FESOP No.: F097-18317-00063

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

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

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

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

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

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

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

~~A certification is not required for this report.~~

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

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218
~~Mailing Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218~~
FESOP No.: F097-18317-00063
Facility: Two (2) Induction Furnaces (EU-01), charge handling (EU-02), and the reaction/holding ladle (EU-04) processes
Parameter: Metal throughput
Limit: The throughput of metal to the two (2) electric induction furnaces (EU-01), charge handling (EU-02), and the reaction/holding ladle (EU-04) processes per twelve consecutive month period shall each be limited to less than 20,000 tons with compliance determined at the end of each month.

QUARTER:_____ YEAR:_____

Month	Metal Throughput This Month (tons)			Metal Throughput Previous 11 Months (tons)			12 Month Total Metal Throughput (tons)		
	Electric Induction Furnaces	Charge Handling	Reaction/ Holding Ladle	Electric Induction Furnaces	Charge Handling	Reaction/ Holding Ladle	Electric Induction Furnaces	Charge Handling	Reaction/ Holding Ladle

☐ 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 AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218
~~Mailing Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218~~
FESOP No.: F097-18317-00063
Facility: pouring and cooling operations (EU-05)
Parameter: Metal throughput
Limit: The throughput of metal to the pouring and cooling operations (EU-05) shall be limited to less than 20,000 tons per twelve consecutive month period with compliance determined at the end of each month.

QUARTER:_____ 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 AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218
~~Mailing Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218~~
FESOP No.: F097-18317-00063
Facility: shakeout and shot blast operations (EU-06A and EU-06B)
Parameter: Metal throughput
Limit: The throughput of metal to the shakeout and shot blast operations (EU-06A and EU-06B) shall be limited to less than 20,000 tons per twelve consecutive month period with compliance determined at the end of each month.

QUARTER:_____ 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 AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218
~~Mailing Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218~~
FESOP No.: F097-18317-00063
Facility: Two (2) electric induction furnaces (EU-01)
Parameter: Manganese and total HAP emissions
Limit: Emissions of manganese from the two (2) electric induction furnaces (EU-01) exhausting through Stack B shall not exceed 0.207 ton per twelve (12) consecutive month period, with compliance determined at the end of each month.
Emission of any combination of HAPs from the two (2) electric induction furnaces (EU-01) exhausting through Stack B shall not exceed 2.40 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
Compliance with the above limits shall be determined using the equations in Condition D.1.8(a) and (c). Please attach supporting calculations and data used for determining HAP emissions reported.

QUARTER:_____ YEAR: _____

Month	Column 1a	Column 1b	Column 1c	Column 2a	Column 1a + Column 1c	Column 1b + Column 2b
	Manganese Emissions This Month (tons)	Total HAP Emissions This Month (tons)	Manganese Emissions Previous 11 Months (tons)	Total HAP Emissions Previous 11 Months (tons)	12 Month Total Mn Emissions (tons)	12 Month Total HAP Emissions (tons)

☐ 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 AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218
~~Mailing Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218~~
FESOP No.: F097-18317-00063
Facility: Charge handling (EU-02) and reaction/holding ladle (EU-04) processes
Parameter: Manganese and total HAP emissions
Limit: Emissions of manganese from the charge handling (EU-02) and reaction/holding ladle (EU-04) processes exhausting through stacks V11 and V12 shall not exceed 0.744 ton per twelve (12) consecutive month period, with compliance determined at the end of each month.
Emission of any combination of HAPs from the charge handling (EU-02) and reaction/holding ladle (EU-04) processes exhausting through stacks V11 and V12 shall not exceed 1.01 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
Compliance with the above limits shall be determined using the equations in Condition D.1.8(b) and (d). Please attach supporting calculations and data used for determining HAP emissions reported.

QUARTER:_____ YEAR: _____

Month	Column 1a	Column 1b	Column 1c	Column 2a	Column 1a + Column 1c	Column 1b + Column 2b
	Manganese Emissions This Month (tons)	Total HAP Emissions This Month (tons)	Manganese Emissions Previous 11 Months (tons)	Total HAP Emissions Previous 11 Months (tons)	12 Month Total Mn Emissions (tons)	12 Month Total HAP Emissions (tons)

☐ 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 AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218
~~Mailing Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218~~
FESOP No.: F097-18317-00063
Facility: Pouring and cooling operations (EU-05)
Parameter: Manganese and total metal HAP emissions
Limit: Total emissions of manganese from the pouring and cooling operations shall not exceed 1.30 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
Total emissions of any combination of metal HAPs from the pouring and cooling operations shall not exceed 1.77 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the above limits shall be determined using the equations in Condition D.2.9(a)(1) and D.2.9(a)(2). Please attach supporting calculations and data used for determining HAP emissions reported.

QUARTER:_____ YEAR: _____

Month	Column 1a	Column 1b	Column 1c	Column 2a	Column 1a + Column 1c	Column 1b + Column 2b
	Manganese Emissions This Month (tons)	Total HAP Emissions This Month (tons)	Manganese Emissions Previous 11 Months (tons)	Total HAP Emissions Previous 11 Months (tons)	12 Month Total Mn Emissions (tons)	12 Month Total HAP Emissions (tons)

☐ 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 AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218
~~Mailing Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218~~
FESOP No.: F097-18317-00063
Facility: Shakeout and shot blast operations (EU-06A and EU-06B)
Parameter: Manganese and total metal HAP emissions
Limit: Total emissions of manganese from the shakeout and shot blast operations shall not exceed 0.0626 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
Total emissions of any combination of metal HAPs from shakeout and shot blast operations shall not exceed 2.39 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
Compliance with the above limits shall be determined using the equations in Condition D.2.9(a)(3) and D.2.9(a)(4). Please attach supporting calculations and data used for determining HAP emissions reported.

QUARTER:_____ YEAR: _____

Month	Column 1a	Column 1b	Column 1c	Column 2a	Column 1a + Column 1c	Column 1b + Column 2b
	Manganese Emissions This Month (tons)	Total HAP Emissions This Month (tons)	Manganese Emissions Previous 11 Months (tons)	Total HAP Emissions Previous 11 Months (tons)	12 Month Total Mn Emissions (tons)	12 Month Total HAP Emissions (tons)

☐ 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 AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218
~~Mailing Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218~~
FESOP No.: F097-18317-00063
Facility: Pouring and cooling (EU-05) and the shakeout operations (EU-06A)
Parameter: Total organic HAP emissions
Limit: Emissions of any combination of organic HAPs from the pouring and cooling operations (EU-05) and the shakeout operations (EU-06A) combined shall not exceed 12.1 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. Compliance with the above limits shall be determined using the equation in Condition D.2.8(b).

QUARTER:_____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	Total Organic HAP Emissions This Month (tons)	Total Organic HAP Emissions Previous 11 Months (tons)	12 Month Total Organic HAP Emissions (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 AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218
~~Mailing Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218~~
FESOP No.: F097-18317-00063
Facility: Air Set Core Making Process
Parameter: Sand Used
Limit: 4,500 tons of sand per twelve consecutive month period with compliance determined at the end of each month

QUARTER:_____ YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	Tons of sand used this Month	Tons of sand used previous 11 Months	Tons of sand used 12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

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 AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218
~~Mailing Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218~~
FESOP No.: F097-18317-00063
Facility: Oil Sand Core Oil Making Process
Parameter: Sand Used
Limit: 730 tons of sand per twelve consecutive month period with compliance determined at the end of each month

QUARTER: _____ YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	Tons of sand used this Month	Tons of sand used previous 11 Months	Tons of sand used 12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

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 AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218
~~Mailing Address: 3823 Massachusetts Ave., Indianapolis, Indiana 46218~~
FESOP No.: F097-18317-00063
Facility: Redford Shell Core Machines
Parameter: Shell Sand Used
Limit: 120 tons of shell sand per twelve consecutive month period with compliance determined at the end of each month

QUARTER: _____ YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	Tons of sand used this Month	Tons of sand used previous 11 Months	Tons of sand used 12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

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 AND ENFORCEMENT BRANCH

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

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Ave. Indianapolis, Indiana 46218
~~Mailing Address: 3823 Massachusetts Ave. Indianapolis, Indiana 46218~~
FESOP No.: F097-18317-00063

Months: _____ to _____ Year: _____

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. **Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C-General Reporting**. Any deviation from the requirements **of this permit**, 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:	

Page 2 of 2

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.~~

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on April 20, 2012.

The construction and operation of this proposed revision shall be subject to the conditions of the attached proposed FESOP Significant Revision No. 097-31761-00063. The staff recommends to the Commissioner that this FESOP Significant Revision be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Bruce Farrar at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5401 or toll free at 1-800-451-6027 extension 4-5401.

(b) A copy of the findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.in.gov/idem

Appendix A - Emissions Calculations Summary for Interstate Castings, Inc.

Company Name: Interstate Castings
Address City IN Zip: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
Permit Number: F 097-31761-00063
Plt ID: 097-00063
Reviewer: Bruce Farrar
Date: April 20, 2012

Summary of Potential Emissions (TPY)

Processes	PM	PM10	PM2.5	VOC	CO	CO2e	SOx	NOx	Pb
Furnaces (EU-01)	19.7	18.8	18.8	0.00	0.00		0.00	0.00	2.19
Charging (EU-02)	13.1	7.9	7.9	0.00	0.00		0.00	0.00	0.05
Preheater (EU-03)	0.20	1.22	1.22	0.59	9.02	12,961	0.06	10.7	5.37E-05
Inoculation (EU-04)	39.4	39.4	39.4	0.00	0.00		0.00	0.00	0.15
Pouring/Casting/Cooling (EU-05)	92.0	45.1	45.1	3.07	131.4		0.44	0.22	0.35
Shakeout (EU-06A)	70.1	49.1	49.1	26.3	0.00		0.00	0.00	0.27
Grinding/Cleaning (EU-06B)	0.10	0.10	0.10	0.00	0.00		0.00	0.00	0.00
Sand Handling (EU-06C)	325.3	48.8	48.8	0.00	0.00		0.00	0.00	0.00
Shot Blast (EU-06B)	372.3	37.2	37.2	0.00	0.00		0.00	0.00	1.43
Core Making - Air Set (EU-07)	94.6	14.2	14.2	13.6	0.00		0.00	0.00	0.00
Core Making - Core Oil (EU-08)	1.97	0.30	0.30	16.3	0.00		0.00	0.00	0.00
Core Making - Redford Shell Sand (EU-09A and EU-09B)	0.56	0.08	0.08	0.04	0.00		0.00	0.00	0.00
mechanical sand reclamation system EU10	3.75	3.75	3.75	0.00	0.00		0.00	0.00	0.00
Insignificant - Paved Roads	0.04	0.01	0.01	0.00	0.00		0.00	0.00	0.00
Insignificant - Natural Gas Combustion	0.06	0.23	0.23	0.17	2.54	3,650	0.02	3.02	1.51E-05
Insignificant - Wood Working	61.9	61.9	61.9	0.00	0.00		0.00	0.00	0.00
Total Potential Emissions	1095.2	328.2	328.2	60.0	143.0	16,611	0.52	14.0	4.45

Processes	Mn	Cr	Co	Ni	As	Se	Cd
Furnaces (EU-01)	0.61	7.49E-03	5.91E-04	1.32E-02	2.56E-03	1.97E-04	1.18E-03
Charging (EU-02)	0.41	4.99E-03	3.94E-04	8.80E-03	1.71E-03	1.31E-04	7.88E-04
Preheater (EU-03)	0.00	1.50E-04	0.00E+00	2.25E-04	0.00E+00	0.00E+00	1.18E-04
Inoculation (EU-04)	1.22	1.50E-02	1.18E-03	2.64E-02	5.12E-03	3.94E-04	2.37E-03
Pouring/Casting/Cooling (EU-05)	2.85	3.50E-02	2.76E-03	6.16E-02	1.20E-02	9.20E-04	5.52E-03
Shakeout (EU-06A)	2.17	2.66E-02	2.10E-03	4.70E-02	9.11E-03	7.01E-04	4.20E-03
Grinding/Cleaning (EU-06B)	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sand Handling (EU-06C)	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Shot Blast (EU-06B)	11.5	1.41E-01	1.12E-02	2.49E-01	4.84E-02	3.72E-03	2.23E-02
Core Making (EU-07, EU-08, EU-09A, and EU-09B)	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Insignificant - Natural Gas Combustion	1.15E-05	4.23E-05		6.35E-05			3.33E-05
Total Potential Emissions	18.8	0.23	0.02	0.41	0.08	0.01	0.04
		Total Metal HAP	**24.03**				

Processes	Benzene	Phenol	Toluene	Formaldehyde	Methanol	other**
Preheater (EU-03)	2.25E-04	0	3.65E-04	8.05E-03	0	0.19
Core Making - Air Set (EU-07)	0.13	0	0	0.05	3.29	0
Core Making - Core Oil (EU-08)	0	0	0	0	0	0
Core Making - Redford Shell Sand (EU-09A and EU-09B)	7.20E-03	1.99E-02	2.82E-03	0	0	0
Pouring/Casting/Cooling (EU-05)	0.63	0.05	0	0	0	0.22
Insignificant - Natural Gas Combustion	6.35E-05	0.00E+00	1.03E-04	2.27E-03	0.00E+00	0.05
Total PTE	0.76	0.07	0.00	0.06	3.29	0.47
		Total Organic HAP	**4.66**			
		TOTAL HAP	**28.69**			

Appendix A - Emissions Calculations Summary for Interstate Castings, Inc. (Continure)

Company Name: Interstate Castings
Address City IN Zip: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
Permit Number: F 097-31761-00063
Plt ID: 097-00063
Reviewer: Bruce Farrar
Date: April 20, 2012

Summary of Limited Potential to Emit (TPY)

Processes	PM	PM10	PM2.5	VOC*	CO	CO2e	SOx	NOx	Pb*
Furnaces (EU-01) - Stack B Emissions	6.68	6.39	6.39	0.00	0.00		0.00	0.00	2.17
Furnaces (EU-01) - Emissions Not Captured	0.09	0.09	0.09	0.00	0.00		0.00	0.00	0.02
Charging (EU-02)	6.00	5.40	5.40	0.00	0.00		0.00	0.00	0.05
Preheater (EU-03)	0.20	1.22	1.22	0.59	9.02	12,961	0.06	10.74	5.37E-05
Inoculation (EU-04)	18.0	27.0	27.0	0.00	0.00		0.00	0.00	0.15
Pouring/Casting/Cooling (EU-05)	42.0	30.9	30.9	3.07	60.0		0.44	0.22	0.35
Shakeout/Cleaning/Sand Handling/Shot Blast (EU-06A, EU-06B, EU-06B)									
Stack A Emissions	6.75	2.62	2.62	26.0	0.00		0.00	0.00	1.68
Shakeout/ Cleaning/ Sand Handling/ Shot Blast (EU-06A, EU-06B, EU-06B)									
Emissions Not Captured	5.27	0.88	0.88	0.26	0.00		0.00	0.00	0.02
Core Making - Air Set (EU-07)	8.10	1.82	1.82	13.6	0.00		0.00	0.00	0.00
Core Making - Core Oil (EU-08)	1.31	0.30	0.30	16.3	0.00		0.00	0.00	0.00
Core Making - Redford Shell Sand (EU-09A and EU-09B)	0.22	0.05	0.05	0.04	0.00		0.00	0.00	0.00
mechanical sand reclamation system EU10	3.75	3.75	3.75	0.00	0.00		0.00	0.00	0.00
Insignificant - Paved Roads	4.42E-02	8.62E-03	8.62E-03	0.00	0.00		0.00	0.00	0.00
Insignificant - Natural Gas Combustion	0.06	0.23	0.23	0.17	2.54	3,650	0.02	3.02	1.51E-05
Insignificant - Wood Working	0.62	0.62	0.62	0.00	0.00		0.00	0.00	0.00
Total Limited PTE	99.11	81.28	81.28	59.98	71.56	16,611	0.52	13.98	4.45

Processes	Mn	Cr*	Co*	Ni*	As*	Se*	Cd*
Furnaces (EU-01) - Stack B Emissions	2.07E-01	7.41E-03	5.85E-04	1.31E-02	2.54E-03	1.95E-04	1.17E-03
Furnaces (EU-01) - Emissions Not Captured	2.79E-03	7.49E-05	5.91E-06	1.32E-04	2.56E-05	1.97E-06	1.18E-05
Charging (EU-02)	1.86E-01	4.99E-03	3.94E-04	8.80E-03	1.71E-03	1.31E-04	7.88E-04
Preheater (EU-03)	4.08E-05	1.50E-04	0.00E+00	2.25E-04	0.00E+00	0.00E+00	1.18E-04
Inoculation (EU-04)	5.58E-01	1.50E-02	1.18E-03	2.64E-02	5.12E-03	3.94E-04	2.37E-03
Pouring/Casting/Cooling (EU-05)	1.30E+00	3.50E-02	2.76E-03	6.16E-02	1.20E-02	9.20E-04	5.52E-03
Shakeout/Cleaning/Sand Handling/Shot Blast (EU-06A, EU-06B, EU-06B)							
Stack A Emissions	6.20E-02	1.66E-01	1.32E-02	2.93E-01	5.69E-02	4.38E-03	2.62E-02
Shakeout/ Cleaning/ Sand Handling/ Shot Blast (EU-06A, EU-06B, EU-06B)							
Emissions Not Captured	6.26E-02	1.68E-03	1.33E-04	2.96E-03	5.75E-05	4.42E-05	2.65E-04
Core Making (EU-07, EU-08, EU-09A, and EU-09B)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Insignificant - Natural Gas Combustion	1.15E-05	4.23E-05	0.00E+00	6.35E-05	0.00E+00	0.00E+00	3.33E-05
Total Limited PTE	2.38	0.23	0.02	0.41	0.08	0.01	0.04
		Total Metal HAP	**7.60**				

Processes	Benzene*	Phenol*	Toluene*	Formaldehyde*	Methanol*	other**
Preheater (EU-03)	2.25E-04	0	3.7E-04	8.05E-03	0.00	0.19
Core Making - Air Set (EU-07)	1.31E-01	0	0	4.73E-02	3.29	0
Core Making - Core Oil (EU-08)	0	0	0	0	0	0
Core Making - Redford Shell Sand (EU-09A and EU-09B)	7.20E-03	1.99E-02	2.82E-03	0	0	0
Pouring/Casting/Cooling (EU-05)	0.63	0.05	0	0	0	0.22
Insignificant - Natural Gas Combustion	6.35E-05	0.00E+00	1.03E-04	2.27E-03	0.00E+00	0.05
Total Limited PTE	0.76	0.07	0.00	0.06	3.29	0.47
		Total Organic HAP	**4.66**			
		TOTAL HAP	**12.26**			

* The permit does not explicitly limit emissions from these pollutants; therefore, the limited PTE for these pollutants is based on full PTE. However, the metal and sand usage limits for purposes of limiting PM, PM10, CO, and Mn will likely reduce emissions from these other noted pollutants (see individual process pages in this Appendix for further detailed calculations).

** Other organics which may include Toluene

Appendix A - Emissions Calculations for Interstate Castings Inc.
Furnaces

Company Name: Interstate Castings
Address City IN Zip: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
Permit Number: F 097-31761-00063
Plt ID: 097-00063
Reviewer: Bruce Farrar
Date: April 20, 2012

Emission Unit:	EU-01
Unit Description:	Two Electric Induction Furnaces (only one can operate at a time)
Furnace Capacity:	5 tons of metal charged per hour
Control Device:	Settling Tank/Cyclone
Capture Efficiency:	99.00%
Control Efficiency:	25.00%
Stack ID:	B
Stack Flow Rate (acfm)	8500

Potential Emissions (before control) - Two Electric Induction Furnaces

Pollutants	PM	PM10	VOC	CO	SOx	NOx	Pb
Em. Factor	0.9	0.86	0	0	0	0	0.1
SCC	30400303	30400303	30400303	30400303	30400303	30400303	30400303
Source of Em. Factor	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25
Units of Em. Factor	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal
Emissions (tons/yr)	19.71	18.83	0.00	0.00	0.00	0.00	2.19
Pollutants	Cr	Mn	Co	Ni	As	Cd	Se
Speciate wt% (v3.2)	0.00038	0.03100	0.00003	0.00067	0.00013	0.00006	0.00001
Em. Factor	0.00034	0.02790	0.00003	0.00060	0.00012	0.00005	0.00001
Source of Em. Factor*	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2
Units of Em. Factor	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal
Emissions (tons/yr)	7.49E-03	6.11E-01	5.91E-04	1.32E-02	2.56E-03	1.18E-03	1.97E-04

* The emission factors for metals were calculated using the wt% value from Speciate v3.2 and multiplying this percentage by the emission factor for PM (which was taken from FIRE 6.25).

Allowable Emissions - Two Electric Induction Furnaces

Pollutant	Rule Cite	gr/dscf	lbs/hr	tons/yr
PM	326 IAC 6.5-1-2(e	0.07	5.1	22.338

Limited PTE (after control and production limit) - Two Electric Induction Furnaces

Production Limit	20000	tons of metal/12 months					
Pollutant	PM*	PM10*	VOC	CO	SOx	NOx	Pb
Emissions Not Captured (tpy)	0.09	0.086	0.00	0.00	0.00	0.00	0.01
Stack B Emissions (tpy)	6.6825	6.3855	0.00	0.00	0.00	0.00	0.74
Total	6.7725	6.4715	0	0	0	0	0.7525
Pollutants	Cr	Mn	Co	Ni	As	Cd	Se
Emissions Not Captured (tpy)	3.42E-05	2.79E-03	2.70E-06	6.03E-05	1.17E-05	5.40E-06	9.00E-07
Stack B Emissions (tpy)	2.54E-03	2.07E-01	2.00E-04	4.48E-03	8.69E-04	4.01E-04	6.68E-05
Total	2.57E-03	2.10E-01	2.03E-04	4.54E-03	8.80E-04	4.06E-04	6.77E-05

Methodology

Potential Emissions (before control) was calculated using the following equation:
Emissions (tons/yr) =
(Emission Factor, lbs/ton x Furnace Capacity, tons metal/hr x 8760 hr/yr)/ 2000 lbs/ton

Limited PTE was calculated using the following equation(s):
Emissions Not Captured (tpy) =
(Emission Factor, lbs/ton x 20,000 tons of Metal per twelve month period)/ 2000 lbs/ton x (1- Collection Efficiency)

Stack B Emissions (tpy) =
(Emission Factor, lbs/ton x 20,000 tons of Metal per twelve month period)/ 2000 lbs/ton x Collection Eff. x (1-Control Eff.))

Appendix A - Emissions Calculations for Interstate Castings Inc.
Charge Handling

Company Name: Interstate Castings
Address City IN Zip: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
Permit Number: F 097-31761-00063
Plt ID: 097-00063
Reviewer: Bruce Farrar
Date: April 20, 2012

Emission Unit:	EU-02	
Unit Description:	Charge Handling	
Furnace Capacity:	5	tons of metal charged per hour
Stack ID	V11 and V12	
Control Efficiency:	No Control	

Potential Emissions

Pollutants	PM	PM10	VOC	CO	SOx	NOx		
Em. Factor	0.6	0.36	0	0	0	0		
SCC	30400315	30400315	30400315	30400315	30400315	30400315		
Source of Em. Factor	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25		
Units of Em. Factor	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal		
Emissions (tons/yr)	13.14	7.88	0.00	0.00	0.00	0.00		
Pollutants	Cr	Mn	Co	Ni	As	Se	Cd	Pb
Speciate wt% (v3.2)	0.00038	0.03100	0.00003	0.00067	0.00013	0.00001	0.00006	0.00385
Em. Factor	0.00023	0.01860	0.00002	0.00040	0.00008	0.00001	0.00004	0.00231
Source of Em. Factor*	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2
Units of Em. Factor	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal
Emissions (tons/yr)	4.99E-03	4.07E-01	3.94E-04	8.80E-03	1.71E-03	1.31E-04	7.88E-04	5.06E-02

* The emission factors for metals were calculated using the wt% value from Speciate v3.2 and multiplying this percentage by the emission factor for PM (which was taken from FIRE 6.25).

Limited PTE (after control and production limit) - Charge Handling

Production Limit	20000	tons of metal/12 months						
Pollutant	PM	PM10*	VOC	CO	SOx	NOx		
Charge Handling Emissions (tpy)	6	5.4	0	0	0	0		
Pollutant	Cr	Mn	Co	Ni	As	Se	Cd	Pb
Charge Handling Emissions (tpy)	0.0023	0.1860	0.0002	0.0040	0.0008	0.0001	0.0004	0.0231

*The limited PM10 Emission Rate (tpy) includes a 1.5 safety factor requested by the source.

Methodology

Potential Emissions was calculated using the following equation:
Emissions (tons/yr) =
(Emission Factor, lbs/ton x Furnace Capacity, tons metal/hr x 8760 hr/yr)/ 2000 lbs/ton

Limited PTE was calculated using the following equation:
Charge Handling Emissions (tpy) =
(Emission Factor, lbs/ton x 20,000 tons of Metal per twelve month period)/ 2000 lbs/ton

Appendix A: Emissions Calculations
Natural Gas Combustion Only Preheater (EU-03)
MM BTU/HR <100

Company Name: Interstate Castings
Address City IN Zip: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
Permit Number: F 097-31761-00063
Plt ID: 097-00063
Reviewer: Bruce Farrar
Date: April 20, 2012

Heat Input Capacity MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr
25.00	1020	214.7

	Pollutant						
	PM*	PM10*[1]	direct PM2.5*[1]	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.20	1.22	1.22	0.06	10.74	0.59	9.02

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32
1. The limited PM10 and PM2.5 Emission Rate (tpy) includes a 1.5 safety factor requested by the source.

Methodology

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

See page 6 for HAPs emissions calculations.

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

Company Name: Interstate Castings
Address City IN Zip: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
Permit Number: F 097-31761-00063
Plt ID: 097-00063
Reviewer: Bruce Farrar
Date: April 20, 2012

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

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

Methodology is the same as page 5.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.
See Page 7 for Greenhouse Gas calculations.

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

Company Name: Interstate Castings
Address City IN Zip: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
Permit Number: F 097-31761-00063
Plt ID: 097-00063
Reviewer: Bruce Farrar
Date: April 20, 2012

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	12,882	0.2	0.2
Summed Potential Emissions in tons/yr	12,883		
CO2e Total in tons/yr	12,961		

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Appendix A - Emissions Calculations for Interstate Castings Inc.
Inoculation

Company Name: Interstate Castings
Address City IN Zip: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
Permit Number: F 097-31761-00063
Plt ID: 097-00063
Reviewer: Bruce Farrar
Date: April 20, 2012

Emission Unit:	EU-04
Unit Description:	Ductile Iron Production - Inoculation
Charge Capacity:	5 tons of metal charged per hour
Stack ID:	V11 and V12
Control Efficiency:	No Control

Potential Emissions - Ductile Iron Production/Inoculation

Pollutants	PM	PM10	VOC	CO	SOx	NOx		
Em. Factor	1.8	1.8	0	0	0	0		
SCC	30400321	30400321	30400321	30400321	30400321	30400321		
Source of Em. Factor	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25		
Units of Em. Factor	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal		
Emissions (tons/yr)	39.42	39.42	0.00	0.00	0.00	0.00		
Pollutants	Cr	Mn	Co	Ni	As	Se	Cd	Pb
Speciate wt% (v3.2)	0.00038	0.03100	0.00003	0.00067	0.00013	0.00001	0.00006	0.00385
Em. Factor	0.00068	0.05580	0.00005	0.00121	0.00023	0.00002	0.00011	0.00693
Source of Em. Factor	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2
Units of Em. Factor	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal
Emissions (tons/yr)	1.50E-02	1.22E+00	1.18E-03	2.64E-02	5.12E-03	3.94E-04	2.37E-03	1.52E-01

Limited PTE (after control and production limit) - Ductile Iron Production/Inoculation

Production Limit	20000	tons of metal/12 months						
Pollutant	PM	PM10	VOC	CO	SOx	NOx		
Ductile Iron Production/Inoculation Emissions (tpy)	18	27	0	0	0	0		
Pollutant	Cr	Mn	Co	Ni	As	Se	Cd	Pb
Ductile Iron Production/Inoculation Emissions (tpy)	0.00684	0.558	0.00054	0.01206	0.00234	0.00018	0.00108	0.0693

*The limited PM10 Emission Rate (tpy) includes a 1.5 safety factor requested by the source.

Methodology

Limited PTE was calculated using the following equation:

Ductile Iron Production/Inoculation Emissions (tpy) =
(Emission Factor, lbs/ton x 20,000 tons of Metal per twelve month period)/ 2000 lbs/ton

Appendix A - Emissions Calculations for Interstate Castings Inc.
Pouring/Casting/Cooling

Company Name: Interstate Castings
Address City IN Zip: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
Permit Number: F 097-31761-00063
Plt ID: 097-00063
Reviewer: Bruce Farrar
Date: April 20, 2012

Emission Unit: EU-05
Unit Description: Pouring/Casting/Cooling
Charge Capacity: 5 tons of metal charged per hour
Stack ID: Emissions vented through stacks V17, V18, V26, V27, and V28
Control Efficiency: No Control

Potential Emissions* - Pouring/Casting/Cooling Operations

Pollutants	PM	PM10	VOC	CO	SOx	NOx		
Em. Factor	4.2	2.06	0.14	6.0	0.02	0.01		
SCC	30400320	30400320	30400320	30400320	30400320	30400320		
Source of Em. Factor	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25		
Units of Em. Factor	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal		
Emissions (tons/yr)	91.98	45.11	3.07	131.40	0.44	0.22		
Pollutants	Cr	Mn	Co	Ni	As	Se	Cd	Pb
Speciate wt% (v3.2)	0.00038	0.03100	0.00003	0.00067	0.00013	0.00001	0.00006	0.00385
Em. Factor	0.00160	0.13020	0.00013	0.00281	0.00055	0.00004	0.00025	0.01617
Source of Em. Factor	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2
Units of Em. Factor	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal
Emissions (tons/yr)	3.50E-02	2.85E+00	2.76E-03	6.16E-02	1.20E-02	9.20E-04	5.52E-03	3.54E-01

* Organic HAP emissions are accounted for on page 10 of the calculations.

Limited PTE (No control but has production limit) - Pouring/Casting/Cooling Operations

Production Limit	20000	tons of metal/12 months						
Pollutant	PM	PM10*	VOC	CO	SOx	NOx		
Pouring/Casting Emissions (tpy)	42	30.9	1.4	60	0.2	0.1		
Pollutant	Cr	Mn	Co	Ni	As	Se	Cd	Pb
Pouring/Casting Emissions (tpy)	0.01596	1.30200	0.00126	0.02814	0.00546	0.00042	0.00252	0.16170

*The limited PM10 Emission Rate (tpy) includes a 1.5 safety factor requested by the source.

Methodology

Potential Emissions (before control) was calculated using the following equation:
Emissions (tons/yr) =
(Emission Factor, lbs/ton x Charge Capacity, tons metal/hr x 8760 hr/yr)/ 2000 lbs/ton

Limited PTE was calculated using the following equation:
Pouring/Casting Emissions (tpy) =
(Emission Factor, lbs/ton x 20,000 tons of Metal per twelve month period)/ 2000 lbs/ton

Appendix A - Emissions Calculations for Interstate Castings Inc.
Shakeout, Grinding/Cleaning, Sand Handling, and Shot Blast Operations

Company Name: Interstate Castings
Address City IN Zip: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
Permit Number: F 097-31761-00063
Plt ID: 097-00063
Reviewer: Bruce Farrar
Date: April 20, 2012

Emission Unit:	EU-06A	EU-06B	EU-06C	
Unit Description:	Casting Shakeout	Table Blast, Shot Blast, 3 Grinders and Cutoff Saw	Sand Handling	
Charge Capacity (tph):	5	5	NA	tons of metal charged per hour
Sand Handling Cap. (tph):	NA	NA	20.63	tons of sand handled per hour
Stack ID:	A	A	A	
Stack Flow Rate (acfm)	40000	40000	40000	
Control Device	Baghouse	Baghouse	Baghouse	
Collection Efficiency	0.99	0.99	0.99	
Control Efficiency	0.99	0.99	0.99	

Potential Emissions - (includes shakeout, grinding/cleaning, sand handling, and shot blast operations)

Shakeout								
Pollutants	PM	PM10	VOC	CO	SOx	NOx		
Em. Factor	3.2	2.24	1.2	*	0	0		
SCC	30400331	30400331	30400331	30400331	30400331	30400331		
Source of Em. Factor	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25		
Units of Em. Factor	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal		
Emissions (tons/yr)	70.08	49.06	26.28	0.00	0.00	0.00		
Pollutants	Cr	Mn	Co	Ni	As	Se	Cd	Pb
Speciate wt% (v3.2)	0.00038	0.03100	0.00003	0.00067	0.00013	0.00001	0.00006	0.00385
Em. Factor	0.00122	0.09920	0.00010	0.00214	0.00042	0.00003	0.00019	0.01232
Source of Em. Factor	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2
Units of Em. Factor	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal
Emissions (tons/yr)	2.66E-02	2.17E+00	2.10E-03	4.70E-02	9.11E-03	7.01E-04	4.20E-03	2.70E-01

Grinding/Cleaning						
Pollutant	PM**	PM10	VOC	CO	SOx	NOx
Em. Factor	0.0045	0.0045	0	0	0	0
SCC	30400360	30400360	30400360	30400360	30400360	30400360
Source of Em. Factor	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25
Units of Em. Factor	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal
Emissions (tons/yr)	0.10	0.10	0.00	0.00	0.00	0.00

Sand Handling						
Pollutant	PM**	PM10	VOC	CO	SOx	NOx
Em. Factor	3.6	0.54	0	0	0	0
SCC	30400350	30400350	30400350	30400350	30400350	30400350
Source of Em. Factor	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25
Units of Em. Factor	lbs/ton sand	lbs/ton sand	lbs/ton sand	lbs/ton sand	lbs/ton sand	lbs/ton sand
Emissions (tons/yr)	325.29	48.79	0.00	0.00	0.00	0.00

Shot Blast								
Pollutant	PM	PM10	VOC	CO	SOx	NOx		
Em. Factor	17	1.7	0	0	0	0		
SCC	30400340	30400340	30400340	30400340	30400340	30400340		
Source of Em. Factor	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25		
Units of Em. Factor	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal		
Emissions (tons/yr)	372.30	37.23	0.00	0.00	0.00	0.00		
Pollutants	Cr	Mn	Co	Ni	As	Se	Cd	Pb
Speciate wt% (v3.2)	0.00038	0.03100	0.00003	0.00067	0.00013	0.00001	0.00006	0.00385
Em. Factor	0.00646	0.52700	0.00051	0.01139	0.00221	0.00017	0.00102	0.06545
Source of Em. Factor	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2	Speciate v3.2
Units of Em. Factor	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal	lbs/ton metal
Emissions (tons/yr)	1.41E-01	1.15E+01	1.12E-02	2.49E-01	4.84E-02	3.72E-03	2.23E-02	1.43E+00

* The CO emissions from shakeout are accounted for in the pouring and cooling calculations found on page 5.
** Assume PM equals PM10.

Allowable Emissions

Pollutant	Rule Cite	gr/dscf	lbs/hr	tons/yr
PM	326 IAC 6.5-1-2(a	0.03	10.29	45.05

Limited PTE - (includes shakeout, grinding/cleaning, sand handling, and shot blast operations)

Production Limit	20000	tons of metal/12 months						
Pollutant	PM	PM10*	VOC	CO	SOx	NOx		
Stack A Emissions (tpy)	6.75	2.62	11.88	0.00	0.00	0.00		
	Cr	Mn	Co	Ni	As	Se	Cd	Pb
	7.60E-04	6.20E-02	6.00E-05	1.34E-03	2.60E-04	2.00E-05	1.20E-04	7.70E-03
Pollutant	PM	PM10*	VOC	CO	SOx	NOx		
Emissions Not Captured (tpy	5.27	0.88	0.12	0.00	0.00	0.00		
	Cr	Mn	Co	Ni	As	Se	Cd	Pb
	7.68E-04	6.26E-02	6.06E-05	1.35E-03	2.63E-04	2.02E-05	1.21E-04	7.78E-03
Total Emissions (tpy)	PM	PM10	VOC	CO	SOx	NOx		
	12.02	3.50	12.00	0.00	0.00	0.00		
	Cr	Mn	Co	Ni	As	Se	Cd	Pb
	1.53E-03	1.25E-01	1.21E-04	2.69E-03	5.23E-04	4.02E-05	2.41E-04	1.55E-02

* About 0.59 tpy of these emissions are limited by the 20000 ton metal input; the other 0.72 tpy comes from the sand handling operations that is calculated based on maximum sand handling capacity; all is exhausted through Stack A. The limited PM10 Emission Rate (tpy) includes a 1.5 safety factor requested by the source.

Methodology

Potential Emissions was calculated using the following equation:
Emissions (tons/yr) =
(Emission Factor, lbs/ton x Charge (or Sand) Capacity, tons/hr x 8760 hr/yr)/ 2000 lbs/ton

Source has requested, with FESOP SPR 097-31761-00063, to limit stack A PM PTE to 6.75 tons/yr, PM10 and PM2.5 to 2.62 tons/year.
Stack A Emissions (tpy) =

Emissions Not Captured (tpy) =
[(Emission Factors (shakeout + grinding/cleaning + shot blast), lbs/ton metal x 20,000 tons of Metal per twelve month period)/ 2000 lbs/ton)
+ (Emission Factor (sand handling), lbs/ton sand x 20.63 tons sand/hr x 8760 hr/yr)] x (1-Collection Eff.)

Appendix A - Emissions Calculations for Interstate Castings Inc
Core Making (VOC and HAP Calcs)

Company Name: Interstate Castings
Address City IN Zip: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
Permit Number: F 097-31761-00063
Plt ID: 097-00063
Reviewer: Bruce Farrar
Date: April 20, 2012

Emission Unit IDs: EU-07, EU-08, EU-09A, and EU-09B
Unit Descriptions: One (1) Air Set Core Making, One (1) Core Oil Core Making, and Two (2) Redford Shell Core Making Machines
Stack ID: V4, V5, and V38

Air Set Core Making (EU-07)
Maximum Capacity 12,000 pounds of sand per hour
Limit Capacity 4,500 tons of sand per year

Material Formulation		Quantity at Max. Capacity (lb/hr)	Quantity at Limit Capacity (lb/hr)
100	lb sand	12,000	1027.40
1.25	lb resin	150	12.84
0.25	lb catalyst	30	2.57

Core Oil Core Making (EU-08)
Maximum Capacity 250 pounds of sand per hour
Limit Capacity 730 tons of sand per year

Material Formulation		Quantity at Max. Capacity (lb/hr)	Quantity at Limit Capacity (lb/hr)
200	lb sand	250	166.67
5.94	lb core oil	7.43	4.95
12.51	lb city water	15.64	10.43
1.31	lb iron oxide	1.64	1.09
7.56	lb cereal binder	9.45	6.30

#1 Redford Shell Core Machine (EU-09A)
Maximum Capacity 35.75 pounds of shell sand per hour
Limit Capacity 60 tons of shell sand per year

#2 Redford Shell Core Machine (EU-09B)
Maximum Capacity 35.75 pounds of shell sand per hour
Limit Capacity 60 tons of shell sand per year

Core Making Formulations*	VOC (% wt)	Furfuryl Alcohol (% wt)	Benzene (% wt)	Phenol (% wt)	Toluene (% wt)	Formaldehyde (% wt)	Methanol (% wt)
Air Set Core Making							
Resin	78.36	77	0.00	0	0	0.36	1.00
Catalyst	0.10	0.00	0.10	0	0	0	
Core Oil Core Making							
Core Oil	50	0	0	0	0	0	0

*Catalyst wt % furfuryl alcohol was provided by manufacturer; all other formulations are from MSDS's. IDEM, OAQ has approved data showing furfuryl alcohol is a reactive component, and reacts quickly to yield a non-volatile, solid product. The reaction takes place at ambient temperature. Emissions are so small it is difficult to measure any emissions; this is complicated by the fact that the resin system both contains water, and produces some water as a reaction byproduct.

Appendix A - Emissions Calculations for Interstate Castings Inc
Core Making (VOC and HAP Calcs Continued)

Company Name: Interstate Castings
Address City IN Zip: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
Permit Number: F 097-31761-00063
Plt ID: 097-00063
Reviewer: Bruce Farrar
Date: April 20, 2012

Potential VOC and HAP Emissions - Core Making

		Specific HAPs (tpy)					
	Total VOC (tpy)	Benzene	Phenol	Toluene	Formaldehyde	Methanol	Total HAP (tpy)
Air Set Core Making*							
Resin	13.45	0.00	0.00	0.00	0.05	3.29	3.33
Catalyst	0.13	0.13	0.00	0.00	0.00	0.00	0.13
Core Oil Core Making							
Core Oil	16.26	0.00	0.00	0.00	0.00	0.00	0.00

Redford Shell Core Machine (#1)

Pollutants	VOC	Benzene	Phenol	Toluene
Em. Factor	0.25	0.046	0.127	0.018
Source of Em. Factor	**	**	**	**
Units of Em. Factor	lbs/ton sand	lbs/ton sand	lbs/ton sand	lbs/ton sand
Emissions (tons/yr)	0.02	3.60E-03	9.94E-03	1.41E-03

Redford Shell Core Machine (#2)

Pollutants	VOC	Benzene	Phenol	Toluene
Em. Factor	0.25	0.046	0.127	0.018
Source of Em. Factor	**	**	**	**
Units of Em. Factor	lbs/ton sand	lbs/ton sand	lbs/ton sand	lbs/ton sand
Emissions (tons/yr)	0.02	3.60E-03	9.94E-03	1.41E-03

Summary of PTE

	TOTAL VOC (tpy)	TOTAL HAP (tpy)
Air Set	**13.58**	**3.46**
Core Oil	**16.26**	**0.00**
Redford Shell	**0.04**	**0.03**

* Air Set Core Making calculations should include the following evaporation factors:
2% by weight for furfuryl alcohol (from the Manufacturer, this is a conservative estimate)
2% by weight for formaldehyde (from Form R Reporting of Binder Chemicals Used in Foundries)
50% by weight for methanol (from Form R Reporting of Binder Chemicals Used in Foundries)

** These emission factors came from the minor permit revision F097-15876-00063, issued on April 2, 2004 for the construction of these two redford shell core machines.

Limited Potential VOC and HAP Emissions - Core Making

		Specific HAPs (tpy)					
	Total VOC (tpy)	Benzene	Phenol	Toluene	Formaldehyde	Methanol	TOTAL HAP (tpy)
Air Set Core Making*							
Resin	1.15	0.00	0.00	0.00	4.05E-03	0.28	0.29
Catalyst	0.01	0.01	0.00	0.00	0.00	0.00	0.01
Core Oil Core Making							
Core Oil	10.84	0.00	0.00	0.00	0.00	0.00	0.00

Redford Shell Core Machine (#1)

Pollutants	VOC	Benzene	Phenol	Toluene
Em. Factor	0.25	0.046	0.127	0.018
Source of Em. Factor	**	**	**	**
Units of Em. Factor	lbs/ton sand	lbs/ton sand	lbs/ton sand	lbs/ton sand
Emissions (tons/yr)	0.01	1.38E-03	3.81E-03	5.40E-04

Redford Shell Core Machine (#2)

Pollutants	VOC	Benzene	Phenol	Toluene
Em. Factor	0.25	0.046	0.127	0.018
Source of Em. Factor	**	**	**	**
Units of Em. Factor	lbs/ton sand	lbs/ton sand	lbs/ton sand	lbs/ton sand
Emissions (tons/yr)	0.01	1.38E-03	3.81E-03	5.40E-04

Summary of Limited PTE

	TOTAL VOC (tpy)	TOTAL HAP (tpy)
Air Set	**1.16**	**0.30**
Core Oil	**10.84**	**0.00**
Redford Shell	**0.02**	**0.01**

* Air Set Core Making calculations should include the following evaporation factors:
2% by weight for furfuryl alcohol (from the Manufacturer, this is a conservative estimate)
2% by weight for formaldehyde (from Form R Reporting of Binder Chemicals Used in Foundries)
50% by weight for methanol (from Form R Reporting of Binder Chemicals Used in Foundries)

** These emission factors came from the minor permit revision F097-15876-00063, issued on April 2, 2004 for the construction of these two redford shell core machines.

Methodology

Potential VOC and HAP Emissions were calculated using the following equations:

Air Set Core Making VOC Emissions = (Quantity at Max. Capacity, lb/hr) x [(wt % each VOC in Resin) x (each specific % evaporation factor)] x 8760 hr/yr x 1 ton/2000 lb
Core Oil Core Making VOC Emissions = (Quantity at Max. Capacity, lb/hr) x 8760 hr/yr x (wt% VOC in Core Oil) x 1 ton/2000 lb
Redford Shell Machines VOC Emissions = Emission Factor, lbs/sand x Max. lb sand usage/hr x 8760 hr/yr x 1 ton/2000 lb

Limited Potential VOC and HAP Emissions were calculated using the following equations:

Air Set Core Making VOC Emissions = (Quantity at Limit Capacity, lb/hr) x [(wt % each VOC in Resin) x (each specific % evaporation factor)] x 8760 hr/yr x 1 ton/2000 lb
Core Oil Core Making VOC Emissions = (Quantity at Limit Capacity, lb/hr) x 8760 hr/yr x (wt% VOC in Core Oil) x 1 ton/2000 lb
Redford Shell Machines VOC Emissions = Emission Factor, lbs/sand x Limit lb sand usage/hr x 8760 hr/yr x 1 ton/2000 lb

Appendix A - Emissions Calculations for Interstate Castings Inc.
Core Making (PM, PM10, SOx, and NOx Calculations)

Company Name: Interstate Castings
Address City IN Zip: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
Permit Number: F 097-31761-00063
Plt ID: 097-00063
Reviewer: Bruce Farrar
Date: April 20, 2012

Emission Unit: EU-07, EU-08, EU-09A, and EU-09B
Unit Description: One (1) Air Set Core Making, One (1) Core Oil Core Making, and Two (2) Redford Shell Core Making Machines
Stack ID: V4, V5, and V38

Air Set Core Making (EU-07)
Maximum Capacity 12,000 pounds of sand per hour
Limit Capacity 4,500 tons of sand per year

Core Oil Core Making (EU-08)
Maximum Capacity 250 pounds of sand per hour
Limit Capacity 730 tons of sand per year

#1 Redford Shell Core Machine (EU-09A)
Maximum Capacity 35.75 pounds of shell sand per hour
Limit Capacity 60 tons of shell sand per year

#2 Redford Shell Core Machine (EU-09B)
Maximum Capacity 35.75 pounds of shell sand per hour
Limit Capacity 60 tons of shell sand per year

PTE Other Criteria Pollutant Emissions - Core Making (continued from previous page)

Air Set Core Making

Pollutants	PM	PM10	SOx	NOx
Em. Factor	3.6	0.54	0	0
SCC	30400350	30400350	N/A	N/A
Source of Em. Factor	FIRE 6.25	FIRE 6.25	N/A	N/A
Units of Em. Factor	lbs/ton sand	lbs/ton sand	N/A	N/A
Emissions (tons/yr)	94.61	14.19	0.00	0.00

Core Oil Core Making

Pollutants	PM	PM10	SOx	NOx
Em. Factor	3.6	0.54	0	0
SCC	30400350	30400350	N/A	N/A
Source of Em. Factor	FIRE 6.25	FIRE 6.25	N/A	N/A
Units of Em. Factor	lbs/ton sand	lbs/ton sand	N/A	N/A
Emissions (tons/yr)	1.97	0.30	0.00	0.00

Redford Shell Core Machine (#1)

Pollutants	PM	PM10	SOx	NOx
Em. Factor	3.6	0.54	0	0
SCC	30400350	30400350	30400350	30400350
Source of Em. Factor	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25
Units of Em. Factor	lbs/ton sand	lbs/ton sand	lbs/ton sand	lbs/ton sand
Emissions (tons/yr)	0.28	0.04	0.00	0.00

Redford Shell Core Machine (#2)

Pollutants	PM	PM10	SOx	NOx
Em. Factor	3.6	0.54	0	0
SCC	30400350	30400350	30400350	30400350
Source of Em. Factor	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25
Units of Em. Factor	lbs/ton sand	lbs/ton sand	lbs/ton sand	lbs/ton sand
Emissions (tons/yr)	0.28	0.04	0.00	0.00

Summary of PTE - All Core Making Machines

Pollutant	PM	PM10	SOx	NOx
All Core Making Machines	97.14	14.57	0.00	0.00

Limited PTE (Sand Usage Limits) - All Core Making Machines

Air Set Core Making

Pollutants	PM	PM10*	SOx	NOx
Em. Factor	3.6	0.54	0	0
SCC	30400350	30400350	N/A	N/A
Source of Em. Factor	FIRE 6.25	FIRE 6.25	N/A	N/A
Units of Em. Factor	lbs/ton sand	lbs/ton sand	N/A	N/A
Emissions (tons/yr)	8.10	1.82	0.00	0.00

Core Oil Core Making

Pollutants	PM	PM10*	SOx	NOx
Em. Factor	3.6	0.54	0	0
SCC	30400350	30400350	N/A	N/A
Source of Em. Factor	FIRE 6.25	FIRE 6.25	N/A	N/A
Units of Em. Factor	lbs/ton sand	lbs/ton sand	N/A	N/A
Emissions (tons/yr)	1.31	0.30	0.00	0.00

Redford Shell Core Machine (#1)

Pollutants	PM	PM10*	SOx	NOx
Em. Factor	3.6	0.54	0	0
SCC	30400350	30400350	30400350	30400350
Source of Em. Factor	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25
Units of Em. Factor	lbs/ton sand	lbs/ton sand	lbs/ton sand	lbs/ton sand
Emissions (tons/yr)	0.11	0.02	0.00	0.00

Redford Shell Core Machine (#2)

Pollutants	PM	PM10*	SOx	NOx
Em. Factor	3.6	0.54	0	0
SCC	30400350	30400350	30400350	30400350
Source of Em. Factor	FIRE 6.25	FIRE 6.25	FIRE 6.25	FIRE 6.25
Units of Em. Factor	lbs/ton sand	lbs/ton sand	lbs/ton sand	lbs/ton sand
Emissions (tons/yr)	0.11	0.02	0.00	0.00

Summary of Limited PTE - All Core Making Machines

Pollutant	PM	PM10	SOx	NOx
All Core Making Machines	9.63	2.17	0.00	0.00

*The limited PM10 Emission Rate (tpy) includes a 1.5 safety factor requested by the source.

Methodology

Potential Emissions were calculated using the following equations:
Emissions (tons/yr) = (Maximum Capacity, lb sand/hr) x 1 ton/2000 lb x (Emission Factor, lbs/ton sand) x 8760 hr/yr x 1 ton/2000 lb

Limited Potential Emissions were calculated using the following equations:
Emissions (tons/yr) = (Limit Capacity, ton sand/hr) x (Emission Factor, lbs/ton sand) x 8760 hr/yr x 1 ton/2000 lb

Appendix A - Emissions Calculations for Interstate Castings Inc.

HAP Calculations for Pouring, Cooling, Shakeout, and NG Combustion

Company Name: Interstate Castings
Address City IN Zip: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
Permit Number: F 097-31761-00063
Plt ID: 097-00063
Reviewer: Bruce Farrar
Date: April 20, 2012

Potential HAP Emissions from pouring, cooling, shakeout, and NG combustion

Misc. Combustion HAPs	Maximum Capacity	Units	Combustion HAP Emission Factor	PTE	Total Misc. Combustion HAP
Process:			(lb HAP/lb input)	(ton/yr)	(ton/yr)
Pouring/Cooling & Shakeout [a]	55.9	(tons resin/yr)	0.01121 lbs Benzene/lb	0.63	0.90
Pouring/Cooling & Shakeout [a]	55.9	(tons resin/yr)	0.000975 lbs Phenol/lb	0.05	
Pouring/Cooling & Shakeout [a]	55.9	(tons resin/yr)	0.003989 lbs other HAPs/lb	0.22	

[a] PTE for Miscellaneous

Methodology

PTE Misc. Combustion HAPs (tons/yr) = Maximum Capacity (ton/yr) x 2000 lbs/ton x Emission Factor (lb HAP/lb input) x 1 ton/2000 lb

Appendix A - Emissions Calculations for Interstate Castings Inc.
Road Surfaces

Company Name: Interstate Castings
Address City IN Zip: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
Permit Number: F 097-31761-00063
Plt ID: 097-00063
Reviewer: Bruce Farrar
Date: April 20, 2012

Insignificant Fugitive Emissions from Road Surfaces

1. Emission Factors: AP-42

According to AP-42, Chapter 13.2.1 - Paved Roads (12/03), the PM/PM10 emission factors for paved roads can be estimated from the following equation:

$$E = (k \times (sL/2)^a \times (w/3)^b - C) \times (1 - p/(4 \times 365))$$

where:

E =	emission factor (lb/vehicle mile traveled)	
sL =	road surface silt loading (g/m^2) =	0.6 (g/m^2) (AP-42, Table 13.2.1-3
w =	mean vehicle weight (tons) =	25.7 tons
k =	empirical constant =	0.082 for PM and 0.016 for PM10
a =	empirical constant =	0.65
b =	empirical constant =	1.5
C =	emission factor for exhaust, brake and tire wear	0.00047 for PM and PM10
p =	number of days per year with 0.01 inches precipitation	120

PM Emission Factor = $(0.082 \times (0.6/2)^{0.65} \times (29/3)^{1.5} - 0.00047) \times (1 - 120/1460)$ = **0.86** lbs/mile

PM10 Emission Factor = $(0.016 \times (0.6/2)^{0.65} \times (29/3)^{1.5} - 0.00047) \times (1 - 120/1460)$ = **0.17** lbs/mile

2. Potential to Emit (PTE) of PM/PM10 Before Control from Paved Roads:

Vehicle Type	*Ave Weight of Vehicles (tons)	*Trip Number (trips/yr)	* Round Trip Distance (mile/trip)	Vehicle Mile Traveled (VMT) (miles/yr)	Traffic Component (%)	Component Vehicle Weight (tons)	PTE of PM before Control (tons/yr)	PTE of PM10 before Control (tons/yr)
12k pound vehicle	6.0	235	0.10	24	22.86%	1.37	1.01E-02	1.97E-03
34k pound vehicle	17.0	107	0.10	11	10.41%	1.77	4.61E-03	8.97E-04
30k pound vehicle	15.0	98	0.10	10	9.53%	1.43	4.22E-03	8.21E-04
34k pound vehicle	17.0	147	0.20	29	28.60%	4.86	1.27E-02	2.46E-03
40k pound vehicle	20.0	147	0.20	29	28.60%	5.72	1.27E-02	2.46E-03
Total				**103**	**100%**	**15.2**	**4.42E-02**	**8.62E-03**

* This information is provided by the source.

Methodology

Vehicle Mile Traveled (miles/yr) = Trip Number (trips/yr) x Round-Trip Distance (mile/trip)
Traffic Component (%) = VMT / Total VMT
Component Vehicle Weight = Ave. Weight of Vehicles (ton) x Traffic Component (%)
PTE of PM/PM10 before Control (tons/yr) = VMT (miles/yr) x PM/PM10 Emission Factors x 1 ton/2000 lbs

Appendix A - Emissions Calculations for Interstate Castings Inc.
Wood Working

Company Name:	**Interstate Castings**
Address City IN Zip:	**3823 Massachusetts Avenue, Indianapolis, Indiana 46218**
Permit Number:	**F 097-31761-00063**
Plt ID:	**097-00063**
Reviewer:	**Bruce Farrar**
Date:	**April 20, 2012**

Insignificant Emissions From Wood Working

Description:	(1) ban saw and (1) oscillating vertical sander
Control Device:	Dust Collector
Air Flowrate:	550 acfm

PTE of PM/PM10 before Control (tons/yr)

Pollutant	PM	PM-10
Tons/yr	61.9	61.9

PTE of PM/PM10 after Control (tons/yr)

Pollutant	PM	PM-10
Factor	0.03	0.03
Units	gr/dscf	gr/dscf
Tons/yr	0.62	0.62

Controlled PM emissions were assumed to be equivalent to 0.03 gr/dscf
PM emissions were assumed to be equivalent to PM-10
Baghouse efficiency assumed to be 99%.

Methodology

PTE of PM/PM10 after Control (tons/yr) = Grain Loading (gr/dscf) x Max. Air Flow Rate (scfm) x 60 mins/hr x 1/7000 lb/gr x 8760 hr/yr x 1 ton/2000 lbs

PTE of PM/PM10 before Control (tons/yr) = PTE of PM/PM10 after Control (tons/yr) / (1-Control Efficiency)

Appendix A: Emissions Calculations

September 2007 Stack Test Results

Company Name: **Interstate Castings**
Address City IN Zip: **3823 Massachusetts Avenue, Indianapolis, IN 46218**
Operating Permit No.: **F097-18317-00063**
Minor Permit Revision No.: **MPR097-27070-00063**
Reviewer: **M. Caraher**
Date: **November 17, 2008**

Process	Stack	Total VOC from Stack Test (lb/hr)	Metal Throughput During Test (tons/hr)	Total VOC from Stack Test (lb/ton)	Production Limit in 18317 permit (tons/yr)	PTE VOC at Production limit (tons/yr)	18317 Permit Limit Organic HAPs (tons/yr)
pouring/cooling	V17	2.53	3.56	0.71	20,000	7.11	1.94
pouring/cooling	V18	1.64	3.56	0.46	20,000	4.61	
shakeout	Stack A	0.12	3.37	0.04	20,000	0.36	
	totals	4.29		1.21		12.07	

Organic HAPs emissions are calculated based on the organic HAP content of the binder materials used in Airset Cores.

	Iron poured (lbs)	Cores Used (lbs)	Oil Resin (lbs)	Iso Resin (lbs)	Shell Resin (lbs)	Total Resin Used	Percent Oil Resin	Percent Iso Resin	Percent Shell Resin
Test 1	8400	200.64	1.564	1.459					
Test 2	7200	649.51	1.03	6.652					
Test 3	9600	228.13	4.674	0.274					
Test 4	9600	924.98	11.562	1.518	7.107				
Test 5	7200	962.61	1.159	8.072	4.46				
Test 6	6600	505.45		2.458	7.05				
Totals	48,600	3,471	19.99	20.43	18.62	59.04	33.86%	34.61%	31.53%

Process	Stack	Total VOC from Stack Test (lb/hr)	VOC Content of Oil Binder (%)	Organic HAP Content of Oil Binder (%)	VOC Content of Iso Binder (%)	Organic HAP Content of Iso Binder (%)	VOC Content of Shell Binder (%)	Organic HAP Content of Shell Binder (%)	Organic HAP Emissions (lbs/hr)	18317 Permit Limit Organic HAPs (tons/yr)
pouring/cooling	V17	2.53	50.00%	0.00%	78.36%	1.36%	0.0125%	0.0096%	0.62	1.94
pouring/cooling	V18	1.64							0.40	
shakeout	Stack A	0.12							0.03	
	total	4.29							1.06	

Organic HAP Emissions (lbs/hr) = VOC from Stack Test (lb/hr) x Percent ISO Resin used x ISO HAP content/ISO VOC content + VOC from Stack Test (lb/hr) x Percent Shell Resin used x Shell Resin HAP content/Shell Resin VO

Stack	Organic HAP Emissions (lbs/hr)	Metal Throughput During Test (tons/hr)	Total Organic HAPs from Stack Test (lb/ton)	Production Limit in 18317 permit (tons/yr)	PTE Organic HAPs at Production Limit (tons/yr)
V17	0.62	3.56	0.18	20,000	1.75
V18	0.40	3.56	0.11	20,000	1.14
Stack A	0.03	3.37	0.01	20,000	0.09
total	1.06		0.30	20,000	2.98

Appendix A: Emissions Calculations
Summary of HAPs Emissions

Company Name: Interstate Castings
Address City IN Zip: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
Permit Number: F 097-31761-00063
Plt ID: 097-00063
Reviewer: Bruce Farrar
Date: April 20, 2012

	18317 Permit Limit Metallic HAPs (tons/yr)	18317 Permit Limit Organic HAPs (tons/yr)	Metallic HAPs Stack Test Results (lb/ton metal)	Organic HAPs Stack Test Results (lb/ton metal)	18317 Permit Limit (tons metal/yr)	Metallic HAPs Emissions Based on Test Results (tons/yr)	Organic HAPs Emissions Based on Test Results (tons/yr)
Furnaces	2.4		0.0103		20000	0.103	
Charging	1.01		0.00271		20000	0.0271	
V17 pouring/cooling	1.77		0.001875	0.18	20000	0.01875	1.75
V18 pouring/cooling		1.94	0.00122	0.11	20000	0.0122	1.14
shakeout/sand handling	2.39						
shotblasting			0.000415	0.01	20000	0.00415	0.09
air set core making		0.29925					
shell core making		0.01146					
oil core making		0					

Note: shakeout, sand handling, and shotblasting all exhaust to Stack A.

	Total Metallic HAPs Emissions (tons/yr)	Total Organic HAPs Emissions (tons/yr)	Total HAPs Emissions (tons/yr)
Furnaces	0.103		0.103
Charging	0.0271		0.0271
V17 pouring/cooling	0.01875	1.75	1.77
V18 pouring/cooling	0.0122	1.14	1.15
shakeout/sand handling	0.00415		0.09
shotblasting		0.09	0.00
air set core making	0	0.29925	0.30
shell core making	0	0.01146	0.01
oil core making	0	0	0.00
Totals	0.17	3.29	3.46

The summary above shows plantwide emissions, using stack test results for all processes where stack test results are available. This summary assumes that only a portion of the VOC emissions from pouring/cooling/shakeout are organic HAPs, as calculated on page 1.

	Total Metallic HAPs Emissions (tons/yr)	Total Organic HAPs Emissions (tons/yr)	Total HAPs Emissions (tons/yr)
Furnaces	2.4		2.4
Charging	1.01		1.01
V17 pouring/cooling	1.77	1.75	3.52
V18 pouring/cooling		1.14	1.14
shakeout/sand handling	2.4	0.09	2.49
shotblasting			
air set core making	0	0.29925	0.30
shell core making	0	0.01146	0.01
oil core making	0	0	0.00
Totals	7.58	3.29	10.87

The summary above shows plantwide emissions, using stack test results for organic HAPs from pouring/cooling/shakeout (p/c/s), and using permitted emission limits for other processes. This summary assumes that only a portion of the VOC emissions from p/c/s are organic HAPs, as calculated on page 1.

Appendix A: Emissions Calculations
Summary of HAPs Emissions

Company Name: Interstate Castings
Address City IN Zip: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
Permit Number: F 097-31761-00063
Plt ID: 097-00063
Reviewer: Bruce Farrar
Date: April 20, 2012

If we assume that all VOC from pouring/cooling/shakeout is combined organic HAPs:

	Total Metallic HAPs Emissions (tons/yr)	Total Organic HAPs Emissions (tons/yr)	Total HAPs Emissions (tons/yr)
Furnaces	0.103	0	0.103
Charging	0.0271	0	0.03
V17 pouring/cooling	0.01875	12.1	12.09
V18 pouring/cooling	0.0122		0.01
shakeout/sand handling	0.00415		0.00
shotblasting	0	0	0.00
air set core making	0	0.29925	0.30
shell core making	0	0.01146	0.01
oil core making	0	0	0.00
Totals	0.17	12.38	12.55

The summary above shows plantwide emissions, using VOC stack test results for pouring, cooling and shakeout and assumes all VOC from p/c/s are organic HAPs. This summary uses stack test results for all other processes, where available.

If we assume that all VOC from pouring/cooling/shakeout is organic HAPs:

	Total Metallic HAPs Emissions (tons/yr)	Total Organic HAPs Emissions (tons/yr)	Total HAPs Emissions (tons/yr)
Furnaces	2.4	0	2.4
Charging	1.01	0	1.01
V17 pouring/cooling	1.77	12.1	13.84
V18 pouring/cooling	0		0.00
shakeout/sand handling	2.4		2.40
shotblasting	0	0	0.00
air set core making	0	0.29925	0.30
shell core making	0	0.01146	0.01
oil core making	0	0	0.00
Totals	7.58	12.38	19.96

The summary above shows plantwide emissions, using VOC stack test results for pouring, cooling and shakeout and assumes all VOC from p/c/s are organic HAPs. This summary uses permitted emission limits for other processes.

Total unlimited PTE Organic HAP from F097-18317-00063 pouring/cooling/shakeout TSD App A page 15:	21.27 tons/yr
Revised Total unlimited PTE VOC/Organic HAP for FESOP Revision 097-27020-00063 for pouring/cooling/shakeout:	26.50 tons/yr
Revised Total VOC/Organic HAP for FESOP Revision 097-27020-00063 for pouring/cooling/shakeout:	12.07 tons/yr

	Benzene	Phenol	Toluene	Formaldehyde	HCN
Weight percent individual HAP from F097-18317-00063 pouring/cooling/shakeout total; TSD App A page 15	14.60%	0.40%	27.40%	0.20%	2.30%
Calculated indiviual HAP from revised total unlimited PTE VOC/Organic HAP from pouring cooling/shakeout (tons/yr)	3.87	0.11	7.26	0.05	0.61
Calculated indiviual HAP from revised total VOC/Organic HAP from pouring cooling/shakeout (tons/yr)	1.76	0.05	3.31	0.02	0.28

Methodology

Revised Total unlimited PTE VOC/Organic HAP for FESOP Revision 097-27020-00063 for pouring/cooling/shakeout = 1.21 lbs/ton x 5 tons/hr x 8760 hrs/yr x ton/2000 lbs
Revised Total VOC/Organic HAP for FESOP Revision 097-27020-00063 for pouring/cooling/shakeout = 1.21 lbs/ton x 20,000 tons/yr x 8760 hrs/yr x ton/2000 lbs
Calculated unlimited PTE individual HAP = percent individual HAP from F097-18317-00063 pouring/cooling/shakeout x 26.50 tons/yr x ton/2000 lbs
Calculated limited individual HAP = percent individual HAP from F097-18317-00063 pouring/cooling/shakeout x 12.07 tons/yr x ton/2000 lbs

Appendix A: Emissions Calculations
Sand Reclaimation

Company Name: Interstate Castings
Address City IN Zip: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
Permit Number: F 097-31761-00063
Plt ID: 097-00063
Reviewer: Bruce Farrar
Date: April 20, 2012

Emission Unit	Control Device	Baghouse Outlet Grain Loading (gr/dscf)	Maximum Design Air Flow Rate (cfm)	Maximum Capacity (tons sand/hr)	Pollutant	Emission Factor (lb/ton sand)	Uncontrolled Emissions (tons/yr)	Controlled Emissions (lbs/hr)	Controlled Emissions (tons/yr)
mechanical sand reclamation system EU10	baghouse CE-D	0.01	10,000	12	PM	3.6	189.22	0.86	3.75
					PM10	0.54	28.38	0.86	3.75
					PM2.5	0.54	28.38	0.86	3.75
					VOC	0	0.00	0.00	0.00
					SO2	0	0.00	0.00	0.00
					NOx	0	0.00	0.00	0.00
					CO	0	0.00	0.00	0.00

Methodology
Emission Factors are from FIRE, SCC 30400350 (Sand Handling)
Uncontrolled Emissions (tons/yr) = Emission Factor (lbs/ton sand x tons sand/hr x 8760 hours/yr x ton/2000 lbs
Controlled Emissions (lbs/hr) = Baghouse outlet grain loading (gr/dscf) x design air flow rate (cfm) x 60 min/hr x lb/7000 gr
Controlled Emissions (tons/yr) = Baghouse outlet grain loading (gr/dscf) x design air flow rate (cfm) x 60 min/hr x 8760 hour/yr x lb/7000 gr x ton/2000 lbs

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

Company Name: **Interstate Castings**
Address City IN Zip: **3823 Massachusetts Avenue, Indianapolis, Indiana 46218**
Permit Number: **F 097-31761-00063**
Plt ID: **097-00063**
Reviewer: **Bruce Farrar**
Date: **April 20, 2012**

Heat Input Capacity MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr
7.04	1020	60.5

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.06	0.23	0.23	0.02	3.02	0.17	2.54

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

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

See page 21 for HAPs emissions calculations.

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

Company Name: Interstate Castings
Address City IN Zip: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
Permit Number: F 097-31761-00063
Plt ID: 097-00063
Reviewer: Bruce Farrar
Date: April 20, 2012

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	6.349E-05	3.628E-05	2.268E-03	5.442E-02	1.028E-04

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.512E-05	3.326E-05	4.233E-05	1.149E-05	6.349E-05

Methodology is the same as page 20.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.
See Page 22 for Greenhouse Gas calculations.

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

Company Name: **Interstate Castings**
Address City IN Zip: **3823 Massachusetts Avenue, Indianapolis, Indiana 46218**
Permit Number: **F 097-31761-00063**
Plt ID: **097-00063**
Reviewer: **Bruce Farrar**
Date: **April 20, 2012**

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	3,628	0.1	0.1
Summed Potential Emissions in tons/yr	3,628		
CO2e Total in tons/yr	3,650		

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Company Name: **Interstate Castings**
Address City IN Zip: **3823 Massachusetts Avenue, Indianapolis, Indiana 46218**
Permit Number: **F 097-31761-00063**
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Reviewer: **Bruce Farrar**
Date: **April 20, 2012**

Insignificant Natural Gas Combustion Devices

Process	MMBtu/hr	Process	MMBtu/hr
Core Oven	1.6	Air-set conveyor Infra-red	0.024
Maintenance West Space Heater	0.225	Core Room Core Prep Infra-red	0.024
Maintenance East Space Heater	0.225	Bench Core Table Infra-red	0.024
Chipping Booth Space Heater	0.2	Bench Core Table Infra-red	0.024
Old Dock Space Heater	0.4	Core Assembly Table Infra-red	0.024
Maintenance Shower Room Furnace	0.125	Air-set Core & Mold assembly Table Infrare	0.024
Old Conference Room Boiler	0.106	Air-set Core & Mold assembly Table Infrare	0.024
Airset Oven	0.115	Air-set Mold Assembly Infrared	0.024
Airset Torpedo	0.4	Air-set Mold Assembly Infrared	0.024
Airset Torpedo	0.4	Sinto Infro-red (basement)	0.024
Bull Ladle Torch -2"	0.279	Sinto Infro-red (basement)	0.024
Control Room Furnace	0.125	#9 Molding Machine Infra-red (overhead)	0.024
Core Dip Drying Table Infra-red	0.048	#9 Molding Machine Infra-red (basement)	0.024
Ladle Torch 2" Floor Molding	0.279	Molding Line Setup Table Infra-red (baseme	0.024
Ladle Torch 2" Floor Molding	0.279	#8 Molding Machine Infra-red (basement)	0.024
Ladle Torch 2" Floor Molding	0.279	#8 Molding Machine Infra-red (overhead)	0.024
Bull Ladle Torch -2"	0.279	#7 Molding Machine Infra-red (basement)	0.024
Heavey Chip Torpedo	0.4	#7 Molding Machine Infra-red (overhead)	0.024
Shipping Office North Infra-red	0.014	#6 Molding Machine Infra-red (basement)	0.024
Shipping Office South Infra-red	0.014	#6 Molding Machine Infra-red (overhead)	0.024
Core Assembly Table Heater	0.014	#5 Molding Machine Infra-red (basement)	0.024
Muller Trash Chute Torch	0.005	#5 Molding Machine Infra-red (overhead)	0.024
Muller Gearbox Infra-red	0.024	#4 Molding Machine Infra-red (basement)	0.024
Muller Manifold Infra-red	0.024	#4 Molding Machine Infra-red (overhead)	0.024
Compressor Water Manifold Infra-red	0.024	#3 Molding Machine Infra-red (basement)	0.024
Air-set room space heater	0.15	#3 Molding Machine Infra-red (overhead)	0.024
Air-set room Infra-red	0.024	#1 Molding Machine Infra-red (basement)	0.024
Air-set room Infra-red	0.024	#1 Molding Machine Infra-red (overhead)	0.024
Air-set conveyor Infra-red	0.024	Ladle Prep Area Sink Infra-red	0.024
Air-set conveyor Infra-red	0.024	#2 Stand Grinder Infra-red	0.024
Floor Molding North Station Infra-red	0.024	#1 Stand Grinder Infra-red	0.024
Floor Molding South Station Infra-red	0.024	Brinell Tester Infrared	0.024
Floor Molding Water Barell Infra-red	0.024	Single Pedestal Dual Wheel Grinder Infra-re	0.024
Floor Molding Simpson Muller Infra-re	0.024	Floor Molding Rollaround Triple Unit Infra-re	0.024

Total Heat Input Capacity	7.041	MMBtu/hr
Total Max Firing Rate	0.006903	MMCF/hr

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

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

TO: Becky Meyer
Interstate Castings
3823 Massachusetts Ave
Indianapolis, IN 46218

DATE: August 2, 2012

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

SUBJECT: Final Decision
FESOP - Significant Permit Revision
097 - 31761 - 00063

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

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

A copy of the final decision and supporting materials has also been sent via standard mail to:
Leo J Meyer, President
OAQ Permits Branch Interested Parties List

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

Final Applicant Cover letter.dot 11/30/07

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

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

August 2, 2012

TO: Indianapolis-Marion County Public Library

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

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

Applicant Name: Interstate Castings
Permit Number: 097 - 31761 - 00063

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

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

Enclosures
Final Library.dot 11/30/07

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

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: August 2, 2012

RE: Interstate Castings / 097 - 31761 - 00063

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

In order to conserve paper and reduce postage costs, IDEM's Office of Air Quality is now sending many permit decisions on CDs in Adobe PDF format. The enclosed CD contains information regarding the company named above.

This permit is also available on the IDEM website at:
http://www.in.gov/ai/appfiles/idem-caats/

If you would like to request a paper copy of the permit document, please contact IDEM's central file room at:

Indiana Government Center North, Room 1201
100 North Senate Avenue, MC 50-07
Indianapolis, IN 46204
Phone: 1-800-451-6027 (ext. 4-0965)
Fax (317) 232-8659

Please Note: *If you feel you have received this information in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV.*

Enclosures
CD Memo.dot 11/14/08

Mail Code 61-53

IDEM Staff	LPOGOST 8/2/2012 Interstate Castings 097 - 31761 - 00063 final)			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
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2		Leo J Meyer President Interstate Castings 3823 Massachusetts Ave Indianapolis IN 46218 *(RO CAATS)*									
3		Marion County Health Department 3838 N, Rural St Indianapolis IN 46205-2930 *(Health Department)*									
4		Indianapolis City Council and Mayors Office 200 East Washington Street, Room E Indianapolis IN 46204 *(Local Official)*									
5		Lawrence City Council and Mayors Office 9001 East 59th Street #205 Lawrence IN 46216 *(Local Official)*									
6		Marion County Commissioners 200 E. Washington St. City County Bldg., Suite 801 Indianapolis IN 46204 *(Local Official)*									
7		Matt Mosier Office of Sustainability 1200 S Madison Ave #200 Indianapolis IN 46225 *(Local Official)*									
8		Indianapolis-Marion County Public Library 2435 North Sherman Drive Indianapolis IN 46218 *(Library)*									
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