Indiana Department of Environmental Management
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Carol S. Comer
Commissioner

NOTICE OF 30-DAY PERIOD
FOR PUBLIC COMMENT

Preliminary Findings Regarding the Renewal of a
Federally Enforceable State Operating Permit (FESOP)

for Interstate Castings in Marion County

FESOP Renewal No.: F097-37402-00063

The Indiana Department of Environmental Management (IDEM) has received an application from Interstate Castings, located at 3823 Massachusetts Avenue, Indianapolis, Indiana, for a renewal of its FESOP issued on April 16, 2007. If approved by IDEM's Office of Air Quality (OAQ), this proposed renewal would allow Interstate Castings to continue to operate its existing source. In addition, Interstate Castings has applied to construct and operate two (2) uncontrolled woodworking saws, two (2) uncontrolled sand muller units, and two (2) uncontrolled grinding units.

The applicant intends to construct and operate new equipment that will emit air pollutants; therefore, the permit contains new or different permit conditions. In addition, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g., changes that add or modify synthetic minor emission limits). The potential to emit regulated air pollutants will continue to be limited to less than the Title V and PSD major threshold levels. IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow the applicant to make this change.

A copy of the permit application and IDEM's preliminary findings are available at:

Indianapolis Public Library
40 E. St. Clair Street
Indianapolis, IN 46204

A copy of the preliminary findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.

How can you participate in this process?

The date that this notice is published in a newspaper marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so

that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number F097-37402-00063 in all correspondence.

Comments should be sent to:

Brian Williams
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for extension 4-5375
Or dial directly: (317) 234-5375
Fax: (317) 232-6749 attn: Brian Williams
E-mail: bwilliam@idem.IN.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local officials.

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions, please contact Brian Williams of my staff at the above address.

Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

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Michael R. Pence
Governor

DRAFT

Carol S. Comer
Commissioner

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

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.

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.

Operation Permit No.: F097-37402-00063	
Issued by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: Expiration Date:

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SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary gray and ductile iron castings manufacturing plant.

Source Address:	3823 Massachusetts Avenue, Indianapolis, Indiana 46218
General Source Phone Number:	(317) 546-2427
SIC Code:	3321 (Gray and Ductile Iron Foundries)
County Location:	Marion, Center Township
Source Location Status:	Nonattainment for SO_2 standard Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

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

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

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

(1) Two (2) electric induction furnaces, collectively identified as EU-01, with a combined maximum charge capacity of 5.0 tons of metal per hour, 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;

(2) One (1) charge handling system, identified as EU-02, with a maximum charge capacity of 5.0 tons of metal per hour, emissions are collected by the general furnace area ventilation system that exhausts through two uncontrolled stacks identified as stacks V11 and V12. 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 25.0 million Btu per hour, emissions are collected by the general furnace area ventilation system that exhausts through two uncontrolled stacks identified as stacks V11 and V12; and

(4) One (1) reaction/holding ladle, identified as EU-04, with a maximum charge capacity of 5.0 tons of metal per hour, where inoculation takes place, emissions are collected by the general furnace area ventilation system that exhausts through two uncontrolled stacks identified as stacks V11 and V12.

This gray and ductile iron foundry is an affected source under the provisions of 40 CFR 63, Subpart ZZZZZ.

(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 5.0 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 5.0 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, that was modified in 2012, exhausting through stack A.

(d) Casting Cleaning Operations, collectively identified as EU-06B, permitted in 2016 to add two (2) grinding stations, with a maximum throughput of 5.0 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) Four (4) grinders installed in 1960;

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

(4) One (1) grinder installed in 1960, uncontrolled, and exhausting to the indoors; and

(5) Two (2) grinding stations, permitted in 2016, uncontrolled, and exhausting to the indoors.

(e) Sand Handling Operations, collectively identified as EU-06C, installed prior to 1967 and modified in 1998 and in 2000 and permitted in 2016 to add two (2) sand muller units, 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, constructed 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, modified in 2012, which exhausts through stack A.

(10) Two (2) sand muller units, permitted in 2016, with a combined maximum throughput of 0.0125 tons of sand per hour or 0.3 tons of sand per day, uncontrolled, and exhausting to the indoors.

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

(1) One (1) air set core and mold 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;

(2) 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; and

(3) 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.

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

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:

(a) 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 as follows [326 IAC 6.5-1]:

Process	MMBtu/hr	Process	MMBtu/hr
Core Oven	1.60	Air-set conveyor Infra-red	0.02
Maintenance West Space Heater	0.23	Core Room Core Prep Infra-red	0.02
Maintenance East Space Heater	0.23	Bench Core Table Infra-red	0.02
Chipping Booth Space Heater	0.20	Bench Core Table Infra-red	0.02
Old Dock Space Heater	0.40	Core Assembly Table Infra-red	0.02
Maintenance Shower Room Furnace	0.13	Air-set Core & Mold assembly Table Infrared	0.02
Old Conference Room Boiler	0.11	Air-set Core & Mold assembly Table Infrared	0.02
Airset Oven	0.12	Air-set Mold Assembly Infrared	0.02
Airset Torpedo	0.40	Air-set Mold Assembly Infrared	0.02
Airset Torpedo	0.40	Sinto Infro-red (basement)	0.02
Bull Ladle Torch -2"	0.28	Sinto Infro-red (basement)	0.02
Control Room Furnace	0.13	#9 Molding Machine Infra-red (overhead)	0.02
Core Dip Drying Table Infra-red	0.05	#9 Molding Machine Infra-red (basement)	0.02
Ladle Torch 2" Floor Molding	0.28	Molding Line Setup Table Infra-red (basement)	0.02
Ladle Torch 2" Floor Molding	0.28	#8 Molding Machine Infra-red (basement)	0.02
Ladle Torch 2" Floor Molding	0.28	#8 Molding Machine Infra-red (overhead)	0.02
Bull Ladle Torch -2"	0.28	#7 Molding Machine Infra-red (basement)	0.02
Heavey Chip Torpedo	0.40	#7 Molding Machine Infra-red (overhead)	0.02
Shipping Office North Infra-red	0.01	#6 Molding Machine Infra-red (basement)	0.02
Shipping Office South Infra-red	0.01	#6 Molding Machine Infra-red (overhead)	0.02
Core Assembly Table Heater	0.01	#5 Molding Machine Infra-red (basement)	0.02
Muller Trash Chute Torch	0.01	#5 Molding Machine Infra-red (overhead)	0.02
Muller Gearbox Infra-red	0.02	#4 Molding Machine Infra-red (basement)	0.02
Muller Manifold Infra-red	0.02	#4 Molding Machine Infra-red (overhead)	0.02
Compressor Water Manifold Infra-red	0.02	#3 Molding Machine Infra-red (basement)	0.02
Air-set room space heater	0.15	#3 Molding Machine Infra-red (overhead)	0.02
Air-set room Infra-red	0.02	#1 Molding Machine Infra-red (basement)	0.02
Air-set room Infra-red	0.02	#1 Molding Machine Infra-red (overhead)	0.02
Air-set conveyor Infra-red	0.02	Ladle Prep Area Sink Infra-red	0.02
Air-set conveyor Infra-red	0.02	#2 Stand Grinder Infra-red	0.02
Floor Molding North Station Infra-red	0.02	#1 Stand Grinder Infra-red	0.02
Floor Molding South Station Infra-red	0.02	Brinell Tester Infrared	0.02
Floor Molding Water Barell Infra-red	0.02	Single Pedestal Dual Wheel Grinder Infra-red	0.02
Floor Molding Simpson Muller Infra-red	0.02	Floor Molding Rollaround Triple Unit Infra-red	0.02

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

(A) One (1) hand torch unit for mold drying, with a maximum heat input capacity of 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) One (1) Dayton Salamander, with a maximum heat input capacity of 0.6 MMBtu/hr.

(B) One (1) Dayton Salamander, with a maximum heat input capacity of 0.055 MMBtu/hr.

(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 sander. The emissions from this operation are controlled by an integral dust collector with a design flow rate of 550 cubic feet per minute. [326 IAC 6.5-1]

(d) One (1) woodworking operation for mold patterns, permitted in 2016, generating 1.0 pounds of particulate per hour, uncontrolled, exhausting to the indoors, and consisting of the following:

(i) One (1) radial arm saw; and
(ii) One (1) table saw. [326 IAC 6-5.1]

(e) 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.

This is an affected source under 40 CFR Part 63, Subpart CCCCCC.

(f) 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.

(g) Closed loop heating and cooling systems.

(h) Infrared cure equipment.

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

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

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

tower.

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

(m) One (1) propane fueled Payloader, rated at 61 HP.

(n) Combustion source flame safety purging on startup.

(o) Paved and unpaved roads (hard packed gravel) and parking lots with public access. [326 IAC 6-4][326 IAC 6-5]

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) to renew 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, F097-37402-00063, 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][IC 13-17-12]

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

B.5 Severability [326 IAC 2-8-4(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. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

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

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

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

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

(2) the certification states that, 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.9 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted 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, as 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.10 Compliance Order Issuance [326 IAC 2-8-5(b)]

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

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

(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.

The Permittee shall implement the PMPs.

(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 an "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 describe the following:

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

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

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

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

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

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

Indiana Department of Environmental Management
Compliance 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 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).

(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 F097-37402-00063 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

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

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

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

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

(1) That this permit contains a material mistake.

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

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

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

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

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

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(42). The renewal application 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).

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

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

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

Indiana Department of Environmental Management
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 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).

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

B.18 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) 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)(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 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(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.19 Source Modification Requirement [326 IAC 2-8-11.1]

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

B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

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

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

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

Indiana Department of Environmental Management
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 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).

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

B.22 Annual Fee Payment [326 IAC 2-7-19][326 IAC 2-8-4(6)][326 IAC 2-8-16][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ 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.23 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314][326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 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.

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

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

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

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided 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]

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 attached plan as in 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 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).

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

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

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

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 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) 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 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) 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(1)][326 IAC 2-8-5(a)(1)]

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

(a) For new units:
Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units shall be implemented on and after the date of initial start-up.

(b) For existing units:
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 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, 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 requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.12 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. The analog instrument shall be capable of measuring values outside of the normal range.

(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.13 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.14 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 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 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 the reasonable response steps taken.

C.15 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.16 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, where applicable:

(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, where applicable:

(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.17 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 after 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 IAC 2-1.1-1(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) 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.18 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 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

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

(1) Two (2) electric induction furnaces, collectively identified as EU-01, with a combined maximum charge capacity of 5.0 tons of metal per hour, 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;

(2) One (1) charge handling system, identified as EU-02, with a maximum charge capacity of 5.0 tons of metal per hour, emissions are collected by the general furnace area ventilation system that exhausts through two uncontrolled stacks identified as stacks V11 and V12. 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 25.0 million Btu per hour, emissions are collected by the general furnace area ventilation system that exhausts through two uncontrolled stacks identified as stacks V11 and V12; and

(4) One (1) reaction/holding ladle, identified as EU-04, with a maximum charge capacity of 5.0 tons of metal per hour, where inoculation takes place, emissions are collected by the general furnace area ventilation system that exhausts through two uncontrolled stacks identified as stacks V11 and V12.

This gray and ductile iron foundry is an affected source under the provisions of 40 CFR 63, Subpart ZZZZZ.

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

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

D.1.1 PSD Minor Source Limits 326 IAC 2-2]

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

(a) The combined throughput of metal to the two (2) electric induction furnaces (EU-01) shall not exceed 19,000 tons per twelve consecutive month period with compliance determined at the end of each month.

(b) The combined throughput of metal to the charge handling (EU-02) and reaction/holding ladle (EU-04) shall not exceed 19,000 tons per twelve consecutive month period with compliance determined at the end of each month.

(c) The PM emissions from the following units shall not exceed the emission limits listed in the table below:

Unit Description	Control/Stack	PM Emission Limit (lbs/ton of metal melted)
Two (2) Electric Induction Furnaces (EU-01)	Settling Tank/Cyclone (Stack B)	0.67
Charge Handling (EU-02) and Reaction/Holding Ladle (EU-04)	Uncontrolled (Stacks V11 and V12)	2.40

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 100 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.2 FESOP Limits [326 IAC 2-8-4][326 IAC 2-2][326 IAC 2-4.1]

Pursuant to 326 IAC 2-8-4 and in order to render 326 IAC 2-2 not applicable, the Permittee shall comply with the following:

(a) The combined throughput of metal to the two (2) electric induction furnaces (EU-01) shall not exceed 19,000 tons per twelve consecutive month period with compliance determined at the end of each month.

(b) The combined throughput of metal to the charge handling (EU-02) and reaction/holding ladle (EU-04) shall not exceed 19,000 tons per twelve consecutive month period with compliance determined at the end of each month.

(c) The PM10 and PM2.5 emissions from the following units shall not exceed the emission limits listed in the table below:

Unit Description	Control/Stack	PM10 Emission Limit (lbs/ton of metal melted)	PM2.5 Emission Limit (lbs/ton of metal melted)
Two (2) Electric Induction Furnaces (EU-01)	Settling Tank/Cyclone (Stack B)	0.64	0.64
Charge Handling (EU-02) and Reaction/Holding Ladle (EU-04)	Uncontrolled (Stacks V11 and V12)	3.30	3.30

(d) The combined manganese emissions from the two (2) electric induction furnaces (EU-01) exhausting through Stack B shall not exceed 0.197 ton per twelve (12) consecutive month period, with compliance determined at the end of each month.

(e) The combined emissions of any combination of metal HAPs from the two (2) electric induction furnaces (EU-01) exhausting through Stack B shall not exceed 2.37 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(f) The combined manganese emissions from the charge handling (EU-02) and reaction/holding ladle (EU-04) processes exhausting through stacks V11 and V12 shall not exceed 0.707 ton per twelve (12) consecutive month period, with compliance determined at the end of each month.

(g) The combined emissions 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 0.94 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with these limits, combined with the potential to emit PM10, PM2.5, and HAPs all other emission units at this source, shall limit the source-wide total potential to emit of PM10 and PM2.5 to less than 100 tons per twelve (12) consecutive month period, each, any single HAP to less than ten (10) tons per twelve (12) consecutive month period, total HAPs to less than twenty-five (25) tons per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits), 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP), and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.3 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 following shall not exceed 0.07 grains per dry standard cubic foot of exhaust gas:
(a) two (2) electric induction furnaces (EU-01),
(b) charge handling (EU-02),
(c) natural gas preheater, (EU-03), and
(d) reaction/holding ladle (EU-04).

D.1.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-8-4(1)]

D.1.5 Particulate Matter (PM)

In order to demonstrate compliance with Conditions D.1.1, D.1.2, and D.1.3, the Settling Tank and Cyclone shall be in operation and control emissions from the two (2) electronic induction furnaces at all times that either of these induction furnaces are in operation.

D.1.6 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

In order to demonstrate compliance with Conditions D.1.1(c), D.1.2(c) and (d), and D.1.3, the Permittee shall perform PM, PM10, PM2.5, and manganese testing on one (1) of the two (2) identical electric induction furnaces (EU-01) utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. The electric induction furnace not tested will be tested during the next compliance demonstration test in five (5) years then testing will alternate between the two (2) electric induction furnaces (EU-01) every five (5) years after. 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.

PM10 and PM2.5 shall include filterable and condensable PM10 and PM2.5.

D.1.7 Metallic HAP Emissions Compliance Determinations

Compliance with the HAP limits in Condition D.1.2 shall be demonstrated by 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} = 0.00578 pound manganese per ton of metal throughput (or an emission factor determined from the most recent valid 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
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} = 0.250 pound combined metal HAP per ton of metal throughput (or an emission factor determined from the most recent valid 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} = 0.099 pound combined metal HAP per ton of metal throughput
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 most recent valid stack test 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 most recent valid stack test and the remaining non-manganese metal HAP emission factors used to calculate emissions.

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

D.1.8 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, the Permittee shall take a reasonable response. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response required by this condition. Failure to take a reasonable response shall be considered a deviation from this permit.

D.1.9 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions)

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

D.1.10 Record Keeping Requirements

(a) To document the compliance status with Conditions D.1.1(a) and (b) and D.1.2(a) and (b), the Permittee shall maintain monthly records of the tons of metal to the following:
(1) two (2) electric induction furnaces (EU-01),
(2) charge handling (EU-02), and
(3) reaction/holding ladle (EU-04).

(b) To document the compliance status with Conditions D.1.2(d), (e), (f), and (g), 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.1.7; and

(3) HAP emissions in tons per twelve (12) consecutive month period.

(c) To document the compliance status with Condition D.1.8, 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 the compliance status with Conditions D.1.1 and D.1.2 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 meets the requirements of 326 IAC 2-8-5(a)(1) by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(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 5.0 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 5.0 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, that was modified in 2012, exhausting through stack A.

(d) Casting Cleaning Operations, collectively identified as EU-06B, permitted in 2016 to add two (2) grinding stations, with a maximum throughput of 5.0 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) Four (4) grinders installed in 1960;

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

(4) One (1) grinder installed in 1960, uncontrolled, and exhausting to the indoors; and

(5) Two (2) grinding stations, permitted in 2016, uncontrolled, and exhausting to the indoors.

(e) Sand Handling Operations, collectively identified as EU-06C, installed prior to 1967 and modified in 1998 and in 2000 and permitted in 2016 to add two (2) sand muller units, 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, constructed 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, modified in 2012, which exhausts through stack A.

(10) Two (2) sand muller units permitted in 2016, with a combined maximum throughput of 0.0125 tons of sand per hour or 0.3 tons of sand per day, uncontrolled, and exhausting to the indoors.

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

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

D.2.1 PSD Minor Source Limits 326 IAC 2-2]

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

(a) The throughput of metal to pouring and cooling operations (EU-05) shall not exceed 19,000 tons per twelve consecutive month period with compliance determined at the end of each month.

(b) The PM emissions from the following units shall not exceed the emission limits listed in the table below:

Unit Description	Control/Stack	PM Emission Limit (lbs/ton of metal melted)	PM Emission Limit (lb/hr)
Pouring/Casting/Cooling (EU-05)	Uncontrolled (Stacks V17, V18, V25, V26, V27, & V28)	4.20	-
Shakeout (EU-06A)	Dust Collector CE-A (Stack A)	-	1.54
Casting Cleaning Operations - Table Blast, Shot Blast, and Four (4) Grinders (EU-06B)			
Sand Handling (EU-06C)			

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 100 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.2.2 FESOP Limits [326 IAC 2-8-4][326 IAC 2-2][326 IAC 2-4.1]

Pursuant to 326 IAC 2-8-4 and in order to render 326 IAC 2-2 not applicable, the Permittee shall comply with the following:

(a) The throughput of metal to the following shall each not exceed 19,000 tons per twelve consecutive month period with compliance determined at the end of each month:
(1) pouring and cooling operations (EU-05),
(2) shakeout (EU-06A), and
(3) casting cleaning operations - table blast and shot blast machine (EU-06B).

(b) The PM10, PM2.5, CO, and total organic HAPs emissions from the following units shall not exceed the emission limits listed in the table below:

Unit Description	Control/Stack	PM10 Emission Limit (lbs/ton of metal melted)	PM2.5 Emission Limit (lbs/ton of metal melted)	PM10 Emission Limit (lb/hr)	PM2.5 Emission Limit (lb/hr)	CO Emission Limit (lbs/ton of metal melted)	Total Organic HAPs Limit (lbs/ton of metal melted)
Pouring/Casting/ Cooling (EU-05)	Uncontrolled (Stacks V17, V18, V26, V27, & V28)	3.09	3.09	-	-	6.0	1.21
Shakeout Operations (EU-06)	Dust Collector CE-A (Stack A)	-	-	2.86	2.86		
Casting Cleaning Operations - Table Blast, Shot Blast, and Four (4) Grinders (EU-06B)						-	-
Sand Handling (EU-06C)						-	-

(c) The manganese emissions from the pouring and cooling operations (EU-05) shall not exceed 1.24 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(d) The emissions of any combination of metal HAPs from the pouring and cooling operations (EU-05) shall not exceed 1.64 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(e) The combined manganese emissions from the shakeout (EU-06A), table blast, and shot blast machine (EU-06B) shall not exceed 0.059 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(f) The combined emissions of any combination of metal HAPs from the shakeout (EU-06A), table blast, and shot blast machine (EU-06B) shall not exceed 1.77 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with these limits, combined with the potential to emit PM10, PM2.5, CO, and HAPs all other emission units at this source, shall limit the source-wide total potential to emit of PM10, PM2.5, and CO to less than 100 tons per twelve (12) consecutive month period, each, any single HAP to less than ten (10) tons per twelve (12) consecutive month period, total HAPs to less than twenty-five (25) tons per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits), 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants

(HAP), and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.2.3 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a), particulate emissions from each of the following emission units shall not exceed the grain per dry standard cubic foot (dscf) limit listed in the table below:

Unit Description	PM Limit (grain/dscf)
Pouring/Casting/Cooling (EU-05)	0.03
Shakeout (EU-06A)	0.03
Casting Cleaning Operations - Table Blast (EU-06B)	0.03
Casting Cleaning Operations - Shot Blast (EU-06B)	0.03
Casting Cleaning Operations - Seven (7) Grinders (EU-06B)	0.03, each
Sand Handling (EU-06C)	0.03

D.2.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-8-4(1)]

D.2.5 Particulate Matter (PM)

(a) In order to comply with Conditions D.2.1, D.2.2, and D.2.3, the dust collectors for particulate control shall be in operation and control emissions from the emission units at all times that the emission units are in operation as listed in the table below, when these units are in operation:

Unit Description	Control ID
Shakeout (EU-06A)	Dust Collector CE-A (Stack A)
Casting Cleaning Operations - Table Blast, Shot Blast, and Four (4) Grinders (EU-06B)	
Sand Handling (EU-06C)	

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

In order to demonstrate compliance with Conditions D.2.1, D.2.2, and D.2.3, the Permittee shall perform PM, PM10, PM2.5 and Manganese testing of the Dust Collector CE-A stack exhaust (Stack A) not later than five (5) years from the date of the most recent valid compliance demonstration. This testing shall be conducted utilizing methods approved by the Commissioner and 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.

Dust Collector CE-A controls the emissions from the following emission units:
(1) Shakeout Operations (EU-06A);
(2) Table Blast, Shot Blast Machine, and four (4) grinders (EU-6B); and

(3) Sand Handling (EU-06C)

PM10 and PM2.5 includes filterable and condensable PM10 and PM2.5.

D.2.7 HAP Emissions Compliance Demonstrations

Compliance with the metal HAP limits in Condition D.2.2(c), (d), (e), and (f) shall be demonstrated by using the following equations:

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

Where:
EF_{PCMn} = 0.13 pound manganese per ton of metal throughput
M_{PC} = total metal throughput to the pouring and cooling operations (tons per twelve (12) consecutive month period)

(b) 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} = 0.173 pound combined metal HAP per ton of metal throughput
M_{PC} = total metal throughput to the pouring and cooling operations (tons per twelve (12) consecutive month period)

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

Where:
EF_{SMn} = 0.00093 pound manganese per ton of metal throughput (or an emission factor determined from the most recent valid stack test)
M_S = total metal throughput to the shakeout, table blast, and shot blast machine operations (tons per twelve (12) consecutive month period)

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

Where:
EF_{STM} = 0.186 pound combined metal HAP per ton of metal throughput (or an emission factor determined from the most recent valid stack test)
M_S = total metal throughput to the shakeout, table blast, and shot blast machine operations (tons per twelve (12) consecutive month period)

(e) Upon IDEM approval of manganese compliance stack test results on the shakeout, table blast, and shot blast machine operations, the following shall apply:

(1) The manganese emission factors in pound per ton obtained from the most recent valid stack test shall be used for the variable identified above as EF_{SMn}.

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

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

D.2.8 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, the Permittee shall take a reasonable response. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response required by this condition. Failure to take a reasonable response shall be considered a deviation from this permit.

D.2.9 Parametric Monitoring

The Permittee shall record the pressure drop across the dust collector, identified as CE-A, used in conjunction with the shakeout, casting cleaning, and sand handling processes, at least once per day when any of the processes are in operation. When for any one reading, the pressure drop across each baghouse is outside the normal range, the Permittee shall take reasonable response. The normal range for these units 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 of 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 or replaced at least once every six (6) months.

D.2.10 Broken or Failed Bag Detection

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

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

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

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

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

D.2.11 Record Keeping Requirements

(a) To document the compliance status with Conditions D.2.1(a) and D.2.2(a), the Permittee shall maintain monthly records of the tons of metal to the following:
(1) pouring and cooling operations (EU-05),
(2) shakeout (EU-06A), and
(3) casting cleaning operations - table blast and shot blast machine (EU-06B).

(b) To document the compliance status with Condition D.2.2(c), (d), (e), and (f), 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 (EU-06A), and table blast and shot blast machine (EU-06B) as applicable;

(2) Metallic HAP emission calculations performed using the equations in Condition D.2.7; and

(3) Metallic HAP emissions in tons per year.

(c) To document the compliance status with Condition D.2.8, 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).

(d) To document the compliance status with Condition D.2.9, the Permittee shall maintain daily records of the pressure drop across the dust collector, identified as CE-A. 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).

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

D.2.12 Reporting Requirements

A quarterly summary of the information to document the compliance status with Conditions D.2.1 and D.2.2 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 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).

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

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

(1) One (1) air set core and mold 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;

(2) 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; and

(3) 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.

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

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

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

D.3.1 PSD Minor Source Limits 326 IAC 2-2]

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

(a) The amount of sand at the air set core and mold making process (EU-07) shall be not exceed 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 not exceed 730 tons per twelve consecutive month period with compliance determined at the end of each month.

(c) The combined amount of shell sand at the Redford shell core machines (EU-09A and EU-09B) shall not exceed 120 tons per twelve consecutive month period with compliance determined at the end of each month.

(d) The PM emissions from the following units shall not exceed the emission limits listed in the table below:

Unit Description	Control/Stack	PM Emission Limit (lbs/ton of sand)
Air Set Core And Mold Making Process (EU-07)	Uncontrolled (Stacks V4, V5, & V38)	3.60
Oil Sand Core Making Process (EU-08)		3.60
Redford Shell Core Machines (EU-09A and EU-09B)		3.60

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 100 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.3.2 FESOP Limits [326 IAC 2-8-4][326 IAC 2-2][326 IAC 2-4.1]

Pursuant to 326 IAC 2-8-4 and in order to render 326 IAC 2-2 not applicable, the Permittee shall comply with the following:

(a) The amount of sand at the air set core and mold making process (EU-07) shall be not exceed 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 not exceed 730 tons per twelve consecutive month period with compliance determined at the end of each month.

(c) The combined amount of shell sand at the Redford shell core making processes (EU-09A and EU-09B) shall not exceed 120 tons per twelve consecutive month period with compliance determined at the end of each month.

(d) The PM10 and PM2.5 emissions from the following unit shall not exceed the emission limits listed in the table below:

Unit Description	Control/Stack	PM10 Emission Limit (lbs/ton of sand)	PM2.5 Emission Limit (lbs/ton of sand)
Air Set Core And Mold Making Process (EU-07)	Uncontrolled (Stacks V4, V5, & V38)	0.81	0.81
Oil Sand Core Making Process (EU-08)		0.81	0.81
Redford Shell Core Machines (EU-09A and EU-09B)		0.81	0.81

(e) The emissions of any combination of organic HAPs from the air set core and mold making process (EU-07) shall not exceed 0.133 pounds per ton of sand.

(f) The combined 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.

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

Compliance with these limits, combined with the potential to emit PM10, PM2.5, and HAPs all other emission units at this source, shall limit the source-wide total potential to emit of PM10 and PM2.5 to less than 100 tons per twelve (12) consecutive month period, each, any single HAP to less than ten (10) tons per twelve (12) consecutive month period, total HAPs to less than twenty-five (25) tons per twelve (12) consecutive month period, and shall render the requirements of 326

IAC 2-7 (Part 70 Permits), 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP), and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.3.3 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a), particulate emissions from each of the following emission units shall not exceed the grain per dry standard cubic foot (dscf) limit listed in the table below:

Unit Description	PM Limit (grain/dscf)
Air Set Core And Mold Making Process (EU-07)	0.03
Oil Sand Core Making Process (EU-08)	0.03
Redford Shell Core Machines (EU-09A and EU-09B)	0.03, each

D.3.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.3.5 Visible Emissions Notations

(a) Visible emission notations of stacks V4, V5, and V38 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 a reasonable response. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response required by this condition. Failure to take a reasonable response shall be considered a deviation from this permit

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

D.3.6 Record Keeping Requirements

(a) To document the compliance status with Conditions D.3.1 and D.3.2, the Permittee shall maintain monthly records of the tons of sand used in each of the following:
(1) air set core and mold making process (EU-07)
(2) oil sand core making process (EU-08), and
(3) Redford shell core machines (EU-09A and EU-09B).

(b) To document the compliance status with Condition D.3.5, the Permittee shall maintain daily records of visible emission notations of stacks V4, V5, and V38 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) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.3.7 Reporting Requirements

A quarterly summary of the information to document the compliance status with Conditions D.3.1 and D.3.2 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 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).

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) 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 as follows [326 IAC 6.5-1]:

Process	MMBtu/hr	Process	MMBtu/hr
Core Oven	1.60	Air-set conveyor Infra-red	0.02
Maintenance West Space Heater	0.23	Core Room Core Prep Infra-red	0.02
Maintenance East Space Heater	0.23	Bench Core Table Infra-red	0.02
Chipping Booth Space Heater	0.20	Bench Core Table Infra-red	0.02
Old Dock Space Heater	0.40	Core Assembly Table Infra-red	0.02
Maintenance Shower Room Furnace	0.13	Air-set Core & Mold assembly Table Infrared	0.02
Old Conference Room Boiler	0.11	Air-set Core & Mold assembly Table Infrared	0.02
Airset Oven	0.12	Air-set Mold Assembly Infrared	0.02
Airset Torpedo	0.40	Air-set Mold Assembly Infrared	0.02
Airset Torpedo	0.40	Sinto Infro-red (basement)	0.02
Bull Ladle Torch -2"	0.28	Sinto Infro-red (basement)	0.02
Control Room Furnace	0.13	#9 Molding Machine Infra-red (overhead)	0.02
Core Dip Drying Table Infra-red	0.05	#9 Molding Machine Infra-red (basement)	0.02
Ladle Torch 2" Floor Molding	0.28	Molding Line Setup Table Infra-red (basement)	0.02
Ladle Torch 2" Floor Molding	0.28	#8 Molding Machine Infra-red (basement)	0.02
Ladle Torch 2" Floor Molding	0.28	#8 Molding Machine Infra-red (overhead)	0.02
Bull Ladle Torch -2"	0.28	#7 Molding Machine Infra-red (basement)	0.02
Heavey Chip Torpedo	0.40	#7 Molding Machine Infra-red (overhead)	0.02
Shipping Office North Infra-red	0.01	#6 Molding Machine Infra-red (basement)	0.02
Shipping Office South Infra-red	0.01	#6 Molding Machine Infra-red (overhead)	0.02
Core Assembly Table Heater	0.01	#5 Molding Machine Infra-red (basement)	0.02
Muller Trash Chute Torch	0.01	#5 Molding Machine Infra-red (overhead)	0.02
Muller Gearbox Infra-red	0.02	#4 Molding Machine Infra-red (basement)	0.02
Muller Manifold Infra-red	0.02	#4 Molding Machine Infra-red (overhead)	0.02
Compressor Water Manifold Infra-red	0.02	#3 Molding Machine Infra-red (basement)	0.02
Air-set room space heater	0.15	#3 Molding Machine Infra-red (overhead)	0.02
Air-set room Infra-red	0.02	#1 Molding Machine Infra-red (basement)	0.02
Air-set room Infra-red	0.02	#1 Molding Machine Infra-red (overhead)	0.02
Air-set conveyor Infra-red	0.02	Ladle Prep Area Sink Infra-red	0.02
Air-set conveyor Infra-red	0.02	#2 Stand Grinder Infra-red	0.02

Floor Molding North Station Infra-red	0.02	#1 Stand Grinder Infra-red	0.02
Floor Molding South Station Infra-red	0.02	Brinell Tester Infrared	0.02
Floor Molding Water Barell Infra-red	0.02	Single Pedestal Dual Wheel Grinder Infra-red	0.02
Floor Molding Simpson Muller Infra-red	0.02	Floor Molding Rollaround Triple Unit Infra-red	0.02

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

(A) One (1) hand torch unit for mold drying, with a maximum heat input capacity of 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) One (1) Dayton Salamander, with a maximum heat input capacity of 0.6 MMBtu/hr.

(B) One (1) Dayton Salamander, with a maximum heat input capacity of 0.055 MMBtu/hr.

(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 sander. The emissions from this operation are controlled by an integral dust collector with a design flow rate of 550 cubic feet per minute. [326 IAC 6.5-1]

(d) One (1) woodworking operation for mold patterns, permitted in 2016, generating 1.0 pounds of particulate per hour, uncontrolled, exhausting to the indoors, and consisting of the following:

(i) One (1) radial arm saw; and
(ii) One (1) table saw. [326 IAC 6-5.1]

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

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

D.4.1 Particulate Matter (PM) [326 IAC 6.5-1]

(a) Pursuant to 326 IAC 6.5-1-2(a), particulate emissions from each of the following emission units shall not exceed the grain per dry standard cubic foot (dscf) limit listed in the table below:

Unit Description	PM Limit (grain/dscf)
Brazing equipment, cutting torches, soldering equipment, and welding equipment	0.03, each
Two (2) Woodworking Operations	0.03, each
Sixty-seven (67) Direct-Fired Natural Gas Combustion Units	0.03, each
Propane Hand Torch	0.03
Two (2) Dayton Salamanders	0.03, each

(b) Pursuant to 326 IAC 6.5-1-2(b)(3), the natural gas-fired boiler (Old Conference Room Boiler), which is a gaseous fuel-fired steam generator is subject to the particulate matter (PM) limit of 0.01 grains per dry standard cubic foot of exhaust gas (gr/dscf).

D.4.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-8-4(1)]

D.4.3 Particulate Matter (PM)

In order to comply with Condition D.4.1, the integral dust collector shall be in operation and control emissions from the woodworking operation at all times that the woodworking equipment is in operation.

SECTION E.1 NESHAP

Emissions Unit Description:

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

(1) Two (2) electric induction furnaces, collectively identified as EU-01, with a combined maximum charge capacity of 5.0 tons of metal per hour, 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;

(2) One (1) charge handling system, identified as EU-02, with a maximum charge capacity of 5.0 tons of metal per hour, emissions are collected by the general furnace area ventilation system that exhausts through two uncontrolled stacks identified as stacks V11 and V12. 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 25.0 million Btu per hour, emissions are collected by the general furnace area ventilation system that exhausts through two uncontrolled stacks identified as stacks V11 and V12; and

(4) One (1) reaction/holding ladle, identified as EU-04, with a maximum charge capacity of 5.0 tons of metal per hour, where inoculation takes place, emissions are collected by the general furnace area ventilation system that exhausts through two uncontrolled stacks identified as stacks V11 and V12.

This gray and ductile iron foundry is an affected source under the provisions of 40 CFR 63, Subpart ZZZZZ.

(The information describing the process contained in this emissions unit 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 National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1][40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.1 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, for the emission units listed above, except as otherwise specified in 40 CFR Part 63, Subpart ZZZZZ.

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

E.1.2 NESHAP for Iron and Steel Foundries Area Sources [40 CFR 63, Subpart ZZZZZ][326 IAC 20]

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 to the operating permit):

(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

SECTION E.2 NESHAP

Emissions Unit Description:

(e) 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.

This is an affected source under 40 CFR Part 63, Subpart CCCCCC.

(The information describing the process contained in this emissions unit 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.2.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1][40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.1 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, for the emission unit listed above, except as otherwise specified in 40 CFR Part 63, Subpart CCCCCC.

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

E.2.2 NESHAP for Source Category: Gasoline Dispensing Facilities [40 CFR Part 63, Subpart CCCCCC][326 IAC 20]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart CCCCCC (included as Attachment C to the operating permit), for the emission unit listed above:

(1) 40 CFR 63.11110
(2) 40 CFR 63.11111(a), (b), (e), (f), (h), (i), and (j)
(3) 40 CFR 63.11112(a), (c), and (d)
(4) 40 CFR 63.11113(b), and (c)
(5) 40 CFR 63.11115
(6) 40 CFR 63.11116
(7) 40 CFR 63.11125(d)
(8) 40 CFR 63.11126(b)
(9) 40 CFR 63.11130
(10) 40 CFR 63.11131
(11) 40 CFR 63.11132
(12) Table 3

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

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
FESOP Permit No.: F097-37402-00063

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
MC 61-53 IGCN 1003
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 Avenue, Indianapolis, Indiana 46218
FESOP Permit No.: F097-37402-00063

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**) daytime business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-8-12

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

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

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

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

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

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

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
FESOP Permit No.: F097-37402-00063
Facility: Two (2) Induction Furnaces (EU-01), charge handling (EU-02), and the reaction/holding ladle (EU-04) processes
Parameter: Metal throughput
Limits: The combined throughput of metal to the two (2) electric induction furnaces (EU-01) shall not exceed 19,000 tons per twelve consecutive month period with compliance determined at the end of each month.

The combined throughput of metal to the charge handling (EU-02) and reaction/holding ladle (EU-04) shall not exceed 19,000 tons per twelve consecutive month period 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 and Reaction/Holding Ladle	Electric Induction Furnaces	Charge Handling and Reaction/Holding Ladle	Electric Induction Furnaces	Charge Handling and 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 Avenue, Indianapolis, Indiana 46218
FESOP Permit No.: F097-37402-00063
Facility: Two (2) electric induction furnaces (EU-01)
Parameter: Manganese and total metal HAP emissions
Limits: The combined manganese emissions from the two (2) electric induction furnaces (EU-01) exhausting through Stack B shall not exceed 0.197 ton per twelve (12) consecutive month period, with compliance determined at the end of each month.

The combined emissions of any combination of metal HAPs from the two (2) electric induction furnaces (EU-01) exhausting through Stack B shall not exceed 2.37 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.1.7(a) and (c).

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: _____

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

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
FESOP Permit No.: F097-37402-00063
Facility: Charge handling (EU-02) and reaction/holding ladle (EU-04) processes
Parameter: Manganese and total metal HAP emissions
Limits: The combined manganese emissions from the charge handling (EU-02) and reaction/holding ladle (EU-04) processes exhausting through stacks V11 and V12 shall not exceed 0.707 ton per twelve (12) consecutive month period, with compliance determined at the end of each month.

The combined emissions 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 0.94 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.1.7(b) and (d).

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: _____

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

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
FESOP Permit No.: F097-37402-00063
Facility: Pouring and cooling operations (EU-05)
Parameter: Metal throughput
Limit: The throughput of metal to the pouring and cooling operations (EU-05) shall not exceed 19,000 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)

☐ 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 Avenue, Indianapolis, Indiana 46218
FESOP Permit No.: F097-37402-00063
Facility: Shakeout (EU-06A) and casting cleaning operations - table blast and shot blast machine (EU-06B)
Parameter: Metal throughput
Limit: The throughput of metal to the following shall each not exceed 19,000 tons per twelve consecutive month period with compliance determined at the end of each month:
(1) shakeout (EU-06A), and
(2) casting cleaning operations - table blast and shot blast machine (EU-06B).

QUARTER : _____ YEAR:_____

Month	Metal Throughput This Month (tons)		Metal Throughput Previous 11 Months (tons)		12 Month Total Metal Throughput (tons)	
	Shakeout	Casting Cleaning Operations - Table Blast and Shot Blast	Shakeout	Casting Cleaning Operations - Table Blast and Shot Blast	Shakeout	Casting Cleaning Operations - Table Blast and Shot Blast

☐ 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 Avenue, Indianapolis, Indiana 46218
FESOP Permit No.: F097-37402-00063
Facility: Pouring and cooling operations (EU-05)
Parameter: Manganese and total metal HAP emissions
Limit: The manganese emissions from the pouring and cooling operations (EU-05) shall not exceed 1.24 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;

The emissions of any combination of metal HAPs from the pouring and cooling operations (EU-05) shall not exceed 1.64 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.2.7(a) and (b).

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: _____

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

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
FESOP Permit No.: F097-37402-00063
Facility: Shakeout (EU-06A) and casting cleaning operations (EU-06B)
Parameter: Manganese and total metal HAP emissions
Limit: The combined manganese emissions from the shakeout (EU-06A), table blast, and shot blast machine (EU-06B) shall not exceed 0.059 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;

The combined emissions of any combination of metal HAPs from the shakeout (EU-06A), table blast, and shot blast machine (EU-06B) 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.2.7(c) and (d).

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: _____

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

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
FESOP Permit No.: F097-37402-00063
Facility: Air Set Core and Mold Making Process (EU-07)
Parameter: Sand Used
Limit: The amount of sand at the air set core and mold making process (EU-07) shall be not exceed 4,500 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
	Tons of sand used this Month	Tons of sand used previous 11 Months	Tons of sand used 12 Month Total

☐ No deviation occurred in this quarter.

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

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

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

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
FESOP Permit No.: F097-37402-00063
Facility: Oil Sand Core Oil Making Process (EU-08)
Parameter: Sand Used
Limit: The amount of sand at the oil sand core making process (EU-08) shall not exceed 730 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
	Tons of sand used this Month	Tons of sand used previous 11 Months	Tons of sand used 12 Month Total

☐ No deviation occurred in this quarter.

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

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

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

FESOP Quarterly Report

Source Name: Interstate Castings
Source Address: 3823 Massachusetts Avenue, Indianapolis, Indiana 46218
FESOP Permit No.: F097-37402-00063
Facility: Redford Shell Core Machines (EU-09A and EU-09B)
Parameter: Shell Sand Used
Limit: The combined amount of shell sand at the Redford shell core making processes (EU-09A and EU-09B) shall not exceed 120 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
	Tons of sand used this Month	Tons of sand used previous 11 Months	Tons of sand used 12 Month Total

☐ No deviation occurred in this quarter.

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

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

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 Avenue, Indianapolis, Indiana 46218
FESOP Permit No.: F097-37402-00063

Months: _____ **to** _____ **Year:** _____

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:	

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 F097-37402-00063

Table of Contents

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.

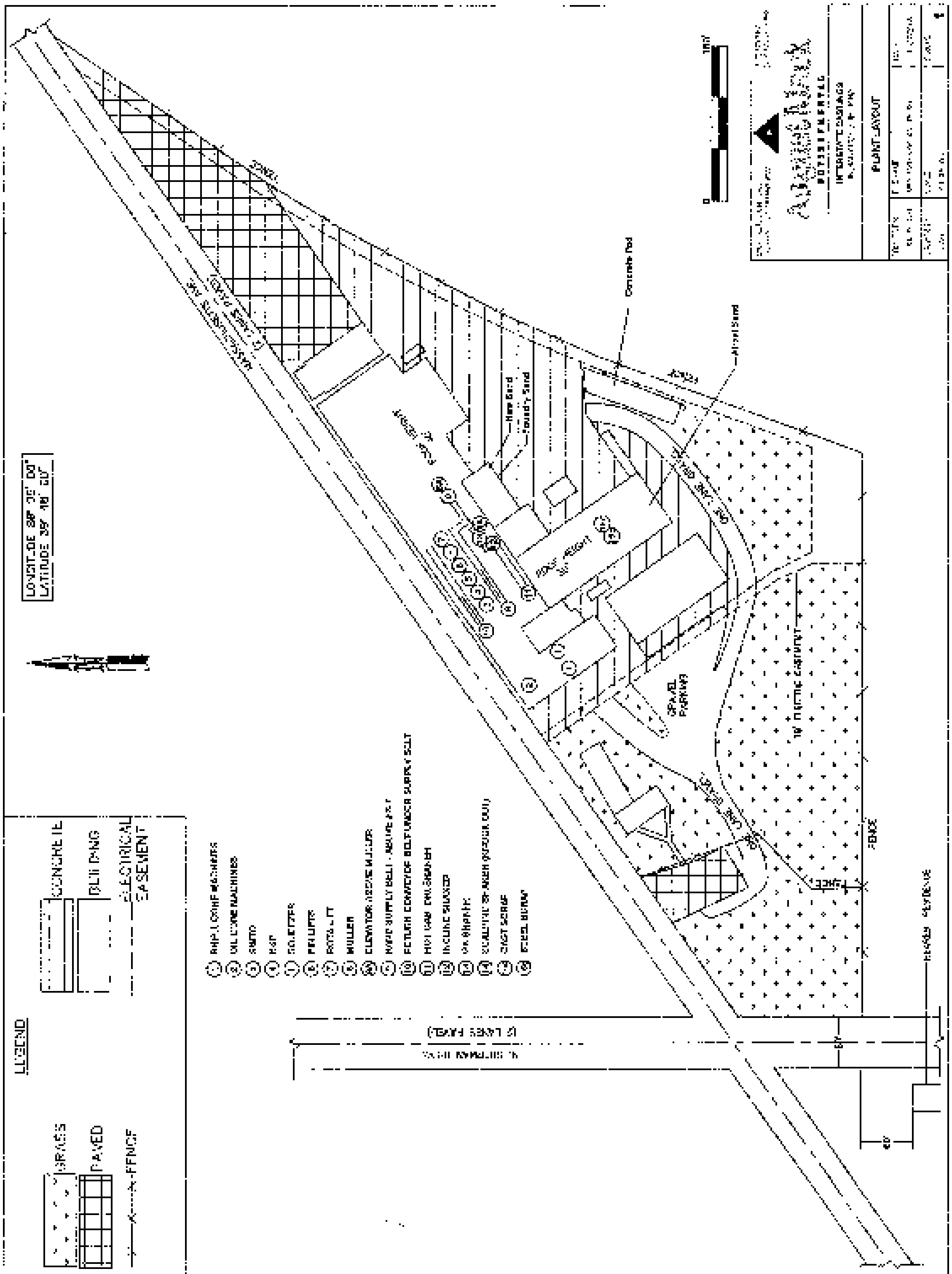
Compliance Schedule

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° 35' 00"
LATITUDE 39° 16' 00"
PLANT LAYOUT

Attachment B

Federally Enforceable State Operating Permit (FESOP) No: 097-37402-00063

[Downloaded from the eCFR on March 24, 2014]

Electronic Code of Federal Regulations

Title 40: Protection of Environment

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

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 (Ep) 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.

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

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.

$$\%\ \text{reduction} = \frac{E_i - E_o}{E_i} \times 100\% \qquad (Eq. 3)$$

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:

$$E_{pl\_\_} E_{pl} \times \left(1 - \frac{\%\ \text{reduction}}{100}\right) \qquad (Eq. 4)$$

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, appendix A)	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 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.

For. . .	You must. . .	According to the following requirements. . .
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 control devices in §63.11	No.	
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 foundry and subject to scrap management requirements in §63.10885(a)(1) and/or (2)	"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)."
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)."

Attachment C

Federally Enforceable State Operating Permit (FESOP) No: 097-37402-00063

[Downloaded from the eCFR on May 13, 2013]

Electronic Code of Federal Regulations

Title 40: Protection of Environment

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

Subpart CCCCCC—National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities

Source: 73 FR 1945, Jan. 10, 2008, unless otherwise noted.

What This Subpart Covers

§ 63.11110 What is the purpose of this subpart?

This subpart establishes national emission limitations and management practices for hazardous air pollutants (HAP) emitted from the loading of gasoline storage tanks at gasoline dispensing facilities (GDF). This subpart also establishes requirements to demonstrate compliance with the emission limitations and management practices.

§ 63.11111 Am I subject to the requirements in this subpart?

(a) The affected source to which this subpart applies is each GDF that is located at an area source. The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage tank.

(b) If your GDF has a monthly throughput of less than 10,000 gallons of gasoline, you must comply with the requirements in § 63.11116.

(c) If your GDF has a monthly throughput of 10,000 gallons of gasoline or more, you must comply with the requirements in § 63.11117.

(d) If your GDF has a monthly throughput of 100,000 gallons of gasoline or more, you must comply with the requirements in § 63.11118.

(e) An affected source shall, upon request by the Administrator, demonstrate that their monthly throughput is less than the 10,000-gallon or the 100,000-gallon threshold level, as applicable. For new or reconstructed affected sources, as specified in § 63.11112(b) and (c), recordkeeping to document monthly throughput must begin upon startup of the affected source. For existing sources, as specified in § 63.11112(d), recordkeeping to document monthly throughput must begin on January 10, 2008. For existing sources that are subject to this subpart only because they load gasoline into fuel tanks other than those in motor vehicles, as defined in § 63.11132, recordkeeping to document monthly throughput must begin on January 24, 2011. Records required under this paragraph shall be kept for a period of 5 years.

(f) If you are an owner or operator of affected sources, as defined in paragraph (a) of this section, you are not required to obtain a permit under 40 CFR part 70 or 40 CFR part 71 as a result of being subject to this subpart. However, you must still apply for and obtain a permit under 40 CFR part 70 or 40 CFR part 71 if you meet one or more of the applicability criteria found in 40 CFR 70.3(a) and (b) or 40 CFR 71.3(a) and (b).

(g) The loading of aviation gasoline into storage tanks at airports, and the subsequent transfer of aviation gasoline within the airport, is not subject to this subpart.

(h) Monthly throughput is the total volume of gasoline loaded into, or dispensed from, all the gasoline storage tanks located at a single affected GDF. If an area source has two or more GDF at separate locations within the area source, each GDF is treated as a separate affected source.

(i) If your affected source's throughput ever exceeds an applicable throughput threshold, the affected source will remain subject to the requirements for sources above the threshold, even if the affected source throughput later falls below the applicable throughput threshold.

(j) The dispensing of gasoline from a fixed gasoline storage tank at a GDF into a portable gasoline tank for the on-site delivery and subsequent dispensing of the gasoline into the fuel tank of a motor vehicle or other gasoline-fueled engine or equipment used within the area source is only subject to § 63.11116 of this subpart.

(k) For any affected source subject to the provisions of this subpart and another Federal rule, you may elect to comply only with the more stringent provisions of the applicable subparts. You must consider all provisions of the rules, including monitoring, recordkeeping, and reporting. You must identify the affected source and provisions with which you will comply in your Notification of Compliance Status required under § 63.11124. You also must demonstrate in your Notification of Compliance Status that each provision with which you will comply is at least as stringent as the otherwise applicable requirements in this subpart. You are responsible for making accurate determinations concerning the more stringent provisions, and noncompliance with this rule is not excused if it is later determined that your determination was in error, and, as a result, you are violating this subpart. Compliance with this rule is your responsibility and the Notification of Compliance Status does not alter or affect that responsibility.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4181, Jan. 24, 2011]

§ 63.11112 What parts of my affected source does this subpart cover?

(a) The emission sources to which this subpart applies are gasoline storage tanks and associated equipment components in vapor or liquid gasoline service at new, reconstructed, or existing GDF that meet the criteria specified in § 63.11111. Pressure/Vacuum vents on gasoline storage tanks and the equipment necessary to unload product from cargo tanks into the storage tanks at GDF are covered emission sources. The equipment used for the refueling of motor vehicles is not covered by this subpart.

(b) An affected source is a new affected source if you commenced construction on the affected source after November 9, 2006, and you meet the applicability criteria in § 63.11111 at the time you commenced operation.

(c) An affected source is reconstructed if you meet the criteria for reconstruction as defined in § 63.2.

(d) An affected source is an existing affected source if it is not new or reconstructed.

§ 63.11113 When do I have to comply with this subpart?

(a) If you have a new or reconstructed affected source, you must comply with this subpart according to paragraphs (a)(1) and (2) of this section, except as specified in paragraph (d) of this section.

(1) If you start up your affected source before January 10, 2008, you must comply with the standards in this subpart no later than January 10, 2008.

(2) If you start up your affected source after January 10, 2008, you must comply with the standards in this subpart upon startup of your affected source.

(b) If you have an existing affected source, you must comply with the standards in this subpart no later than January 10, 2011.

(c) If you have an existing affected source that becomes subject to the control requirements in this subpart because of an increase in the monthly throughput, as specified in § 63.11111(c) or § 63.11111(d), you must comply with the standards in this subpart no later than 3 years after the affected source becomes subject to the control requirements in this subpart.

(d) If you have a new or reconstructed affected source and you are complying with Table 1 to this subpart, you must comply according to paragraphs (d)(1) and (2) of this section.

(1) If you start up your affected source from November 9, 2006 to September 23, 2008, you must comply no later than September 23, 2008.

(2) If you start up your affected source after September 23, 2008, you must comply upon startup of your affected source.

(e) The initial compliance demonstration test required under § 63.11120(a)(1) and (2) must be conducted as specified in paragraphs (e)(1) and (2) of this section.

(1) If you have a new or reconstructed affected source, you must conduct the initial compliance test upon installation of the complete vapor balance system.

(2) If you have an existing affected source, you must conduct the initial compliance test as specified in paragraphs (e)(2)(i) or (e)(2)(ii) of this section.

(i) For vapor balance systems installed on or before December 15, 2009, you must test no later than 180 days after the applicable compliance date specified in paragraphs (b) or (c) of this section.

(ii) For vapor balance systems installed after December 15, 2009, you must test upon installation of the complete vapor balance system.

(f) If your GDF is subject to the control requirements in this subpart only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in § 63.11132, you must comply with the standards in this subpart as specified in paragraphs (f)(1) or (f)(2) of this section.

(1) If your GDF is an existing facility, you must comply by January 24, 2014.

(2) If your GDF is a new or reconstructed facility, you must comply by the dates specified in paragraphs (f)(2)(i) and (ii) of this section.

(i) If you start up your GDF after December 15, 2009, but before January 24, 2011, you must comply no later than January 24, 2011.

(ii) If you start up your GDF after January 24, 2011, you must comply upon startup of your GDF.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 35944, June 25, 2008; 76 FR 4181, Jan. 24, 2011]

Emission Limitations and Management Practices

§ 63.11115 What are my general duties to minimize emissions?

Each owner or operator of an affected source under this subpart must comply with the requirements of paragraphs (a) and (b) of this section.

(a) You must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review

of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(b) You must keep applicable records and submit reports as specified in § 63.11125(d) and § 63.11126(b).

[76 FR 4182, Jan. 24, 2011]

§ 63.11116 Requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline.

(a) You must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

(1) Minimize gasoline spills;

(2) Clean up spills as expeditiously as practicable;

(3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;

(4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

(b) You are not required to submit notifications or reports as specified in § 63.11125, § 63.11126, or subpart A of this part, but you must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.

(c) You must comply with the requirements of this subpart by the applicable dates specified in § 63.11113.

(d) Portable gasoline containers that meet the requirements of 40 CFR part 59, subpart F, are considered acceptable for compliance with paragraph (a)(3) of this section.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4182, Jan. 24, 2011]

§ 63.11117 Requirements for facilities with monthly throughput of 10,000 gallons of gasoline or more.

(a) You must comply with the requirements in section § 63.11116(a).

(b) Except as specified in paragraph (c) of this section, you must only load gasoline into storage tanks at your facility by utilizing submerged filling, as defined in § 63.11132, and as specified in paragraphs (b)(1), (b)(2), or (b)(3) of this section. The applicable distances in paragraphs (b)(1) and (2) shall be measured from the point in the opening of the submerged fill pipe that is the greatest distance from the bottom of the storage tank.

(1) Submerged fill pipes installed on or before November 9, 2006, must be no more than 12 inches from the bottom of the tank.

(2) Submerged fill pipes installed after November 9, 2006, must be no more than 6 inches from the bottom of the tank.

(3) Submerged fill pipes not meeting the specifications of paragraphs (b)(1) or (b)(2) of this section are allowed if the owner or operator can demonstrate that the liquid level in the tank is always above the entire opening of the fill pipe. Documentation providing such demonstration must be made available for inspection by the Administrator's delegated representative during the course of a site visit.

(c) Gasoline storage tanks with a capacity of less than 250 gallons are not required to comply with the submerged fill requirements in paragraph (b) of this section, but must comply only with all of the requirements in § 63.11116.

(d) You must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.

(e) You must submit the applicable notifications as required under § 63.11124(a).

(f) You must comply with the requirements of this subpart by the applicable dates contained in § 63.11113.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008; 76 FR 4182, Jan. 24, 2011]

§ 63.11118 Requirements for facilities with monthly throughput of 100,000 gallons of gasoline or more.

(a) You must comply with the requirements in §§ 63.11116(a) and 63.11117(b).

(b) Except as provided in paragraph (c) of this section, you must meet the requirements in either paragraph (b)(1) or paragraph (b)(2) of this section.

(1) Each management practice in Table 1 to this subpart that applies to your GDF.

(2) If, prior to January 10, 2008, you satisfy the requirements in both paragraphs (b)(2)(i) and (ii) of this section, you will be deemed in compliance with this subsection.

(i) You operate a vapor balance system at your GDF that meets the requirements of either paragraph (b)(2)(i)(A) or paragraph (b)(2)(i)(B) of this section.

(A) Achieves emissions reduction of at least 90 percent.

(B) Operates using management practices at least as stringent as those in Table 1 to this subpart.

(ii) Your gasoline dispensing facility is in compliance with an enforceable State, local, or tribal rule or permit that contains requirements of either paragraph (b)(2)(i)(A) or paragraph (b)(2)(i)(B) of this section.

(c) The emission sources listed in paragraphs (c)(1) through (3) of this section are not required to comply with the control requirements in paragraph (b) of this section, but must comply with the requirements in § 63.11117.

(1) Gasoline storage tanks with a capacity of less than 250 gallons that are constructed after January 10, 2008.

(2) Gasoline storage tanks with a capacity of less than 2,000 gallons that were constructed before January 10, 2008.

(3) Gasoline storage tanks equipped with floating roofs, or the equivalent.

(d) Cargo tanks unloading at GDF must comply with the management practices in Table 2 to this subpart.

(e) You must comply with the applicable testing requirements contained in § 63.11120.

(f) You must submit the applicable notifications as required under § 63.11124.

(g) You must keep records and submit reports as specified in §§ 63.11125 and 63.11126.

(h) You must comply with the requirements of this subpart by the applicable dates contained in § 63.11113.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008]

Testing and Monitoring Requirements

§ 63.11120 What testing and monitoring requirements must I meet?

(a) Each owner or operator, at the time of installation, as specified in § 63.11113(e), of a vapor balance system required under § 63.11118(b)(1), and every 3 years thereafter, must comply with the requirements in paragraphs (a)(1) and (2) of this section.

(1) You must demonstrate compliance with the leak rate and cracking pressure requirements, specified in item 1(g) of Table 1 to this subpart, for pressure-vacuum vent valves installed on your gasoline storage tanks using the test methods identified in paragraph (a)(1)(i) or paragraph (a)(1)(ii) of this section.

(i) California Air Resources Board Vapor Recovery Test Procedure TP-201.1E,—Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, adopted October 8, 2003 (incorporated by reference, see § 63.14).

(ii) Use alternative test methods and procedures in accordance with the alternative test method requirements in § 63.7(f).

(2) You must demonstrate compliance with the static pressure performance requirement specified in item 1(h) of Table 1 to this subpart for your vapor balance system by conducting a static pressure test on your gasoline storage tanks using the test methods identified in paragraphs (a)(2)(i), (a)(2)(ii), or (a)(2)(iii) of this section.

(i) California Air Resources Board Vapor Recovery Test Procedure TP-201.3,—Determination of 2-Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities, adopted April 12, 1996, and amended March 17, 1999 (incorporated by reference, see § 63.14).

(ii) Use alternative test methods and procedures in accordance with the alternative test method requirements in § 63.7(f).

(iii) Bay Area Air Quality Management District Source Test Procedure ST-30—Static Pressure Integrity Test—Underground Storage Tanks, adopted November 30, 1983, and amended December 21, 1994 (incorporated by reference, *see* § 63.14).

(b) Each owner or operator choosing, under the provisions of § 63.6(g), to use a vapor balance system other than that described in Table 1 to this subpart must demonstrate to the Administrator or delegated authority under paragraph § 63.11131(a) of this subpart, the equivalency of their vapor balance system to that described in Table 1 to this subpart using the procedures specified in paragraphs (b)(1) through (3) of this section.

(1) You must demonstrate initial compliance by conducting an initial performance test on the vapor balance system to demonstrate that the vapor balance system achieves 95 percent reduction using the California Air Resources Board Vapor Recovery Test Procedure TP-201.1,—Volumetric Efficiency for Phase I Vapor Recovery Systems, adopted April 12, 1996, and amended February 1, 2001, and October 8, 2003, (incorporated by reference, see § 63.14).

(2) You must, during the initial performance test required under paragraph (b)(1) of this section, determine and document alternative acceptable values for the leak rate and cracking pressure requirements specified in item 1(g) of Table 1 to this subpart and for the static pressure performance requirement in item 1(h) of Table 1 to this subpart.

(3) You must comply with the testing requirements specified in paragraph (a) of this section.

(c) Conduct of performance tests. Performance tests conducted for this subpart shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance (*i.e.,* performance based on normal operating conditions) of the affected source. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(d) Owners and operators of gasoline cargo tanks subject to the provisions of Table 2 to this subpart must conduct annual certification testing according to the vapor tightness testing requirements found in § 63.11092(f).

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4182, Jan. 24, 2011]

Notifications, Records, and Reports

§ 63.11124 What notifications must I submit and when?

(a) Each owner or operator subject to the control requirements in § 63.11117 must comply with paragraphs (a)(1) through (3) of this section.

(1) You must submit an Initial Notification that you are subject to this subpart by May 9, 2008, or at the time you become subject to the control requirements in § 63.11117, unless you meet the requirements in paragraph (a)(3) of this section. If your affected source is subject to the control requirements in § 63.11117 only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in § 63.11132, you must submit the Initial Notification by May 24, 2011. The Initial Notification must contain the information specified in paragraphs (a)(1)(i) through (iii) of this section. The notification must be submitted to the applicable EPA Regional Office and delegated State authority as specified in § 63.13.

(i) The name and address of the owner and the operator.

(ii) The address (i.e., physical location) of the GDF.

(iii) A statement that the notification is being submitted in response to this subpart and identifying the requirements in paragraphs (a) through (c) of § 63.11117 that apply to you.

(2) You must submit a Notification of Compliance Status to the applicable EPA Regional Office and the delegated State authority, as specified in § 63.13, within 60 days of the applicable compliance date specified in § 63.11113, unless you meet the requirements in paragraph (a)(3) of this section. The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of this subpart, and must indicate whether the facilities' monthly throughput is calculated based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. If your facility is in compliance with the requirements of this subpart at the time the Initial Notification required under paragraph (a)(1) of this section is due, the Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required under paragraph (a)(1) of this section.

(3) If, prior to January 10, 2008, you are operating in compliance with an enforceable State, local, or tribal rule or permit that requires submerged fill as specified in § 63.11117(b), you are not required to submit an Initial Notification or a Notification of Compliance Status under paragraph (a)(1) or paragraph (a)(2) of this section.

(b) Each owner or operator subject to the control requirements in § 63.11118 must comply with paragraphs (b)(1) through (5) of this section.

(1) You must submit an Initial Notification that you are subject to this subpart by May 9, 2008, or at the time you become subject to the control requirements in § 63.11118. If your affected source is subject to the control requirements in § 63.11118 only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in § 63.11132, you must submit the Initial Notification by May 24, 2011. The Initial Notification must contain the information specified in paragraphs (b)(1)(i) through (iii) of this section. The notification must be submitted to the applicable EPA Regional Office and delegated State authority as specified in § 63.13.

(i) The name and address of the owner and the operator.

(ii) The address (i.e., physical location) of the GDF.

(iii) A statement that the notification is being submitted in response to this subpart and identifying the requirements in paragraphs (a) through (c) of § 63.11118 that apply to you.

(2) You must submit a Notification of Compliance Status to the applicable EPA Regional Office and the delegated State authority, as specified in § 63.13, in accordance with the schedule specified in § 63.9(h). The Notification of

Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of this subpart, and must indicate whether the facility's throughput is determined based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. If your facility is in compliance with the requirements of this subpart at the time the Initial Notification required under paragraph (b)(1) of this section is due, the Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required under paragraph (b)(1) of this section.

(3) If, prior to January 10, 2008, you satisfy the requirements in both paragraphs (b)(3)(i) and (ii) of this section, you are not required to submit an Initial Notification or a Notification of Compliance Status under paragraph (b)(1) or paragraph (b)(2) of this subsection.

(i) You operate a vapor balance system at your gasoline dispensing facility that meets the requirements of either paragraphs (b)(3)(i)(A) or (b)(3)(i)(B) of this section.

(A) Achieves emissions reduction of at least 90 percent.

(B) Operates using management practices at least as stringent as those in Table 1 to this subpart.

(ii) Your gasoline dispensing facility is in compliance with an enforceable State, local, or tribal rule or permit that contains requirements of either paragraphs (b)(3)(i)(A) or (b)(3)(i)(B) of this section.

(4) You must submit a Notification of Performance Test, as specified in § 63.9(e), prior to initiating testing required by § 63.11120(a) and (b).

(5) You must submit additional notifications specified in § 63.9, as applicable.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008; 76 FR 4182, Jan. 24, 2011]

§ 63.11125 What are my recordkeeping requirements?

(a) Each owner or operator subject to the management practices in § 63.11118 must keep records of all tests performed under § 63.11120(a) and (b).

(b) Records required under paragraph (a) of this section shall be kept for a period of 5 years and shall be made available for inspection by the Administrator's delegated representatives during the course of a site visit.

(c) Each owner or operator of a gasoline cargo tank subject to the management practices in Table 2 to this subpart must keep records documenting vapor tightness testing for a period of 5 years. Documentation must include each of the items specified in § 63.11094(b)(2)(i) through (viii). Records of vapor tightness testing must be retained as specified in either paragraph (c)(1) or paragraph (c)(2) of this section.

(1) The owner or operator must keep all vapor tightness testing records with the cargo tank.

(2) As an alternative to keeping all records with the cargo tank, the owner or operator may comply with the requirements of paragraphs (c)(2)(i) and (ii) of this section.

(i) The owner or operator may keep records of only the most recent vapor tightness test with the cargo tank, and keep records for the previous 4 years at their office or another central location.

(ii) Vapor tightness testing records that are kept at a location other than with the cargo tank must be instantly available (*e.g.,* via e-mail or facsimile) to the Administrator's delegated representative during the course of a site visit or within a mutually agreeable time frame. Such records must be an exact duplicate image of the original paper copy record with certifying signatures.

(d) Each owner or operator of an affected source under this subpart shall keep records as specified in paragraphs (d)(1) and (2) of this section.

(1) Records of the occurrence and duration of each malfunction of operation (*i.e.,* process equipment) or the air pollution control and monitoring equipment.

(2) Records of actions taken during periods of malfunction to minimize emissions in accordance with § 63.11115(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4183, Jan. 24, 2011]

§ 63.11126 What are my reporting requirements?

(a) Each owner or operator subject to the management practices in § 63.11118 shall report to the Administrator the results of all volumetric efficiency tests required under § 63.11120(b). Reports submitted under this paragraph must be submitted within 180 days of the completion of the performance testing.

(b) Each owner or operator of an affected source under this subpart shall report, by March 15 of each year, the number, duration, and a brief description of each type of malfunction which occurred during the previous calendar year and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with § 63.11115(a), including actions taken to correct a malfunction. No report is necessary for a calendar year in which no malfunctions occurred.

[76 FR 4183, Jan. 24, 2011]

Other Requirements and Information

§ 63.11130 What parts of the General Provisions apply to me?

Table 3 to this subpart shows which parts of the General Provisions apply to you.

§ 63.11131 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by the U.S. EPA or a delegated authority such as the applicable State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to a State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local, or tribal agency.

(c) The authorities that cannot be delegated to State, local, or tribal agencies are as specified in paragraphs (c)(1) through (3) of this section.

(1) Approval of alternatives to the requirements in §§ 63.11116 through 63.11118 and 63.11120.

(2) Approval of major alternatives to test methods under § 63.7(e)(2)(ii) and (f), as defined in § 63.90, and as required in this subpart.

(3) Approval of major alternatives to recordkeeping and reporting under § 63.10(f), as defined in § 63.90, and as required in this subpart.

§ 63.11132 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act (CAA), or in subparts A and BBBBBB of this part. For purposes of this subpart, definitions in this section supersede definitions in other parts or subparts.

Dual-point vapor balance system means a type of vapor balance system in which the storage tank is equipped with an entry port for a gasoline fill pipe and a separate exit port for a vapor connection.

Gasoline means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater, which is used as a fuel for internal combustion engines.

Gasoline cargo tank means a delivery tank truck or railcar which is loading or unloading gasoline, or which has loaded or unloaded gasoline on the immediately previous load.

Gasoline dispensing facility (GDF) means any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle, motor vehicle engine, nonroad vehicle, or nonroad engine, including a nonroad vehicle or nonroad engine used solely for competition. These facilities include, but are not limited to, facilities that dispense gasoline into on- and off-road, street, or highway motor vehicles, lawn equipment, boats, test engines, landscaping equipment, generators, pumps, and other gasoline-fueled engines and equipment.

Monthly throughput means the total volume of gasoline that is loaded into, or dispensed from, all gasoline storage tanks at each GDF during a month. Monthly throughput is calculated by summing the volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the current day, plus the total volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the previous 364 days, and then dividing that sum by 12.

Motor vehicle means any self-propelled vehicle designed for transporting persons or property on a street or highway.

Nonroad engine means an internal combustion engine (including the fuel system) that is not used in a motor vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under section 7411 of this title or section 7521 of this title.

Nonroad vehicle means a vehicle that is powered by a nonroad engine, and that is not a motor vehicle or a vehicle used solely for competition.

Submerged filling means, for the purposes of this subpart, the filling of a gasoline storage tank through a submerged fill pipe whose discharge is no more than the applicable distance specified in § 63.11117(b) from the bottom of the tank. Bottom filling of gasoline storage tanks is included in this definition.

Vapor balance system means a combination of pipes and hoses that create a closed system between the vapor spaces of an unloading gasoline cargo tank and a receiving storage tank such that vapors displaced from the storage tank are transferred to the gasoline cargo tank being unloaded.

Vapor-tight means equipment that allows no loss of vapors. Compliance with vapor-tight requirements can be determined by checking to ensure that the concentration at a potential leak source is not equal to or greater than 100 percent of the Lower Explosive Limit when measured with a combustible gas detector, calibrated with propane, at a distance of 1 inch from the source.

Vapor-tight gasoline cargo tank means a gasoline cargo tank which has demonstrated within the 12 preceding months that it meets the annual certification test requirements in § 63.11092(f) of this part.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4183, Jan. 24, 2011]

Table 1 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More1

If you own or operate	Then you must
1. A new, reconstructed, or existing GDF subject to § 63.11118	Install and operate a vapor balance system on your gasoline storage tanks that meets the design criteria in paragraphs (a) through (h).
	(a) All vapor connections and lines on the storage tank shall be equipped with closures that seal upon disconnect.
	(b) The vapor line from the gasoline storage tank to the gasoline cargo tank shall be vapor-tight, as defined in § 63.11132.
	(c) The vapor balance system shall be designed such that the pressure in the tank truck does not exceed 18 inches water pressure or 5.9 inches water vacuum during product transfer.
	(d) The vapor recovery and product adaptors, and the method of connection with the delivery elbow, shall be designed so as to prevent the over-tightening or loosening of fittings during normal delivery operations.
	(e) If a gauge well separate from the fill tube is used, it shall be provided with a submerged drop tube that extends the same distance from the bottom of the storage tank as specified in § 63.11117(b).
	(f) Liquid fill connections for all systems shall be equipped with vapor-tight caps.
	(g) Pressure/vacuum (PV) vent valves shall be installed on the storage tank vent pipes. The pressure specifications for PV vent valves shall be: a positive pressure setting of 2.5 to 6.0 inches of water and a negative pressure setting of 6.0 to 10.0 inches of water. The total leak rate of all PV vent valves at an affected facility, including connections, shall not exceed 0.17 cubic foot per hour at a pressure of 2.0 inches of water and 0.63 cubic foot per hour at a vacuum of 4 inches of water.
	(h) The vapor balance system shall be capable of meeting the static pressure performance requirement of the following equation:
	$Pf = 2e^{-500.887/v}$
	Where:
	Pf = Minimum allowable final pressure, inches of water.
	v = Total ullage affected by the test, gallons.
	e = Dimensionless constant equal to approximately 2.718.
	2 = The initial pressure, inches water.
2. A new or reconstructed GDF, or any storage tank(s) constructed after November 9, 2006, at an existing affected facility subject to § 63.11118	Equip your gasoline storage tanks with a dual-point vapor balance system, as defined in § 63.11132, and comply with the requirements of item 1 in this Table.

[1] The management practices specified in this Table are not applicable if you are complying with the requirements in § 63.11118(b)(2), except that if you are complying with the requirements in § 63.11118(b)(2)(i)(B), you must operate using management practices at least as stringent as those listed in this Table.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 35944, June 25, 2008; 76 FR 4184, Jan. 24, 2011]

Table 2 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Cargo Tanks Unloading at Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More

If you own or operate	Then you must
A gasoline cargo tank	Not unload gasoline into a storage tank at a GDF subject to the control requirements in this subpart unless the following conditions are met:
	(i) All hoses in the vapor balance system are properly connected,
	(ii) The adapters or couplers that attach to the vapor line on the storage tank have closures that seal upon disconnect,
	(iii) All vapor return hoses, couplers, and adapters used in the gasoline delivery are vapor-tight,
	(iv) All tank truck vapor return equipment is compatible in size and forms a vapor-tight connection with the vapor balance equipment on the GDF storage tank, and
	(v) All hatches on the tank truck are closed and securely fastened.
	(vi) The filling of storage tanks at GDF shall be limited to unloading from vapor-tight gasoline cargo tanks. Documentation that the cargo tank has met the specifications of EPA Method 27 shall be carried with the cargo tank, as specified in § 63.11125(c).

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4184, Jan. 24, 2011]

Table 3 to Subpart CCCCCC of Part 63—Applicability of General Provisions

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.1	Applicability	Initial applicability determination; applicability after standard established; permit requirements; extensions, notifications	Yes, specific requirements given in § 63.11111.
§ 63.1(c)(2)	Title V Permit	Requirements for obtaining a title V permit from the applicable permitting authority	Yes, § 63.11111(f) of subpart CCCCCC exempts identified area sources from the obligation to obtain title V operating permits.
§ 63.2	Definitions	Definitions for part 63 standards	Yes, additional definitions in § 63.11132.
§ 63.3	Units and Abbreviations	Units and abbreviations for part 63 standards	Yes.
§ 63.4	Prohibited Activities and Circumvention	Prohibited activities; Circumvention, severability	Yes.
§ 63.5	Construction/Reconstruction	Applicability; applications; approvals	Yes, except that these notifications are not required for facilities subject to § 63.11116
§ 63.6(a)	Compliance with Standards/Operation & Maintenance—Applicability	General Provisions apply unless compliance extension; General Provisions apply to area sources that become major	Yes.
§ 63.6(b)(1)-(4)	Compliance Dates for New and Reconstructed Sources	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for CAA section 112(f)	Yes.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.6(b)(5)	Notification	Must notify if commenced construction or reconstruction after proposal	Yes.
§ 63.6(b)(6)	[Reserved]		
§ 63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources That Become Major	Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source	No.
§ 63.6(c)(1)-(2)	Compliance Dates for Existing Sources	Comply according to date in this subpart, which must be no later than 3 years after effective date; for CAA section 112(f) standards, comply within 90 days of effective date unless compliance extension	No, § 63.11113 specifies the compliance dates.
§ 63.6(c)(3)-(4)	[Reserved]		
§ 63.6(c)(5)	Compliance Dates for Existing Area Sources That Become Major	Area sources That become major must comply with major source standards by date indicated in this subpart or by equivalent time period (e.g., 3 years)	No.
§ 63.6(d)	[Reserved]		
63.6(e)(1)(i)	General duty to minimize emissions	Operate to minimize emissions at all times; information Administrator will use to determine if operation and maintenance requirements were met.	No.*See* § 63.11115 for general duty requirement.
63.6(e)(1)(ii)	Requirement to correct malfunctions ASAP	Owner or operator must correct malfunctions as soon as possible.	No.
§ 63.6(e)(2)	[Reserved]		
§ 63.6(e)(3)	Startup, Shutdown, and Malfunction (SSM) Plan	Requirement for SSM plan; content of SSM plan; actions during SSM	No.
§ 63.6(f)(1)	Compliance Except During SSM	You must comply with emission standards at all times except during SSM	No.
§ 63.6(f)(2)-(3)	Methods for Determining Compliance	Compliance based on performance test, operation and maintenance plans, records, inspection	Yes.
§ 63.6(g)(1)-(3)	Alternative Standard	Procedures for getting an alternative standard	Yes.
§ 63.6(h)(1)	Compliance with Opacity/Visible Emission (VE) Standards	You must comply with opacity/VE standards at all times except during SSM	No.
§ 63.6(h)(2)(i)	Determining Compliance with Opacity/VE Standards	If standard does not State test method, use EPA Method 9 for opacity in appendix A of part 60 of this chapter and EPA Method 22 for VE in appendix A of part 60 of this chapter	No.
§ 63.6(h)(2)(ii)	[Reserved]		
§ 63.6(h)(2)(iii)	Using Previous Tests To Demonstrate Compliance With Opacity/VE Standards	Criteria for when previous opacity/VE testing can be used to show compliance with this subpart	No.
§ 63.6(h)(3)	[Reserved]		
§ 63.6(h)(4)	Notification of Opacity/VE Observation Date	Must notify Administrator of anticipated date of observation	No.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.6(h)(5)(i), (iii)-(v)	Conducting Opacity/VE Observations	Dates and schedule for conducting opacity/VE observations	No.
§ 63.6(h)(5)(ii)	Opacity Test Duration and Averaging Times	Must have at least 3 hours of observation with 30 6-minute averages	No.
§ 63.6(h)(6)	Records of Conditions During Opacity/VE Observations	Must keep records available and allow Administrator to inspect	No.
§ 63.6(h)(7)(i)	Report Continuous Opacity Monitoring System (COMS) Monitoring Data From Performance Test	Must submit COMS data with other performance test data	No.
§ 63.6(h)(7)(ii)	Using COMS Instead of EPA Method 9	Can submit COMS data instead of EPA Method 9 results even if rule requires EPA Method 9 in appendix A of part 60 of this chapter, but must notify Administrator before performance test	No.
§ 63.6(h)(7)(iii)	Averaging Time for COMS During Performance Test	To determine compliance, must reduce COMS data to 6-minute averages	No.
§ 63.6(h)(7)(iv)	COMS Requirements	Owner/operator must demonstrate that COMS performance evaluations are conducted according to § 63.8(e); COMS are properly maintained and operated according to § 63.8(c) and data quality as § 63.8(d)	No.
§ 63.6(h)(7)(v)	Determining Compliance with Opacity/VE Standards	COMS is probable but not conclusive evidence of compliance with opacity standard, even if EPA Method 9 observation shows otherwise. Requirements for COMS to be probable evidence-proper maintenance, meeting Performance Specification 1 in appendix B of part 60 of this chapter, and data have not been altered	No.
§ 63.6(h)(8)	Determining Compliance with Opacity/VE Standards	Administrator will use all COMS, EPA Method 9 (in appendix A of part 60 of this chapter), and EPA Method 22 (in appendix A of part 60 of this chapter) results, as well as information about operation and maintenance to determine compliance	No.
§ 63.6(h)(9)	Adjusted Opacity Standard	Procedures for Administrator to adjust an opacity standard	No.
§ 63.6(i)(1)-(14)	Compliance Extension	Procedures and criteria for Administrator to grant compliance extension	Yes.
§ 63.6(j)	Presidential Compliance Exemption	President may exempt any source from requirement to comply with this subpart	Yes.
§ 63.7(a)(2)	Performance Test Dates	Dates for conducting initial performance testing; must conduct 180 days after compliance date	Yes.
§ 63.7(a)(3)	CAA Section 114 Authority	Administrator may require a performance test under CAA section 114 at any time	Yes.
§ 63.7(b)(1)	Notification of Performance Test	Must notify Administrator 60 days before the test	Yes.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.7(b)(2)	Notification of Re-scheduling	If have to reschedule performance test, must notify Administrator of rescheduled date as soon as practicable and without delay	Yes.
§ 63.7(c)	Quality Assurance (QA)/Test Plan	Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing	Yes.
§ 63.7(d)	Testing Facilities	Requirements for testing facilities	Yes.
63.7(e)(1)	Conditions for Conducting Performance Tests	Performance test must be conducted under representative conditions	No, § 63.11120(c) specifies conditions for conducting performance tests.
§ 63.7(e)(2)	Conditions for Conducting Performance Tests	Must conduct according to this subpart and EPA test methods unless Administrator approves alternative	Yes.
§ 63.7(e)(3)	Test Run Duration	Must have three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; conditions when data from an additional test run can be used	Yes.
§ 63.7(f)	Alternative Test Method	Procedures by which Administrator can grant approval to use an intermediate or major change, or alternative to a test method	Yes.
§ 63.7(g)	Performance Test Data Analysis	Must include raw data in performance test report; must submit performance test data 60 days after end of test with the Notification of Compliance Status; keep data for 5 years	Yes.
§ 63.7(h)	Waiver of Tests	Procedures for Administrator to waive performance test	Yes.
§ 63.8(a)(1)	Applicability of Monitoring Requirements	Subject to all monitoring requirements in standard	Yes.
§ 63.8(a)(2)	Performance Specifications	Performance Specifications in appendix B of 40 CFR part 60 apply	Yes.
§ 63.8(a)(3)	[Reserved]		
§ 63.8(a)(4)	Monitoring of Flares	Monitoring requirements for flares in § 63.11 apply	Yes.
§ 63.8(b)(1)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative	Yes.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.8(b)(2)-(3)	Multiple Effluents and Multiple Monitoring Systems	Specific requirements for installing monitoring systems; must install on each affected source or after combined with another affected source before it is released to the atmosphere provided the monitoring is sufficient to demonstrate compliance with the standard; if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup	No.
§ 63.8(c)(1)	Monitoring System Operation and Maintenance	Maintain monitoring system in a manner consistent with good air pollution control practices	No.
§ 63.8(c)(1)(i)-(iii)	Operation and Maintenance of Continuous Monitoring Systems (CMS)	Must maintain and operate each CMS as specified in § 63.6(e)(1); must keep parts for routine repairs readily available; must develop a written SSM plan for CMS, as specified in § 63.6(e)(3)	No.
§ 63.8(c)(2)-(8)	CMS Requirements	Must install to get representative emission or parameter measurements; must verify operational status before or at performance test	No.
§ 63.8(d)	CMS Quality Control	Requirements for CMS quality control, including calibration, etc.; must keep quality control plan on record for 5 years; keep old versions for 5 years after revisions	No.
§ 63.8(e)	CMS Performance Evaluation	Notification, performance evaluation test plan, reports	No.
§ 63.8(f)(1)-(5)	Alternative Monitoring Method	Procedures for Administrator to approve alternative monitoring	No.
§ 63.8(f)(6)	Alternative to Relative Accuracy Test	Procedures for Administrator to approve alternative relative accuracy tests for continuous emissions monitoring system (CEMS)	No.
§ 63.8(g)	Data Reduction	COMS 6-minute averages calculated over at least 36 evenly spaced data points; CEMS 1 hour averages computed over at least 4 equally spaced data points; data that cannot be used in average	No.
§ 63.9(a)	Notification Requirements	Applicability and State delegation	Yes.
§ 63.9(b)(1)-(2), (4)-(5)	Initial Notifications	Submit notification within 120 days after effective date; notification of intent to construct/reconstruct, notification of commencement of construction/reconstruction, notification of startup; contents of each	Yes.
§ 63.9(c)	Request for Compliance Extension	Can request if cannot comply by date or if installed best available control technology or lowest achievable emission rate	Yes.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.9(d)	Notification of Special Compliance Requirements for New Sources	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date	Yes.
§ 63.9(e)	Notification of Performance Test	Notify Administrator 60 days prior	Yes.
§ 63.9(f)	Notification of VE/Opacity Test	Notify Administrator 30 days prior	No.
§ 63.9(g)	Additional Notifications when Using CMS	Notification of performance evaluation; notification about use of COMS data; notification that exceeded criterion for relative accuracy alternative	Yes, however, there are no opacity standards.
§ 63.9(h)(1)-(6)	Notification of Compliance Status	Contents due 60 days after end of performance test or other compliance demonstration, except for opacity/VE, which are due 30 days after; when to submit to Federal vs. State authority	Yes, however, there are no opacity standards.
§ 63.9(i)	Adjustment of Submittal Deadlines	Procedures for Administrator to approve change when notifications must be submitted	Yes.
§ 63.9(j)	Change in Previous Information	Must submit within 15 days after the change	Yes.
§ 63.10(a)	Recordkeeping/Reporting	Applies to all, unless compliance extension; when to submit to Federal vs. State authority; procedures for owners of more than one source	Yes.
§ 63.10(b)(1)	Recordkeeping/Reporting	General requirements; keep all records readily available; keep for 5 years	Yes.
§ 63.10(b)(2)(i)	Records related to SSM	Recordkeeping of occurrence and duration of startups and shutdowns	No.
§ 63.10(b)(2)(ii)	Records related to SSM	Recordkeeping of malfunctions	No.*See* § 63.11125(d) for recordkeeping of (1) occurrence and duration and (2) actions taken during malfunction.
§ 63.10(b)(2)(iii)	Maintenance records	Recordkeeping of maintenance on air pollution control and monitoring equipment	Yes.
§ 63.10(b)(2)(iv)	Records Related to SSM	Actions taken to minimize emissions during SSM	No.
§ 63.10(b)(2)(v)	Records Related to SSM	Actions taken to minimize emissions during SSM	No.
§ 63.10(b)(2)(vi)-(xi)	CMS Records	Malfunctions, inoperative, out-of-control periods	No.
§ 63.10(b)(2)(xii)	Records	Records when under waiver	Yes.
§ 63.10(b)(2)(xiii)	Records	Records when using alternative to relative accuracy test	Yes.
§ 63.10(b)(2)(xiv)	Records	All documentation supporting Initial Notification and Notification of Compliance Status	Yes.
§ 63.10(b)(3)	Records	Applicability determinations	Yes.
§ 63.10(c)	Records	Additional records for CMS	No.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.10(d)(1)	General Reporting Requirements	Requirement to report	Yes.
§ 63.10(d)(2)	Report of Performance Test Results	When to submit to Federal or State authority	Yes.
§ 63.10(d)(3)	Reporting Opacity or VE Observations	What to report and when	No.
§ 63.10(d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension	Yes.
§ 63.10(d)(5)	SSM Reports	Contents and submission	No.*See* § 63.11126(b) for malfunction reporting requirements.
§ 63.10(e)(1)-(2)	Additional CMS Reports	Must report results for each CEMS on a unit; written copy of CMS performance evaluation; two-three copies of COMS performance evaluation	No.
§ 63.10(e)(3)(i)-(iii)	Reports	Schedule for reporting excess emissions	No.
§ 63.10(e)(3)(iv)-(v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§ 63.8(c)(7)-(8) and 63.10(c)(5)-(13)	No.
§ 63.10(e)(3)(iv)-(v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§ 63.8(c)(7)-(8) and 63.10(c)(5)-(13)	No, § 63.11130(K) specifies excess emission events for this subpart.
§ 63.10(e)(3)(vi)-(viii)	Excess Emissions Report and Summary Report	Requirements for reporting excess emissions for CMS; requires all of the information in §§ 63.10(c)(5)-(13) and 63.8(c)(7)-(8)	No.
§ 63.10(e)(4)	Reporting COMS Data	Must submit COMS data with performance test data	No.
§ 63.10(f)	Waiver for Recordkeeping/Reporting	Procedures for Administrator to waive	Yes.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.11(b)	Flares	Requirements for flares	No.
§ 63.12	Delegation	State authority to enforce standards	Yes.
§ 63.13	Addresses	Addresses where reports, notifications, and requests are sent	Yes.
§ 63.14	Incorporations by Reference	Test methods incorporated by reference	Yes.
§ 63.15	Availability of Information	Public and confidential information	Yes.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4184, Jan. 24, 2011]

Indiana Department of Environmental Management
Office of Air Quality

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

Source Background and Description

Source Name:	**Interstate Castings**
Source Location:	**3823 Massachusetts Avenue, Indianapolis, IN 46218**
County:	**Marion (Center Township)**
SIC Code:	**3321 (Gray and Ductile Iron Foundries)**
Permit Renewal No.:	**F097-37402-00063**
Permit Reviewer:	**Brian Williams**

The Office of Air Quality (OAQ) has reviewed the operating permit renewal and amendment application from Interstate Castings relating to the operation and amendment of a gray and ductile iron castings manufacturing plant. On July 14, 2016, Interstate Castings submitted an application to the OAQ requesting to renew its operating permit. In addition, Interstate Castings has requested to construct and operate new emission units. Interstate Castings was issued its first FESOP Renewal (F097-18317-00063) on April 16, 2007.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

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

(1) Two (2) electric induction furnaces, collectively identified as EU-01, with a combined maximum charge capacity of 5.0 tons of metal per hour, 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;

(2) One (1) charge handling system, identified as EU-02, with a maximum charge capacity of 5.0 tons of metal per hour, emissions are collected by the general furnace area ventilation system that exhausts through two uncontrolled stacks identified as stacks V11 and V12. 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 25.0 million Btu per hour, emissions are collected by the general furnace area ventilation system that exhausts through two uncontrolled stacks identified as stacks V11 and V12; and

(4) One (1) reaction/holding ladle, identified as EU-04, with a maximum charge capacity of 5.0 tons of metal per hour, where inoculation takes place, emissions are collected by the general furnace area ventilation system that exhausts through two uncontrolled stacks identified as stacks V11 and V12.

This gray and ductile iron foundry is an affected source under the provisions of 40 CFR 63, Subpart ZZZZZ.

(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 5.0 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 5.0 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, that was modified in 2012, exhausting through stack A.

(d) Casting Cleaning Operations, collectively identified as EU-06B, with a maximum throughput of 5.0 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) Four (4) grinders installed in 1960;

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

(4) One (1) grinder installed in 1960, uncontrolled, and exhausting to the indoors.

(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, constructed 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**,** modified 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 and mold 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.

Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit

The source also consists of the following emission units that were constructed and/or are operating without a permit:

Emission Units and Pollution Control Equipment Removed From the Source

The source has removed the following emission units:

(a) 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) cutoff saw installed in 1981.

Insignificant Activities

The source also consists of the following insignificant activities:

(a) 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 as follows [326 IAC 6.5-1]:

Process	MMBtu/hr	Process	MMBtu/hr
Core Oven	1.60	Air-set conveyor Infra-red	0.02
Maintenance West Space Heater	0.23	Core Room Core Prep Infra-red	0.02
Maintenance East Space Heater	0.23	Bench Core Table Infra-red	0.02
Chipping Booth Space Heater	0.20	Bench Core Table Infra-red	0.02
Old Dock Space Heater	0.40	Core Assembly Table Infra-red	0.02
Maintenance Shower Room Furnace	0.13	Air-set Core & Mold assembly Table Infrared	0.02
Old Conference Room Boiler	0.11	Air-set Core & Mold assembly Table Infrared	0.02
Airset Oven	0.12	Air-set Mold Assembly Infrared	0.02
Airset Torpedo	0.40	Air-set Mold Assembly Infrared	0.02
Airset Torpedo	0.40	Sinto Infro-red (basement)	0.02
Bull Ladle Torch -2"	0.28	Sinto Infro-red (basement)	0.02
Control Room Furnace	0.13	#9 Molding Machine Infra-red (overhead)	0.02
Core Dip Drying Table Infra-red	0.05	#9 Molding Machine Infra-red (basement)	0.02
Ladle Torch 2" Floor Molding	0.28	Molding Line Setup Table Infra-red (basement)	0.02
Ladle Torch 2" Floor Molding	0.28	#8 Molding Machine Infra-red (basement)	0.02
Ladle Torch 2" Floor Molding	0.28	#8 Molding Machine Infra-red (overhead)	0.02
Bull Ladle Torch -2"	0.28	#7 Molding Machine Infra-red (basement)	0.02
Heavey Chip Torpedo	0.40	#7 Molding Machine Infra-red (overhead)	0.02
Shipping Office North Infra-red	0.01	#6 Molding Machine Infra-red (basement)	0.02
Shipping Office South Infra-red	0.01	#6 Molding Machine Infra-red (overhead)	0.02
Core Assembly Table Heater	0.01	#5 Molding Machine Infra-red (basement)	0.02
Muller Trash Chute Torch	0.01	#5 Molding Machine Infra-red (overhead)	0.02
Muller Gearbox Infra-red	0.02	#4 Molding Machine Infra-red (basement)	0.02
Muller Manifold Infra-red	0.02	#4 Molding Machine Infra-red (overhead)	0.02
Compressor Water Manifold Infra-red	0.02	#3 Molding Machine Infra-red (basement)	0.02
Air-set room space heater	0.15	#3 Molding Machine Infra-red (overhead)	0.02
Air-set room Infra-red	0.02	#1 Molding Machine Infra-red (basement)	0.02
Air-set room Infra-red	0.02	#1 Molding Machine Infra-red (overhead)	0.02
Air-set conveyor Infra-red	0.02	Ladle Prep Area Sink Infra-red	0.02
Air-set conveyor Infra-red	0.02	#2 Stand Grinder Infra-red	0.02
Floor Molding North Station Infra-red	0.02	#1 Stand Grinder Infra-red	0.02
Floor Molding South Station Infra-red	0.02	Brinell Tester Infrared	0.02
Floor Molding Water Barell Infra-red	0.02	Single Pedestal Dual Wheel Grinder Infra-red	0.02
Floor Molding Simpson Muller Infra-red	0.02	Floor Molding Rollaround Triple Unit Infra-red	0.02

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

(A) One (1) hand torch unit for mold drying, with a maximum heat input capacity of 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) One (1) Dayton Salamander, with a maximum heat input capacity of 0.6 MMBtu/hr.

(B) One (1) Dayton Salamander, with a maximum heat input capacity of 0.055 MMBtu/hr.

(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 sander. The emissions from this operation are controlled by an integral dust collector with a design flow rate of 550 cubic feet per minute. [326 IAC 6.5-1]

(d) 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.

This is an affected source under 40 CFR Part 63, Subpart CCCCCC.

(e) 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.

(f) Closed loop heating and cooling systems.

(g) Infrared cure equipment.

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

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

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

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

(l) One (1) propane fueled Payloader, rated at 61 HP.

Pursuant to 326 IAC 1-2-73 a source does not include mobile sources, nonroad engines, or nonroad vehicles. Therefore, the potential to emit has not been calculated for the payloader and there are no applicable requirements for this machine.

(m) Combustion source flame safety purging on startup.

(n) Paved and unpaved roads (hard packed gravel) and parking lots with public access. [326 IAC 6-4] [326 IAC 6-5]

Description of Proposed Changes

The Office of Air Quality (OAQ) has reviewed FESOP Renewal application, submitted by Interstate Castings on July 14, 2016, relating to the following changes:

1. Interstate Castings has requested to install one (1) glass bead abrasive blasting unit equipped with a new dust collector for control, two (2) uncontrolled woodworking saws, two (2) uncontrolled sand muller units, and two (2) uncontrolled grinding units.

2. Interstate Castings has requested to reduce the metal throughput limit from 20,000 tons per year to 19,000 tons per year. Due to this change the manganese and total metal HAPs limits also decreased.

3. The source has notified IDEM that they have removed the cutoff saw from the casting cleaning operations.

4. To clarify that three (3) of the existing grinders are controlled by dust collector CE-A and the remaining one (1) grinder is uncontrolled and exhaust to the indoors.

Based on the information provided to IDEM in the application submitted on July 14, 2016, the addition of this new glass bead abrasive blasting unit would have required PM, PM10, and PM2.5 testing to demonstrate compliance with the PSD minor and FESOP limits proposed in the application. Therefore, on September 20, 2016, Interstate Castings requested to withdraw the request to install the glass bead abrasive blasting unit.

The following is a list of the new emission units and pollution control devices:

(a) Casting Cleaning Operations, collectively identified as EU-06B, permitted in 2016 to add two (2) grinding stations, with a maximum throughput of 5.0 tons of metal per hour, consisting of the following:

    (1) Two (2) grinding stations, permitted in 2016, uncontrolled, and exhausting to the indoors.

(b) Sand Handling Operations, collectively identified as EU-06C, installed prior to 1967 and modified in 1998 and in 2000 and permitted in 2016 to add two (2) sand muller units, with a maximum capacity of 20.63 tons of sand per hour, consisting of the following:

    (1) Two (2) sand muller units, permitted in 2016, with a combined maximum throughput of 0.0125 tons of sand per hour or 0.3 tons of sand per day, uncontrolled, and exhausting to the indoors.

(c) Insignificant activities consisting of the following:

    (1) One (1) woodworking operation for mold patterns, permitted in 2016, generating 1.0 pounds of particulate per hour, uncontrolled, exhausting to the indoors, and consisting of the following:

        (i) One (1) radial arm saw; and
        (ii) One (1) table saw. [326 IAC 6.5-1]

Existing Approvals

Since the issuance of the FESOP Renewal No. F097-18317-00063 on April 16, 2007, the source has constructed or has been operating under the following additional approvals:

(a) Administrative Amendment No. 097-25719-00063, issued on January 14, 2008;

(b) Minor Permit Revision No. 097-27070-00063, issued on December 19, 2008;

(c) Administrative Amendment No. 097-27676-00063, issued on May 21, 2009;

(d) Significant Permit Revision No. 097-31761-00063, issued on August 2, 2012; and

(e) Significant Permit Revision No. 097-32655-00063, issued on March 5, 2013.

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

Air Pollution Control Justification as an Integral Part of the Process

In October 1993 a Final Order Granting Summary Judgment was signed by Administrative Law Judge ("ALJ") Garrettson resolving an appeal filed by Kimball Hospitality Furniture Inc. (Cause Nos. 92-A-J-730 and 92-A-J-833) related to the method by which IDEM calculated potential emissions from woodworking operations. In his findings, the ALJ determined that particulate controls are necessary for the facility to produce its normal product and are integral to the normal operation of the facility, and therefore, potential emissions should be calculated after controls. Based on this ruling, potential emissions for particulate matter from the existing controlled woodworking operation were calculated after consideration of the controls for determining operating permit level purposes. The potential emissions for particulate matter from the proposed woodworking operation will be calculated before controls since this operation is not equipped with a control device.

As a result of this ruling, IDEM will remove the existing PM10 and PM2.5 emission limits for the existing insignificant woodworking operation. The new woodworking operation is not equipped with a control device therefore; this ruling does not apply to the new operation.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

Permit Level Determination – FESOP Amendment

The following table is used to determine the appropriate permit level under 326 IAC 2-8-10 (Administrative Permit Amendments). This table reflects the PTE before controls of the proposed amendment. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/ Emission Unit	PTE of Proposed Amendment (tons/year)								
	PM	PM10	PM2.5	SO_2	NOx	VOC	CO	Total HAPs	Worst Single HAP
Casting Cleaning Operations - Two (2) Grinders	0.22	0.10	0.10	0	0	0	0	0	0
Insignificant - Wood Working (uncontrolled)	4.38	2.32	1.29	0	0	0	0	0	0
Sand Mullers	0.20	0.03	0.03	0	0	0	0	0	0
Total PTE of Proposed Amendment	**4.60**	**2.42**	**1.39**	**0**	**0**	**0**	**0**	**0**	**0**

Pursuant to 326 IAC 2-8-10(a)(13), this change to the permit is considered an administrative amendment because the permit is amended to add emissions units, subject to 326 IAC 2-1.1-3 (Exemptions), at the request of the Permittee.

County Attainment Status

The source is located in Marion County.

Pollutant	Designation
SO_2	Non-attainment effective October 4, 2013, for the Center Township, Perry Township, and Wayne Township. Better than national standards for the remainder of the county.
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	Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard.[1]
$PM_{2.5}$	Attainment effective July 11, 2013, for the annual $PM_{2.5}$ standard.
$PM_{2.5}$	Unclassifiable or attainment effective December 13, 2009, for the 24-hour $PM_{2.5}$ standard.
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.

[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.

(a) Ozone Standards

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

(b) $PM_{2.5}$

Marion County has been classified as attainment for $PM_{2.5}$. Therefore, direct $PM_{2.5}$, SO_2, and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) SO_2
U.S. EPA, in the Federal Register Notice 78 FR 47191 dated August 5, 2013, has designated Marion County Center Township as nonattainment for SO_2. Therefore, SO_2 emissions were reviewed pursuant to the requirements of Emission Offset, 326 IAC 2-3.

This source is located in Center Township.

(d) Other Criteria Pollutants
Marion County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

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, 326 IAC 2-3, or 326 IAC 2-7. Therefore, fugitive emissions are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Greenhouse Gas (GHG) Emissions

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Unrestricted Potential Emissions*	
Pollutant	**Tons/year**
PM	1,035.05
PM_{10}	265.59
$PM_{2.5}$	264.55
SO_2	1.98
NO_x	14.57
VOC	60.01
CO	143.17

Unrestricted Potential Emissions*	
Pollutant	**Tons/year**
Single HAP	18.81
Total HAP	54.22
*This table includes the unlimited PTE of the new emission units.	

HAPs	tons/year
Manganese	18.81
Toluene	7.25
Lead	4.45
Benzene	4.00
Methanol	3.29
All other Metal HAPs	0.78
All other Organic HAPs	15.66
Total	**54.22**

Appendix A of this TSD reflects the unrestricted potential emissions of the source.

(a) The potential to emit (as defined in 326 IAC 2-7-1(30)) of PM10, PM2.5, and CO is equal to or greater than 100 tons per year. However, the Permittee has agreed to limit the source's PM10, PM2.5, and CO emissions to less than Title V levels, therefore the Permittee will be issued a FESOP Renewal.

(b) The potential to emit (as defined in 326 IAC 2-7-1(30)) of all other criteria pollutants are less than 100 tons per year.

(c) The potential to emit (as defined in 326 IAC 2-7-1(30)) of any single HAP is equal to or greater than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(30)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. However, the Permittee has agreed to limit the source's single HAP emissions and total HAP emissions below Title V levels. Therefore, the Permittee will be issued a FESOP Renewal.

Potential to Emit After Issuance

The source has opted to remain a FESOP source. The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of this FESOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)								
	PM	PM_{10}*	$PM_{2.5}$**	SO_2	NO_x	VOC	CO	Total HAPs	Worst Single HAP
Furnaces (EU-01) - Stack B Emissions	6.35	6.07	6.07	0	0	0	0	2.37	2.17 Pb
Furnaces (EU-01) - Uncaptured Emissions	0.09	0.08	0.08	0	0	0	0	0.02	0.02 Pb
Charging (EU-02)	22.80	30.78	30.78	0	0	0	0	0.94	0.71 Mn
Inoculation (EU-04)				0	0	0	0		
Preheater (EU-03)	0.20	1.22	1.22	0.06	10.74	0.59	9.02	0.20	0.19 Hexane
Pouring/Casting/Cooling (EU-05)	39.90	29.36	29.36	0.44	0.22	3.07	57.00	13.11	3.14 Toluene
Shakeout (EU-06A) - Stack A Emissions	6.75	12.53	12.53	0	0	26.28		1.77	1.69 Pb
Casting Cleaning Operations (EU-06B) - Stack A Emissions***				0	0	0	0		
Sand Handling (EU-06C) - Stack A Emissions				0	0	0	0	0	0
Shakeout (EU-06A) - Uncaptured Emissions	0.30	0.21	0.21	0	0	0	0	0.01	0.003 Pb
Casting Cleaning Operations (EU-06B) - Uncaptured Emissions	1.62	0.16	0.16	0	0	0	0	0.07	0.014 Pb
Casting Cleaning Operations - Seven (7) Grinders - Uncaptured Emissions	0.10	0.04	0.04	0	0	0	0	0	0
Sand Handling (EU-06C) - Uncaptured Emissions	3.25	0.49	0.49	0	0	0	0	0	0
Sand Mullers (Uncontrolled)	0.20	0.03	0.03	0	0	0	0	0	0
Core Making - Air Set (EU-07)	8.10	1.82	1.82	0	0	13.6	0	0.30	0.28 Methanol
Core Making - Core Oil (EU-08)	1.31	0.30	0.30	0	0	16.3	0	0	0
Core Making - Redford Shell Sand (EU-09A and EU-09B)	0.22	0.05	0.05	0	0	0.04	0	0.01	0.01 Benzene
Insignificant - Wood Working	5.00	2.94	1.91	0	0	0	0	0	0
Insignificant - Natural Gas Combustion	0.06	0.23	0.23	0.02	3.02	0.17	2.54	0.06	0.05 Hexane

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)								
	PM	PM_{10}*	$PM_{2.5}$**	SO_2	NO_x	VOC	CO	Total HAPs	Worst Single HAP
Insignificant - Fuel Oil Combustion	0.04	0.05	0.04	1.45	0.41	0.01	0.10	negl.	negl.
Insignificant - Propane Hand Torch	0.003	0.01	0.01	0	0.19	0.01	0.11	0	0
Insignificant - Paved Roads	0.04	0.01	0.002	0	0	0	0	0	0
Total PTE of Entire Source	**96.32**	**86.37**	**85.33**	**1.98**	**14.57**	**60.01**	**68.77**	**18.86**	**<10**
Title V Major Source Thresholds	NA	100	100	100	100	100	100	25	10
PSD Major Source Thresholds	100	100	100	NA	100	100	100	NA	NA
Emission Offset Major Source Thresholds	NA	NA	NA	100	NA	NA	NA	NA	NA

negl. = negligible
* Under the Part 70 Permit program (40 CFR 70), PM10 and PM2.5, not particulate matter (PM), are each considered as a "regulated air pollutant".
**$PM_{2.5}$ listed is direct $PM_{2.5}$.
***Excludes emissions from three (3) uncontrolled grinders. In addition, all seven (7) grinders are not included in the Mn or Total Metal HAPs limit.

(a) FESOP Status

This FESOP Renewal to an existing Title V minor stationary source will not change the minor status, because the potential to emit criteria pollutants and HAPs 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).

Unless otherwise specified, existing emissions limits are not changed in this FESOP Renewal.

(1) Criteria Pollutants and HAPs

In order to comply with the requirements of 326 IAC 2-8-4 (FESOP), the source shall comply with the following:

Melt Operations

(a) The combined throughput of metal to the two (2) electric induction furnaces (EU-01) shall not exceed 19,000 tons per twelve consecutive month period with compliance determined at the end of each month.

(b) The combined throughput of metal to the charge handling (EU-02) and reaction/holding ladle (EU-04) shall not exceed 19,000 tons per twelve consecutive month period with compliance determined at the end of each month.

These limits were decreased from less than 20,000 tons to 19,000 tons per twelve consecutive month period with compliance determined at the end of each month at the request of the source. In addition, IDEM has clarified that the throughput limit for the charge handling (EU-02) and reaction/holding ladle (EU-04) is a combined throughput limit since these units have combined PM10 and PM2.5 emission limits.

(c) The PM10 and PM2.5 emissions from the following units shall not exceed the emission limits listed in the table below:

Unit Description	Control/Stack	PM10 Emission Limit (lbs/ton of metal melted)	PM2.5 Emission Limit (lbs/ton of metal melted)
Two (2) Electric Induction Furnaces (EU-01)	Settling Tank/Cyclone (Stack B)	0.64	0.64
Charge Handling (EU-02) and Reaction/Holding Ladle (EU-04)	Uncontrolled (Stacks V11 and V12)	3.30	3.30

(d) The combined manganese emissions from the two (2) electric induction furnaces (EU-01) exhausting through Stack B shall not exceed 0.197 ton per twelve (12) consecutive month period, with compliance determined at the end of each month.

This limit was decreased from 0.207 tons to 0.197 tons per twelve consecutive month period with compliance determined at the end of each month due to the change to the throughput limit.

(e) The combined emissions of any combination of metal HAPs from the two (2) electric induction furnaces (EU-01) exhausting through Stack B shall not exceed 2.37 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

This limit was decreased from 2.40 tons to 2.37 tons per twelve consecutive month period with compliance determined at the end of each month due to the change to the throughput limit.

(f) The combined manganese emissions from the charge handling (EU-02) and reaction/holding ladle (EU-04) processes exhausting through stacks V11 and V12 shall not exceed 0.707 ton per twelve (12) consecutive month period, with compliance determined at the end of each month.

This limit was decreased from 0.744 tons to 0.707 tons per twelve consecutive month period with compliance determined at the end of each month due to the change to the throughput limit.

(g) The combined emissions 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 0.94 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

This limit was decreased from 1.01 tons to 0.94 tons per twelve consecutive month period with compliance determined at the end of each month due to the change to the throughput limit.

Pouring, Cooling, Shakeout, Casting Cleaning, and Sand Handling Operations

(a) The throughput of metal to the following shall each not exceed 19,000 tons per twelve consecutive month period with compliance determined at the end of each month:
(1) pouring and cooling operations (EU-05),
(2) shakeout (EU-06A), and
(3) casting cleaning operations - table blast and shot blast machine (EU-06B).

This limit was decreased from less than 20,000 tons to 19,000 tons per twelve consecutive month period with compliance determined at the end of each month at the request of the source. In addition, IDEM has clarified that only the table blast and shot blast machine are included in the throughput limit since the grinders do not have any pound per ton emission factors and the grinders are not included in the metal HAPs limits.

(b) The PM10, PM2.5, CO, and total organic HAPs emissions from the following units shall not exceed the emission limits listed in the table below:

Unit Description	Control/Stack	PM10 Emission Limit (lbs/ton of metal melted)	PM2.5 Emission Limit (lbs/ton of metal melted)	PM10 Emission Limit (lb/hr)	PM2.5 Emission Limit (lb/hr)	CO Emission Limit (lbs/ton of metal melted)	Total Organic HAPs Limit (lbs/ton of metal melted)
Pouring/Casting/ Cooling (EU-05)	Uncontrolled (Stacks V17, V18, V26, V27, & V28)	3.09	3.09	-	-	6.0	1.21
Shakeout Operations (EU-06)	Dust Collector CE-A (Stack A)	-	-	2.86	2.86		
Casting Cleaning Operations - Table Blast, Shot Blast, and Four (4) Grinders ((EU-06B)						-	-
Sand Handling (EU-06C)						-	-

(c) The manganese emissions from the pouring and cooling operations (EU-05) shall not exceed 1.24 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;

This limit was decreased from 1.30 tons to 1.24 tons per twelve consecutive month period with compliance determined at the end of each month due to the change to the throughput limit.

(d) The emissions of any combination of metal HAPs from the pouring and cooling operations (EU-05) shall not exceed 1.64 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

This limit was decreased from 1.77 tons to 1.64 tons per twelve consecutive month period with compliance determined at the end of each month due to the change to the throughput limit.

(e) The combined manganese emissions from the shakeout (EU-06A), table blast, and shot blast machine (EU-06B) shall not exceed 0.059 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;

This limit was decreased from 0.0626 tons to 0.059 tons per twelve consecutive month period with compliance determined at the end of each month due to the change to the throughput limit. IDEM has also revised the limit to clarify, which emission units are subject to this limit.

(f) The combined emissions of any combination of metal HAPs from the shakeout (EU-06A), table blast, and shot blast machine (EU-06B) shall not exceed 1.77 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

This limit was decreased from 2.39 tons to 1.77 tons per twelve consecutive month period with compliance determined at the end of each month due to the change to the throughput limit. IDEM has also revised the limit to clarify, which emission units are subject to this limit.

Core and Mold Making Operations

(a) The amount of sand at the air set core and mold making process (EU-07) shall be not exceed 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 not exceed 730 tons per twelve consecutive month period with compliance determined at the end of each month.

(c) The combined amount of shell sand at the Redford shell core making processes (EU-09A and EU-09B) shall not exceed 120 tons per twelve consecutive month period with compliance determined at the end of each month.

(d) The PM10 and PM2.5 emissions from the following unit shall not exceed the emission limits listed in the table below:

Unit Description	Control/Stack	PM10 Emission Limit (lbs/ton of sand)	PM2.5 Emission Limit (lbs/ton of sand)
Air Set Core And Mold Making Process (EU-07)	Uncontrolled (Stacks V4, V5, & V38)	0.81	0.81
Oil Sand Core Making Process (EU-08)		0.81	0.81
Redford Shell Core Machines (EU-09A and EU-09B)		0.81	0.81

(e) The 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.

(f) The combined 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.

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

Compliance with these limits, combined with the potential to emit PM10, PM2.5, and CO, all other emission units at this source, shall limit the source-wide total potential to emit of PM10, PM2.5, and CO to less than 100 tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

Compliance with these limits, combined with the potential to emit HAP from all other emission units at this source, shall limit the source-wide total potential to emit of any single HAP to less than ten (10) tons per twelve (12) consecutive month period, total HAPs to less than twenty-five (25) tons per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP) not applicable.

(b) PSD Minor Source – PM

This FESOP Renewal to an existing PSD minor stationary source will not change the PSD minor status, because the potential to emit PM 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.

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

Melt Operations

(a) The combined throughput of metal to the two (2) electric induction furnaces (EU-01) shall not exceed 19,000 tons per twelve consecutive month period with compliance determined at the end of each month.

(b) The combined throughput of metal to the charge handling (EU-02) and reaction/holding ladle (EU-04) shall not exceed 19,000 tons per twelve consecutive month period with compliance determined at the end of each month.

These limits were decreased from less than 20,000 tons to 19,000 tons per twelve consecutive month period with compliance determined at the end of each month at the request of the source. In addition, IDEM has clarified that the throughput limit for the charge handling (EU-02) and reaction/holding ladle (EU-04) is a combined throughput limit since these units have combined PM10 and PM2.5 emission limits.

(b) The PM emissions from the following units shall not exceed the emission limits listed in the table below:

Unit Description	Control/Stack	PM Emission Limit (lbs/ton of metal melted)
Two (2) Electric Induction Furnaces (EU-01)	Settling Tank/Cyclone (Stack B)	0.67
Charge Handling (EU-02) and Reaction/Holding Ladle (EU-04)	Uncontrolled (Stacks V11 and V12)	2.40

Pouring, Cooling, Shakeout, Casting Cleaning, and Sand Handling Operations

(a) The throughput of metal to the pouring and cooling operations (EU-05) shall not exceed 19,000 tons per twelve consecutive month period with compliance determined at the end of each month.

This limit was decreased from less than 20,000 tons to 19,000 tons per twelve consecutive month period with compliance determined at the end of each month at the request of the source. The throughput limit for the shakeout and casting cleaning operations was removed since the PM emission limit is in terms of pounds per hour not pounds per ton.

(b) The PM emissions from the following unit shall not exceed the emission limits listed in the table below:

Unit Description	Control/Stack	PM Emission Limit (lbs/ton of metal melted)	PM Emission Limit (lb/hr)
Pouring/Casting/Cooling (EU-05)	Uncontrolled (Stacks V17, V18, V25, V26, V27, & V28)	4.20	
Shakeout (EU-06A)	Dust Collector CE-A (Stack A)	-	1.54
Casting Cleaning Operations - Table Blast, Shot Blast, and Four (4) Grinders ((EU-06B)			
Sand Handling (EU-06C)			

Core and Mold Making Operations

(a) The amount of sand at the air set core and mold making process (EU-07) shall be not exceed 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 not exceed 730 tons per twelve consecutive month period with compliance determined at the end of each month.

(c) The combined amount of shell sand at the Redford shell core making processes (EU-09A and EU-09B) shall not exceed 120 tons per twelve consecutive month period with compliance determined at the end of each month.

(d) The PM emissions from the following unit shall not exceed the emission limits listed in the table below:

Unit Description	Control/Stack	PM Emission Limit (lbs/ton of sand)
Core Making - Air Set (EU-07)	Uncontrolled (Stacks V4, V5, & V38)	3.60
Core Making - Core Oil (EU-08)		3.60
Core Making - Redford Shell Sand (EU-09A and EU-09B)		3.60

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 100 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

(c) Emission Offset Minor Source
This FESOP Renewal 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

New Source Performance Standards (NSPS)

(a) The requirements of the New Source Performance Standard for Small-Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc and 326 IAC 12, are not included for the existing natural gas-fired boiler, identified as Old Conference Room Boiler because the maximum heat input capacity of this boiler is less than 10 MMBtu/hr.

(b) 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 source does operate a thermal sand reclamation system. In addition, the sand heater that is part of the air set core and mold making process is only used to heat the sand to make it more malleable in the winter. Therefore, the sand heater does not meet the definition of a calciner or dryer as defined in 40 CFR 60.731

(c) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included for this permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

(a) 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.

(b) This gray and ductile iron foundry is still 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 the annual metal melt production is limited to less than 20,000 tons per year.

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 ZZZZZ.

This is an existing applicable requirement that is not being revised in this renewal. This affected source is not required to perform testing to comply with this NESHAP since it is currently classified as a small foundry.

(c) 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.

(d) 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.

(e) 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.

(f) 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. Pursuant to 40 CFR 63.11195(e), gas-fired boilers as defined in this subpart are not subject to the requirements of this subpart.

(g) 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.

(h) The existing gasoline fuel transfer and dispensing operation is subject to the National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities (40 CFR 63, Subpart CCCCCC), because this gasoline fuel transfer station dispenses gasoline, is located at an area source of hazardous air pollutants (HAP), and meets the definition of a gasoline dispensing facility (GDF) as defined in 40 CFR 63.11132.

The gasoline fuel transfer and dispensing operation is subject to the following applicable portions of the NESHAP for gasoline dispensing facilities at an area source of hazardous air pollutants (HAP).

(1) 40 CFR 63.11110
(2) 40 CFR 63.11111(a), (b), (e), (f), (h), (i), and (j)
(3) 40 CFR 63.11112(a), (c), and (d)
(4) 40 CFR 63.11113(b), and (c)
(5) 40 CFR 63.11115
(6) 40 CFR 63.11116
(7) 40 CFR 63.11125(d)
(8) 40 CFR 63.11126(b)
(9) 40 CFR 63.11130
(10) 40 CFR 63.11131
(11) 40 CFR 63.11132
(12) Table 3

This is an existing applicable requirement that is not being revised in this renewal. There are no applicable testing requirements in this NESHAP.

The requirements of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the gasoline fuel transfer and dispensing operation except as otherwise specified in 40 CFR 63, Subpart CCCCCC.

(i) 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 permit.

Compliance Assurance Monitoring (CAM)

(a) 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 - Entire Source

326 IAC 1-5-2 (Emergency Reduction Plans)
The source is not subject to 326 IAC 1-5-2 because the potential to emit of all pollutants is limited to less than one hundred (100) tons per year, each.

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

326 IAC 1-7 (Stack Height Provisions).
The source is subject to 326 IAC 1-7.

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))
This FESOP Renewal 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 Potential to Emit After Issuance Section above.

326 IAC 2-3 (Emission Offset)
This FESOP Renewal 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 Potential to Emit After Issuance Section above.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The unlimited potential to emit of HAPs from the entire source is greater than ten (10) tons per year for any single HAP and/or greater than twenty-five (25) tons per year of a combination of HAPs. However, the source shall continue to limit the potential to emit HAPs from the entire source 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 not subject to the requirements of 326 IAC 2-4.1. See Potential to Emit After Issuance Section above.

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.

326 IAC 2-8-4 (FESOP)
This FESOP Renewal 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 Potential to Emit After Issuance Section above.

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.

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.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source is located in the portion of Marion County included in Center and Wayne Townships, and the potential fugitive particulate emissions, as defined in 326 IAC 6-5-2, from the source are greater than 25 tons/yr. Therefore, the requirements of 326 IAC 6-5 are applicable. Pursuant to 326 IAC 6-5, fugitive particulate matter emissions shall be controlled according to the fugitive dust plan. The plan is included as Attachment A of the permit.

326 IAC 6.5 (PM Limitations Except Lake County)
This source is subject to 326 IAC 6.5 because it is located in Marion County, its PM PTE is equal to or greater than 100 tons/year or actual emissions are greater than 10 tons/year. However, this source is not one of the sources specifically listed in 326 IAC 6.5-2 through 326 IAC 6.5-10. Therefore, 326 IAC 6.5-1-2 applies to the emission units at this source.

State Rule Applicability – Individual Facilities

326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)
The natural gas combustion units are subject to a particulate matter limitation specified in 326 IAC 6.5 that is as stringent as or more stringent than the particulate limitation established in 326 IAC 6-2. Therefore, the requirements of 326 IAC 6-2 do not apply to the natural gas-fired boiler (Old Conference Room Boiler).

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Each of the units at the source is subject to 326 IAC 6.5. Therefore, pursuant to 326 IAC 6-3-1(c)(3), each unit is exempt from the requirements of 326 IAC 6-3, because they are otherwise subject to the more stringent particulate limit established in 326 IAC 6.5.

326 IAC 6.5 (PM Limitations Except Lake County)
(a) Pursuant to 326 IAC 6.5-1-2(a), particulate emissions from each of the following emission units shall not exceed the grain per dry standard cubic foot (dscf) limit listed in the table below:

Unit Description	PM Limit (grain/dscf)
Pouring/Casting/Cooling (EU-05)	0.03
Shakeout (EU-06A)	0.03
Casting Cleaning Operations - Table Blast (EU-06B)	0.03
Casting Cleaning Operations - Shot Blast (EU-06B)	0.03
Casting Cleaning Operations - Seven (7) Grinders (EU-06B)	0.03, each
Sand Handling (EU-06C)	0.03
Air Set Core And Mold Making Process (EU-07)	0.03
Oil Sand Core Making Process (EU-08)	0.03
Redford Shell Core Machines (EU-09A and EU-09B)	0.03, each
Brazing equipment, cutting torches, soldering equipment, and welding equipment	0.03, each
Two (2) Woodworking Operations	0.03, each
Sixty-seven (67) Direct-Fired Natural Gas Combustion Units	0.03, each
Propane Hand Torch	0.03
Two (2) Dayton Salamanders	0.03, each

(b) Pursuant to 326 IAC 6.5-1-2(b)(3), the natural gas-fired boiler (Old Conference Room Boiler), which is a gaseous fuel-fired steam generator is subject to the particulate matter (PM) limit of 0.01 grains per dry standard cubic foot of exhaust gas (gr/dscf).

(c) 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.

The control devices shall be in operation at all times when the electric induction furnaces, shakeout operations, casting cleaning operations, sand handling operations, or woodworking operation are in operation, in order to comply with these limits.

326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations)
This source is not subject to 326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations) because the potential to emit sulfur dioxide from each emission unit is less than twenty-five (25) tons per year and ten (10) pounds per hour.

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The shakeout operation has a potential to emit greater than twenty-five (25) tons of VOC per year. However, this operation was constructed prior to January 1, 1980. Therefore, the shakeout operation is not subject to the requirements of 326 IAC 8-1-6.

The oil sand core making process was constructed before January 1, 1980 and the unlimited VOC potential emissions from this process is less than twenty-five (25) tons per year. Therefore, this process is not subject to the requirements of 326 IAC 8-1-6.

The air set core and mold making process was constructed after January 1, 1980. However, the unlimited VOC potential emissions from the aire set core and mold making process is less than twenty-five (25) tons per year. Therefore, this process is not subject to the requirements of 326 IAC 8-1-6.

All other emission units at this source are not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each emission unit is less than twenty-five (25) tons per year.

326 IAC 8-6 (Organic Solvents
This rule does not apply since this source does not have potential VOC emissions greater than 100 tons per year.

326 IAC 9-1-2 (Carbon Monoxide Emission Limits)
This rule does not apply since the two (2) electric induction furnaces do not have the capacity to melt 10 tons or more of metal per hour.

326 IAC 11-1-1 (Existing Foundries)
The requirements of 11-1-2 do not apply since 326 IAC 6.5-1 also applies and the requirements of 326 IAC 11-1-2 are not consistent with the applicable limits established in 326 IAC 6.5-1.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

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

(a) The compliance determination and monitoring requirements applicable to this source are as follows:

Emission Unit/Control	Control and Stack	Operating Parameters	Frequency
Electric Induction Furnaces[1]	Settling Tank and Cyclone (Stack B)	Visible Emission Notations	Once per day
Charge Handling System, Preheater, and Reaction/Holding Ladle[2]	Uncontrolled (Stacks V11 and V12)	Visible Emission Notations	Once per day
Pouring/Casting/Cooling (EU-05)[2]	Uncontrolled (Stacks V17, V18, V25, V26, V27, & V28)	Visible Emission Notations	Once per day
Shakeout (EU-06A), Casting Cleaning Operations - Table Blast, Shot Blast, and Four (4) Grinders ((EU-06B), and Sand Handling (EU-06C)[1]	Dust Collector CE-A (Stack A)	Visible Emission Notations	Once per day
		Pressure Drop	Once per day
Core Making - Air Set (EU-07), Core Oil (EU-08), and Redford Shell Sand (EU-09A and EU-09B)[2]	Uncontrolled (Stacks V4, V5, & V38)	Visible Emission Notations	Once per day

(1) The monitoring conditions are necessary because the control devices must operate properly to ensure compliance with 326 IAC 6.5 (Particulate Emissions Limitations Except Lake County), 326 IAC 2-8 (FESOP), 326 IAC 2-2 (PSD), and/or 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP)).

(2) The monitoring conditions are necessary because these emission units and/or stacks each have the potential to emit greater than twenty-five (25) tons of particulate matter per year and these emission units are subject to limits to render 326 IAC 2-7 (Part 70 Permits), 326 IAC 2-2 (PSD), and 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP)) not applicable.

(b) The testing requirements applicable to this source are as follows:

Testing Requirements				
Emission Unit	**Control Device**	**Pollutant**	**Timeframe for Testing**	**Frequency of Testing**
Electric Induction Furnaces[1]	Settling Tank and Cyclone (Stack B)	PM, PM10, PM2.5, and Mn	Five (5) years from the last valid compliance demonstration	Once every five (5) years
Shakeout (EU-06A), Casting Cleaning Operations - Table Blast, Shot Blast, and Four (4) Grinders ((EU-06B), and Sand Handling (EU-06C)[2]	Dust Collector CE-A (Stack A)	PM, PM10, PM2.5, and Mn	Five (5) years from the last valid compliance demonstration	Once every five (5) years

(1) These testing conditions are necessary in order to demonstrate compliance with 326 IAC 6.5 (Particulate Emissions Limitations Except Lake County), 326 IAC 2-8 (FESOP), 326 IAC 2-2 (PSD), and/or 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP)). In this permit renewal, IDEM is claryfing that the source shall perform testing on one (1) of the two (2) identical electric induction furnaces (EU-01) on a five (5) year rotating basis. The electric induction furnace not tested, will be tested during the next compliance demonstration test in five years then testing will alternate between the two electric induction furnaces every five years after. This is a new requirement in this permit renewal.

The source last performed this testing on October 3, 2012.

(2) These testing conditions are necessary in order to demonstrate compliance with 326 IAC 6.5 (Particulate Emissions Limitations Except Lake County), 326 IAC 2-8 (FESOP), 326 IAC 2-2 (PSD), and/or 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP)). The source last performed this testing on October 3, 2012.

The source also performed PM, PM10, and PM2.5 testing on March 14, 2013 due to the October 3, 2012 test results indicating the PM10 and PM2.5 emissions potentially being higher then the PSD minor and FESOP limits.

The results from the March 14, 2013 demonstrated that the source as in compliance with all applicable PM, PM10, and PM2.5 emission limits.

Recommendation

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

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

An application for the purposes of this review was received on July 18, 2016.

Conclusion

The construction and operation of this proposed revision and the continued operation of this gray and ductile iron castings manufacturing plant shall be subject to the conditions of the attached FESOP Renewal No. 097-37402-00063.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Brian Williams 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) 234-5375 or toll free at 1-800-451-6027 extension 4-5375.

(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 Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

Appendix A - Emissions Calculations
Summary of Emissions from Amendment

Company Name: Interstate Castings
Address City IN Zip: 3823 Massachusetts Avenue, Indianapolis, IN 46218
Permit Number: F 097-37402-00063
Reviewer: Brian Williams

Unlimited Potential to Emit (tons/year)									
Emission Unit/Processes	**PM**	**PM10**	**PM2.5**	**SO2**	**NOx**	**VOC**	**CO**	**Total HAPs**	**Single HAP**
Casting Cleaning Operations - Two (2) Grinders	0.22	0.10	0.10	0	0	0	0	0	0
Insignificant - Wood Working (uncontrolled)	4.38	2.32	1.29	0	0	0	0	0	0
Sand Mullers	0.20	0.03	0.03	0	0	0	0	0	0
Total Potential Emissions	**4.60**	**2.42**	**1.39**	**0**	**0**	**0**	**0**	**0**	**0**

Appendix A - Emissions Calculations
Summary of Unlimited Emissions

Company Name: Interstate Castings
Address City IN Zip: 3823 Massachusetts Avenue, Indianapolis, IN 46218
Permit Number: F 097-37402-00063
Reviewer: Brian Williams

Unlimited Potential to Emit (tons/year)

Emission Unit/Processes	PM	PM10	PM2.5	SO2	NOx	VOC	CO	Total HAPs
Furnaces (EU-01)	19.71	18.83	18.83	0	0	0	0	2.83
Charging (EU-02)	13.14	7.88	7.88	0	0	0	0	0.47
Preheater (EU-03)	0.20	1.22	1.22	0.06	10.74	0.59	9.02	0.20
Inoculation (EU-04)	39.42	39.42	39.42	0	0	0	0	1.42
Pouring/Casting/Cooling (EU-05)	91.98	45.11	45.11	0.44	0.22	3.07	131.40	29.76
Shakeout (EU-06A)	70.08	49.06	49.06	0.00	0.00	26.28		2.53
Casting Cleaning Operations - Table and Shot Blast (EU-06B)	372.30	37.23	37.23	0	0	0	0	13.45
Casting Cleaning Opeations - Four (4) Grinders	0.22	0.10	0.10	0	0	0	0	0
Casting Cleaning Opeations - Three (3) Grinders (Uncontrolled)	0.22	0.10	0.10	0	0	0	0	0
Sand Handling (EU-06C)	325.29	48.79	48.79	0	0	0	0	0
Sand Mullers (Uncontrolled)	0.20	0.03	0.03	0	0	0	0	0
Core Making - Air Set (EU-07)	94.61	14.19	14.19	0	0	13.6	0	3.46
Core Making - Core Oil (EU-08)	1.97	0.30	0.30	0	0	16.3	0	0
Core Making - Redford Shell Sand (EU-09A and EU-09B)	0.56	0.08	0.08	0	0	0.04	0	0.03
Insignificant - Wood Working	5.00	2.94	1.91	0	0	0	0	0
Insignificant - Natural Gas Combustion	0.06	0.23	0.23	0.02	3.02	0.17	2.54	0.06
Insignificant - Fuel Oil Combustion	0.04	0.05	0.04	1.45	0.41	0.01	0.10	0
Insignificant - Propane Hand Torch	0.003	0.01	0.01	0	0.19	0.01	0.11	0
Insignificant - Paved Roads	0.04	0.01	0.002	0	0	0	0	0
Total Potential Emissions	**1,035.05**	**265.59**	**264.55**	**1.98**	**14.57**	**60.01**	**143.17**	**54.22**

Unlimited Potential to Emit - Metal HAPs (tons/year)

Emission Unit/Processes	Pb	Cr	Mn	Co	Ni	As	Se	Cd	Total Metal HAPs
Furnaces (EU-01)	2.19	7.49E-03	0.61	5.91E-04	1.32E-02	2.56E-03	1.97E-04	1.18E-03	2.83
Charging (EU-02)	0.05	4.99E-03	0.41	3.94E-04	8.80E-03	1.71E-03	1.31E-04	7.88E-04	0.47
Preheater (EU-03)	5.37E-05	1.50E-04	4.08E-05	0	2.25E-04	0	0	1.18E-04	5.88E-04
Inoculation (EU-04)	0.15	0.01	1.22	0.00	0.03	0.01	0.00	0.00	1.42
Pouring/Casting/Cooling (EU-05)	0.35	0.03	2.85	0.00	0.06	0.01	0.00	0.01	3.32
Shakeout (EU-06A)	0.27	0.03	2.17	0.00	0.05	0.01	0.00	0.00	2.53
Casting Cleaning Operations - Table and Shot Blast (EU-06B)	1.43	1.41E-01	11.54	1.12E-02	2.49E-01	4.84E-02	3.72E-03	2.23E-02	13.45
Insignificant - Natural Gas Combustion	1.51E-05	4.23E-05	1.15E-05	0	6.35E-05	0	0	3.33E-05	1.66E-04
Insignificant - Fuel Oil Combustion	2.58E-05	8.61E-06	1.72E-05	0	8.61E-06	1.15E-05	4.30E-05	8.61E-06	1.41E-04
Total Potential Emissions	**4.45**	**0.23**	**18.81**	**0.02**	**0.41**	**0.08**	**0.01**	**0.04**	**24.03**

Unlimited Potential to Emit - Organic HAPs (tons/year)

Emission Unit/Processes	Benzene	Phenol	Toluene	Form-aldehyde	Methanol	All Other Organic HAPs	Total Organic HAPs
Preheater (EU-03)	2.25E-04	0	3.65E-04	8.05E-03	0	0.19	0.20
Pouring/Casting/Cooling (EU-05) and Shakeout (EU-06B)	3.86	0.11	7.24	0.05	0	15.17	26.43
Core Making - Air Set (EU-07)	0.13	0	0	0.05	3.29	0	3.46
Core Making - Core Oil (EU-08)	0	0	0	0	0	0	0
Core Making - Redford Shell Sand (EU-09A and EU-09B)	0.01	0.02	2.82E-03	0	0	0	0.03
Insignificant - Natural Gas Combustion	6.35E-05	0	1.03E-04	2.27E-03	0	0.05	0.06
Total Potential Emissions	**4.00**	**0.13**	**7.25**	**0.11**	**3.29**	**15.42**	**30.18**

Appendix A - Emissions Calculations
Summary of Limited Emissions

Company Name: Interstate Castings
Address City IN Zip: 3823 Massachusetts Avenue, Indianapolis, IN 46218
Permit Number: F 097-37402-00063
Reviewer: Brian Williams

Limited Potential to Emit (tons/year)

Emission Unit/Processes	PM	PM10	PM2.5	SO2	NOx	VOC	CO	Total HAPs
Furnaces (EU-01) - Stack B Emissions	6.35	6.07	6.07	0	0	0	0	2.37
Furnaces (EU-01) - Uncaptured Emissions	0.09	0.08	0.08	0	0	0	0	0.02
Charging (EU-02)				0	0	0	0	
Inoculation (EU-04)	22.80	30.78	30.78	0	0	0	0	0.94
Preheater (EU-03)	0.20	1.22	1.22	0.06	10.74	0.59	9.02	0.20
Pouring/Casting/Cooling (EU-05)	39.90	29.36	29.36	0.44	0.22	3.07	57.00	13.11
Shakeout (EU-06A) - Stack A Emissions				0	0	26.28		
Casting Cleaning Operations (EU-06B) - Stack A Emissions*	6.75	12.53	12.53	0	0	0	0	1.77
Sand Handling (EU-06C) - Stack A Emissions				0	0	0	0	0
Shakeout (EU-06A) - Uncaptured Emissions	0.30	0.21	0.21	0	0	0	0	0.01
Casting Cleaning Operations (EU-06B) - Uncaptured Emissions	1.62	0.16	0.16	0	0	0	0	0.07
Casting Cleaning Operations - Seven (7) Grinders - Uncaptured Emissions*	0.10	0.04	0.04	0	0	0	0	0
Sand Handling (EU-06C) - Uncaptured Emissions	3.25	0.49	0.49	0	0	0	0	0
Sand Mullers (Uncontrolled)	0.20	0.03	0.03	0	0	0	0	0
Core Making - Air Set (EU-07)	8.10	1.82	1.82	0	0	13.6	0	0.30
Core Making - Core Oil (EU-08)	1.31	0.30	0.30	0	0	16.3	0	0
Core Making - Redford Shell Sand (EU-09A and EU-09B)	0.22	0.05	0.05	0	0	0.04	0	0.01
Insignificant - Wood Working	5.00	2.94	1.91	0	0	0	0	0
Insignificant - Natural Gas Combustion	0.06	0.23	0.23	0.02	3.02	0.17	2.54	0.06
Insignificant - Fuel Oil Combustion	0.04	0.05	0.04	1.45	0.41	0.01	0.10	1.23E-04
Insignificant - Propane Hand Torch	0.003	0.01	0.01	0	0.19	0.01	0.11	0
Insignificant - Paved Roads	0.04	0.01	0.002	0	0	0	0	0
Total Potential Emissions	**96.32**	**86.37**	**85.33**	**1.98**	**14.57**	**60.01**	**68.77**	**18.86**

Limited Potential to Emit - Metal HAPs (tons/year)

Emission Unit/Processes	Pb**	Cr	Mn	Co	Ni	As	Se	Cd	Total Metal HAPs
Furnaces (EU-01) - Stack B Emissions	2.17	2.41E-03	0.20	1.90E-04	4.25E-03	8.25E-04	6.35E-05	3.81E-04	2.37
Furnaces (EU-01) - Uncaptured Emissions	0.02	3.25E-05	0.003	2.57E-06	5.73E-05	1.11E-05	8.55E-07	5.13E-06	0.025
Charging (EU-02)	0.05	2.17E-03	0.71	1.71E-04	3.82E-03	7.41E-04	5.70E-05	3.42E-04	0.94
Inoculation (EU-04)	0.15	6.50E-03		5.13E-04	1.15E-02	2.22E-03	1.71E-04	1.03E-03	
Preheater (EU-03)	5.37E-05	1.50E-04	4.08E-05	0	2.25E-04	0	0	1.18E-04	5.88E-04
Pouring/Casting/Cooling (EU-05)	0.35	0.02	1.24	1.20E-03	0.03	5.19E-03	3.99E-04	2.39E-03	1.64
Shakeout (EU-06A)/Casting Cleaning Operations (EU-06B) - Stack A Emissions	1.69	7.22E-04	0.06	5.70E-05	1.27E-03	2.47E-04	1.90E-05	1.14E-04	1.75
Shakeout (EU-06A) - Uncaptured Emissions	0.003	1.16E-04	9.42E-03	9.12E-06	2.04E-04	3.95E-05	3.04E-06	1.82E-05	0.01
Casting Cleaning Operations (EU-06B) - Uncaptured Emissions	0.014	6.14E-04	5.01E-02	4.85E-05	1.08E-03	2.10E-04	1.62E-05	9.69E-05	0.07
Insignificant - Natural Gas Combustion	1.51E-05	4.23E-05	1.15E-05	0	6.35E-05	0	0	3.33E-05	1.66E-04
Insignificant - Fuel Oil Combustion	2.58E-05	8.61E-06	1.72E-05	0	8.61E-06	1.15E-05	4.30E-05	8.61E-06	1.23E-04
Total Potential Emissions	**4.45**	**0.03**	**2.26**	**2.19E-03**	**0.05**	**9.48E-03**	**7.30E-04**	**4.53E-03**	**6.81**

Limited Potential to Emit - Organic HAPs (tons/year)

Emission Unit/Processes	Benzene	Phenol	Toluene	Form-aldehyde	Methanol	All Other Organic HAPs	Total Organic HAPs
Preheater (EU-03)	2.25E-04	0	3.65E-04	8.05E-03	0	0.19	0.20
Pouring/Casting/Cooling (EU-05) and Shakeout (EU-06B)	1.67	0.05	3.14	0.02	0	6.58	11.47
Core Making - Air Set (EU-07)	0.01	0	0	4.05E-03	0.28	0	0.30
Core Making - Core Oil (EU-08)	0	0	0	0	0	0	0
Core Making - Redford Shell Sand (EU-09A and EU-09B)	0.01	0.02	2.82E-03	0	0	0	0.01
Insignificant - Natural Gas Combustion	6.35E-05	0	1.03E-04	2.27E-03	0	0.05	0.06
Total Potential Emissions	**1.69**	**0.07**	**3.14**	**0.04**	**0.28**	**6.83**	**12.04**

*This does not include the emissions from the three (3) uncontrolled grinders. The emissions from these units are included with the uncaptured emissions from the four (4) controlled grinders.
**Pb is assumed to be unlimited PTE.

See next page for more details on the specific limits. The potential to emit for all other pollutants is based on the unlimited PTE because the source does not have federally enforceable limits in the permit for these specific pollutants.

Appendix A: Emissions Calculations
FESOP and PSD Minor Limits

Company Name: Warsaw Foundry Company, Inc.
Address City IN Zip: 1212 North Detroit Street, Warsaw, Indiana 46580
Permit Number: F085-36736-00006
Reviewer: Brian Williams

Limited Metal Melt Throughput (tons/yr)
19,000.00

Limited Sand Throughputs (tons/yr)	
Air Set (EU-07)	4,500
Core Oil (EU-08)	730
Redford Shell Sand (EU-09A and EU-09B)	120

		Emission Limits (lb/ton)					Emission Limits (lb/hr)		
Process	**Control/Stack**	**PM**	**PM10**	**PM2.5**	**CO**	**Total Organic HAPs**	**PM**	**PM10**	**PM2.5**
Furnaces (EU-01)	Settling Tank/Cyclone (Stack B)	0.67	0.64	0.64	-	-	-	-	-
Charging (EU-02)*	Uncontrolled (Stacks V11 and V12)	2.40	3.24	3.24	-	-	-	-	-
Inoculation (EU-04)*					-	-	-	-	-
Pouring/Casting/Cooling (EU-05)	Uncontrolled (Stacks V17, V18, V25, V26, V27, & V28)	4.20	3.09	3.09	6.00	1.21	-	-	-
Shakeout (EU-06A)	Dust Collector CE-A (Stack A)	-	-	-			1.54	2.86	2.86
Casting Cleaning Operations (EU-06B)**					-	-			
Sand Handling (EU-06C)					-	-			
Core Making - Air Set (EU-07)*	Uncontrolled (Stacks V4, V5, & V38)	3.60	0.81	0.81	-	0.133	-	-	-
Core Making - Core Oil (EU-08)*		3.60	0.81	0.81	-	-	-	-	-
Core Making - Redford Shell Sand (EU-09A and EU-09B)*		3.60	0.81	0.81	-	0.191	-	-	-

*PM10 and PM2.5 emission limits included 1.5 safety factor requested by the source in previous permits.
**Excludes emissions from three (3) uncontrolled grinders. In addition, all seven (7) grinders are not included in the Mn or Total Metal HAPs limit.

		Limited Potential to Emit (tons/yr)**						
	Control Device	**PM**	**PM10**	**PM2.5**	**CO**	**Mn**	**Total Metal HAPs*** **	**Total Organic HAPs**
Furnaces (EU-01) - Captured and Controlled Emissions	Settling Tank/Cyclone (Stack B)	6.35	6.07	6.07	-	0.197	2.37	-
Furnaces (EU-01) - Uncaptured Emissions	Uncontrolled	0.09	0.08	0.08	-	0.003	0.025	-
Charging (EU-02)	Uncontrolled (Stacks V11 and V12)	22.80	30.78	30.78	-	0.707	0.94	-
Inoculation (EU-04)					-			-
Pouring/Casting/Cooling (EU-05)	Uncontrolled (Stacks V17, V18, V25, V26, V27, & V28)	39.90	29.36	29.36	57.00	1.24	1.64	11.47
Shakeout (EU-06A)	Dust Collector CE-A (Stack A)	6.75	12.53	12.53		0.059	1.77	
Casting Cleaning Operations (Shot Blasters and Grinders) (EU 06B)*					-			-
Sand Handling (EU-06C)					-	-	-	-
Shakeout (EU-06A) - Uncaptured Emissions	Uncontrolled	0.30	0.21	0.21	-	0.009	0.013	-
Casting Cleaning Operations (EU-06B) - Uncaptured Emissions	Uncontrolled	1.62	0.16	0.16	-	0.05	0.066	-
Casting Cleaning Operations - Seven (7) Grinders - Uncaptured Emissions	Uncontrolled	0.096	0.043	0.043	-	-	-	-
Sand Handling (EU-06C) - Uncaptured Emissions	Uncontrolled	3.25	0.49	0.49	-	-	-	-
Core Making - Air Set (EU-07)	Uncontrolled (Stacks V4, V5, & V38)	8.10	1.82	1.82	-	-	-	0.30
Core Making - Core Oil (EU-08)		1.31	0.30	0.30	-	-	-	-
Core Making - Redford Shell Sand (EU-09A and EU-09B)		0.22	0.05	0.05	-	-	-	0.01

*Excludes emissions from three (3) uncontrolled grinders. In addition, all seven (7) grinders are not included in the Mn or Total Metal HAPs limit.

**The potential to emit for all other pollutants is based on the unlimited PTE because the source does not have federally enforceable limits in the permit for these specific pollutants.

***The permit does not explicitly limit the individual metal HAPs, with the exception of Mn. The limited Total Metal HAPs values in the table above assumes the throughput limits and associated control devices will also reduce the individual metal HAP emissions (assumes no reduction in Pb emissions). The source has previously included the unlimited potential to emit Pb in the Total Metal HAPs limit.

Limited PTE (tons/yr) = Limited Throughput (ton/yr) x Emission Limit (lb/ton) x 1/2,000 (ton/lb)
Limited PTE (tons/yr) = Emission Limit (lb/hr) x 8,760 (hr/yr) x 1/2,000 (ton/lb)
Limited PTE Mn (tons/yr) = Limited Throughput (tons/yr) x Uncontrolled EF (lb/ton) x Collection Eff. (%) x (1 - Control (%)) x 1/2,000 (ton/lb)
Limited PTE Total Metal HAPs (tons/yr) = Limited Throughput (tons/yr) x SUM(Uncontrolled Metal HAPs EF) (lb/ton) x Collection Eff. (%) x (1 - Control (%)) x 1/2,000 (ton/lb)
Uncaptured PTE (tons/yr) = Limited Throughput (tons/yr) x Uncontrolled EF (lb/ton) x (1 - Collection Eff. (%)) x 1/2,000 (ton/lb)

Appendix A: Emissions Calculations
Foundry Emissions

Company Name: Interstate Castings
Address City IN Zip: 3823 Massachusetts Avenue, Indianapolis, IN 46218
Permit Number: F 097-37402-00063
Reviewer: Brian Williams

Process		Emission Unit ID(s)	Maximum Throughput (tons/hr)	Uncontrolled Emission Factors (lb/ton)						
				PM	PM10	PM2.5	SO_2	NOx	VOC	CO
Electric Induction Furnaces	(SCC-3-04-003-03)	EU-01	5.00	0.90	0.86	0.86	0	0	0	0
Charge Handling	(SCC 3-04-003-15)	EU-02	5.00	0.60	0.36	0.36	0	0	0	0
Ductile Iron Production - Inoculation	(SCC 3-04-003-21)	EU-04	5.00	1.80	1.80	1.80	0	0	0	0
Pouring/Casting/Cooling	(SCC 3-04-003-20)	EU-05	5.00	4.20	2.06	2.06	0.02	0.01	0.14	6.00
Casting Shakeout	(SCC 3-04-003-31)	EU-06A	5.00	3.20	2.24	2.24	0	0	1.20	
Casting Cleaning Operations - Table and Shot Blast	(SCC 3-04-003-40)	EU-06B	5.00	17.00	1.70	1.70	0	0	0	0
Casting Cleaning Operations - Four (4) Grinders	(SCC 3-04-003-60)		5.00	0.01	0.0045	0.0045	0	0	0	0
Casting Cleaning Operations - Three (3) Grinders (Uncontrolled)	(SCC 3-04-003-60)		5.00	0.01	0.0045	0.0045	0	0	0	0
Sand Handling	(SCC 3-04-003-50)	EU-06C	20.63	3.60	0.54	0.54	0	0	0	0
Sand Mullers (Uncontrolled)		-	0.0125	3.60	0.54	0.54	0	0	0	0
Core Making - Air Set		EU-07	6.00	3.60	0.54	0.54	0	0	0	0
Core Making - Core Oil		EU-08	0.13	3.60	0.54	0.54	0	0	0	0
Core Making - Redford Shell Sand		EU-09A and EU-09B	0.04	3.60	0.54	0.54	0	0	0	0

Notes
Emission factors from AP-42 Chapter 12.10 Gray Iron Foundries and US EPA Fire Version 6.25.

Process	Emission Unit ID(s)	Uncontrolled Potential to Emit (tons/yr)						
		PM	PM10	PM2.5	SO_2	NOx	VOC	CO
Electric Induction Furnaces	EU-01	19.71	18.83	18.83	0	0	0	0
Charge Handling	EU-02	13.14	7.88	7.88	0	0	0	0
Ductile Iron Production - Inoculation	EU-04	39.42	39.42	39.42	0	0	0	0
Pouring/Casting/Cooling	EU-05	91.98	45.11	45.11	0.44	0.22	3.07	131.40
Casting Shakeout	EU-06A	70.08	49.06	49.06	0	0	26.28	
Casting Cleaning Operations - Table and Shot Blast	EU-06B	372.30	37.23	37.23	0	0	0	0
Casting Cleaning Operations - Four (4) Grinders		0.22	0.10	0.10	0	0	0	0
Casting Cleaning Operations - Three (3) Grinders (Uncontrolled)		0.22	0.10	0.10	0	0	0	0
Sand Handling	EU-06C	325.29	48.79	48.79	0	0	0	0
Sand Mullers (Uncontrolled)	-	0.20	0.03	0.03	0	0	0	0
Core Making - Air Set	EU-07	94.61	14.19	14.19	0	0	0	0
Core Making - Core Oil	EU-08	1.97	0.30	0.30	0	0	0	0
Core Making - Redford Shell Sand	EU-09A and EU-09B	0.56	0.08	0.08	0	0	0	0

Process	Control Device	Capture Efficiency	Control Efficiency	Captured and Controlled Potential to Emit (tons/yr)						
				PM	PM10	PM2.5	SO_2	NOx	VOC	CO
Electric Induction Furnaces	Settling Tank/Cyclone (Stack B)	99.00%	25.00%	14.63	13.98	13.98	0	0	0	0
Charge Handling	Uncontrolled (Stacks V11 and V12)	0%	0%	0	0	0	0	0	0	0
Ductile Iron Production - Inoculation		0%	0%	0	0	0	0	0	0	0
Pouring/Casting/Cooling	Uncontrolled (Stacks V17, V18, V25, V26, V27, & V28)	0%	0%	0	0	0	0	0	0	0
Casting Shakeout	Dust Collector CE-A (Stack A)	99.00%	99.00%	0.69	0.49	0.49	0	0	0	
Casting Cleaning Operations - Table and Shot Blast				3.69	0.37	0.37	0	0	0	0
Casting Cleaning Operations - Four (4) Grinders				2.17E-03	9.76E-04	9.76E-04	0	0	0	0
Casting Cleaning Operations - Three (3) Grinders (Uncontrolled)	Uncontrolled	0%	0%	0	0	0	0	0	0	0
Sand Handling	Dust Collector CE-A (Stack A)	99.00%	99.00%	3.22	0.48	0.48	0	0	0	0
Sand Mullers (Uncontrolled)	Uncontrolled	0%	0%	0	0	0	0	0	0	0
Core Making - Air Set	Uncontrolled (Stacks V4, V5, & V38)	0%	0%	0	0	0	0	0	0	0
Core Making - Core Oil		0%	0%	0	0	0	0	0	0	0
Core Making - Redford Shell Sand		0%	0%	0	0	0	0	0	0	0

Process	Control Device	Capture Efficiency	Uncaptured Potential to Emit (tons/yr)						
			PM	PM10	PM2.5	SO_2	NOx	VOC	CO
Electric Induction Furnaces	Settling Tank/Cyclone (Stack B)	99.00%	0.20	0.19	0.19	0	0	0	0
Charge Handling	Uncontrolled (Stacks V11 and V12)	0%	13.14	7.88	7.88	0	0	0	0
Ductile Iron Production - Inoculation		0%	39.42	39.42	39.42	0	0	0	0
Pouring/Casting/Cooling	Uncontrolled (Stacks V17, V18, V25, V26, V27, & V28)	0%	91.98	45.11	45.11	0	0	3.07	131.40
Casting Shakeout	Dust Collector CE-A (Stack A)	99.00%	0.70	0.49	0.49	0	0	26.28	
Casting Cleaning Operations - Table and Shot Blast			3.72	0.37	0.37	0	0	0	0
Casting Cleaning Operations - Four (4) Grinders			2.19E-03	9.86E-04	9.86E-04	0	0	0	0
Casting Cleaning Operations - Three (3) Grinders (Uncontrolled)	Uncontrolled	0.00%	0.22	0.10	0.10	0	0	0	0
Sand Handling	Dust Collector CE-A (Stack A)	99.00%	3.25	0.49	0.49	0	0	0	0
Sand Mullers (Uncontrolled)	Uncontrolled	0%	0.20	0.03	0.03	0	0	0	0
Core Making - Air Set	Uncontrolled (Stacks V4, V5, & V38)	0%	94.61	14.19	14.19	0	0	0	0
Core Making - Core Oil		0%	1.97	0.30	0.30	0	0	0	0
Core Making - Redford Shell Sand		0%	0.56	0.08	0.08	0	0	0	0

Methodology
Uncontrolled PTE (tons/yr) = Maximum Throughput (tons/hr) * Emission Factor (lb/ton) * 8,760 hr/yr * 1 ton/2,000 lbs
Captured and Controlled PTE (tons/yr) = Uncontrolled PTE (tons/yr) * Collection Eff. (%) * (1 - Control (%))
Uncaptured PTE (tons/yr) = Uncontrolled PTE (tons/yr) * (1 - Collection Eff. (%))

Appendix A: Emissions Calculations
Foundry Emissions

Company Name: Interstate Castings
Address City IN Zip: 3823 Massachusetts Avenue, Indianapolis, IN 46218
Permit Number: F 097-37402-00063
Reviewer: Brian Williams

USEPA Speciate v 3.2 Data							
Pb	Cr	Mn	Co	Ni	As	Se	Cd
0.385%	0.038%	3.100%	0.003%	0.067%	0.013%	0.001%	0.006%

Process		Emission Unit ID(s)	Maximum Throughput (tons/hr)	Uncontrolled Emission Factors (lb/ton)							
				Pb	Cr	Mn	Co	Ni	As	Se	Cd
Electric Induction Furnaces*	(SCC-3-04-003-03)	EU-01	5.00	0.10	3.42E-04	0.0279	2.70E-05	6.03E-04	1.17E-04	9.00E-06	5.40E-05
Charge Handling	(SCC 3-04-003-15)	EU-02	5.00	2.31E-03	2.28E-04	1.86E-02	1.80E-05	4.02E-04	7.80E-05	6.00E-06	3.60E-05
Ductile Iron Production - Inoculation	(SCC 3-04-003-21)	EU-04	5.00	6.93E-03	6.84E-04	5.58E-02	5.40E-05	1.21E-03	2.34E-04	1.80E-05	1.08E-04
Pouring/Casting/Cooling	(SCC 3-04-003-20)	EU-05	5.00	1.62E-02	1.60E-03	1.30E-01	1.26E-04	2.81E-03	5.46E-04	4.20E-05	2.52E-04
Casting Shakeout	(SCC 3-04-003-31)	EU-06A	5.00	1.23E-02	1.22E-03	9.92E-02	9.60E-05	2.14E-03	4.16E-04	3.20E-05	1.92E-04
Casting Cleaning Operations - Table and Shot Blast	(SCC 3-04-003-40)	EU-06B	5.00	6.55E-02	6.46E-03	5.27E-01	5.10E-04	1.14E-02	2.21E-03	1.70E-04	1.02E-03

Notes
*Pb emission factors from USEPA's Factor Information Retrieval Data System, version 6.25.
All other 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).

Process	Emission Unit ID(s)	Uncontrolled Potential to Emit (tons/yr)							
		Pb	Cr	Mn	Co	Ni	As	Se	Cd
Electric Induction Furnaces	EU-01	2.19	7.49E-03	0.61	5.91E-04	0.01	2.56E-03	1.97E-04	1.18E-03
Charge Handling	EU-02	0.05	4.99E-03	0.41	3.94E-04	8.80E-03	1.71E-03	1.31E-04	7.88E-04
Ductile Iron Production - Inoculation	EU-04	0.15	0.01	1.22	1.18E-03	0.03	5.12E-03	3.94E-04	2.37E-03
Pouring/Casting/Cooling	EU-05	0.35	0.03	2.85	2.76E-03	0.06	1.20E-02	9.20E-04	5.52E-03
Casting Shakeout	EU-06A	0.27	0.03	2.17	2.10E-03	0.05	9.11E-03	7.01E-04	4.20E-03
Casting Cleaning Operations - Table and Shot Blast	EU-06B	1.43	0.14	11.54	0.01	0.25	0.05	3.72E-03	0.02

Process	Control Device	Capture Efficiency	Control Efficiency	Captured and Controlled Potential to Emit (tons/yr)							
				Pb	Cr	Mn	Co	Ni	As	Se	Cd
Electric Induction Furnaces	Settling Tank/Cyclone	99.00%	25.00%	1.63	5.56E-03	0.45	4.39E-04	9.81E-03	1.90E-03	1.46E-04	8.78E-04
Charge Handling	Uncontrolled	0.00%	0.00%	0	0	0	0	0	0	0	0
Ductile Iron Production - Inoculation	Uncontrolled	0.00%	0.00%	0	0	0	0	0	0	0	0
Pouring/Casting/Cooling	Uncontrolled	0.00%	0.00%	0	0	0	0	0	0	0	0
Casting Shakeout	Dust Collector CE-A	99.00%	99.00%	2.67E-03	2.64E-04	0.02	2.08E-05	4.65E-04	9.02E-05	6.94E-06	4.16E-05
Casting Cleaning Operations - Table and Shot Blast				0.01	1.40E-03	0.11	1.11E-04	2.47E-03	4.79E-04	3.69E-05	2.21E-04

Process	Control Device	Capture Efficiency	Uncaptured Potential to Emit (tons/yr)							
			Pb	Cr	Mn	Co	Ni	As	Se	Cd
Electric Induction Furnaces	Settling Tank/Cyclone	99.00%	0.02	7.49E-05	0.01	5.91E-06	1.32E-04	2.56E-05	1.97E-06	1.18E-05
Charge Handling	Uncontrolled	0.00%	0.05	4.99E-03	0.41	3.94E-04	0.01	1.71E-03	1.31E-04	7.88E-04
Ductile Iron Production - Inoculation	Uncontrolled	0.00%	0.15	0.01	1.22	1.18E-03	0.03	0.01	3.94E-04	2.37E-03
Pouring/Casting/Cooling	Uncontrolled	0.00%	0.35	0.03	2.85	2.76E-03	0.06	0.01	9.20E-04	0.01
Casting Shakeout	Dust Collector CE-A	99.00%	2.70E-03	2.66E-04	0.02	2.10E-05	4.70E-04	9.11E-05	7.01E-06	4.20E-05
Casting Cleaning Operations - Table and Shot Blast			1.43E-02	1.41E-03	0.12	1.12E-04	2.49E-03	4.84E-04	3.72E-05	2.23E-04

Methodology
Uncontrolled PTE (tons/yr) = Maximum Throughput (tons/hr) * Emission Factor (lb/ton) * 8,760 hr/yr * 1 ton/2,000 lbs
Captured and Controlled PTE (tons/yr) = Uncontrolled PTE (tons/yr) * Collection Eff. (%) * (1 - Control (%))
Uncaptured PTE (tons/yr) = Uncontrolled PTE (tons/yr) * (1 - Collection Eff. (%))

Appendix A: Emissions Calculations
September 2007 VOC/Organic HAP Stack Test Results

Company Name: Interstate Castings
Address City IN Zip: 3823 Massachusetts Avenue, Indianapolis, IN 46218
Permit Number: F 097-37402-00063
Reviewer: Brian Williams

Process	Stack	Total VOC from Stack Test (lb/hr)	Metal Throughput During Test (tons/hr)	Total VOC from Stack Test (lb/ton)	Maximum Throughput (tons/hr)	Limited Throughput (tons/yr)
pouring/cooling	V17	2.53	3.56	0.71	5.00	19,000
pouring/cooling	V18	1.64	3.56	0.46		
shakeout	Stack A	0.12	3.37	0.04		
	Totals	**4.29**		**1.21**		

If we assume that all VOC from pouring/cooling/shakeout is combined organic HAPs:

Process	Stack	Total Organic HAPs Emissions (lb/ton)	Unlimited Total Organic HAPs Emissions (tons/yr)	Limited Total Organic HAPs Emissions (tons/yr)
pouring/cooling	V17	1.21	26.43	11.47
pouring/cooling	V18			
shakeout	Stack A			
	Totals	**26.43**	**11.47**	

	Benzene	Phenol	Toluene	Formaldehyde	Hydrogen Cyanide	Other Organic HAPs	**Total Organic HAPs**
Weight percent individual HAP	14.60%	0.40%	27.40%	0.20%	2.30%	55.10%	**100.00%**
Calculated indivual HAP from total unlimited PTE VOC/Organic HAP from pouring cooling/shakeout (tons/yr)	3.86	0.11	7.24	0.05	0.61	14.56	**26.43**
Calculated indivual HAP from limited PTE total VOC/Organic HAP from pouring cooling/shakeout (tons/yr)	1.67	0.05	3.14	0.02	0.26	6.32	**11.47**

Methodology

Source did not speciate all organic HAPs during testing. Therefore, 55.10% assumed to be combination of organic HAPs not identified in table above. Weight percent individual HAPs based on MPR No. 097-27070-00063, issued on December 19, 2008.

Total VOC from Stack Test (lb/ton) = Total VOC from Stack Test (lb/hr) x Metal Throughput During Test (tons/hr)

Unlimited Total Organic HAPs Emissions (tons/yr) = Total Organic HAPs Emissions (lb/ton) x Maximum Throughput (tons/hr) x 8,760 (hrs/yr) x 1/2,000 (ton/lb)

Limited Total Organic HAPs Emissions (tons/yr) = Total Organic HAPs Emissions (lb/ton) x Limited Throughput (tons/yr) x 1/2,000 (ton/lb)

Individual Organic HAPs Emissions (tons/yr) = Total Organic HAPs Emissions (lb/ton) x Percent HAP (%) x Maximum Throughput (tons/hr) x 8,760 (hrs/yr) x 1/2,000 (ton/lb)

Individual Organic HAPs Emissions (tons/yr) = Total Organic HAPs Emissions (lb/ton) x Percent HAP (%) x Limited Throughput (tons/yr) x 1/2,000 (ton/lb)

Appendix A - Emissions Calculations
Core Making (VOC and HAP Calcs)

Company Name: **Interstate Castings**
Address City IN Zip: **3823 Massachusetts Avenue, Indianapolis, IN 46218**
Permit Number: **F 097-37402-00063**
Reviewer: **Brian Williams**

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
Core Making (VOC and HAP Calcs) Continued

Company Name: Interstate Castings
Address City IN Zip: 3823 Massachusetts Avenue, Indianapolis, IN 46218
Permit Number: F 097-37402-00063
Reviewer: Brian Williams

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
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: **Interstate Castings**
Source Address: **3823 Massachusetts Avenue, Indianapolis, Indiana 46218**
Permit Number: **F 097-37402-00063**
Reviewer: **Brian Williams**

Heat Input Capacity MMBtu/hr	HHV mmBtu/mmscf	Potential Throughput MMCF/yr
25.0	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 unlimited 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

Hazardous Air Pollutants (HAPs)

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	**Total - Organics**
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	2.3E-04	1.3E-04	8.1E-03	0.19	3.7E-04	**0.20**

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	**Total - Metals**
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	5.4E-05	1.2E-04	1.5E-04	4.1E-05	2.3E-04	**5.9E-04**

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

Total HAPs	**0.20**
Worst HAP	**0.19**

Appendix A - Emissions Calculations
Wood Working

Company Name: **Interstate Castings**
Address City IN Zip: **3823 Massachusetts Avenue, Indianapolis, IN 46218**
Permit Number: **F 097-37402-00063**
Reviewer: **Brian Williams**

Insignificant Emissions From Wood Working

Description: (1) ban saw and (1) oscillating vertical sander
Control Device: Dust Collector
Air Flowrate: 550.00 acfm
Control Efficiency (%): 99.00%

PTE before Control (tons/yr)			
Pollutant	**PM**	**PM10**	**PM2.5**
Lb/hr	14.14	14.14	14.14
Tons/yr	**61.95**	**61.95**	**61.95**

PTE after Control (tons/yr)*			
Pollutant	**PM**	**PM10**	**PM2.5**
Emission Factor (gr/dscf)	0.03	0.03	0.03
Lb/hr	0.14	0.14	0.14
Tons/yr	0.62	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 PM10 and PM2.5
Baghouse efficiency assumed to be 99%.
*Woodworking control device is integral to the process. Therefore, unlimited PTE is considered after control.

Methodology

PTE of PM/PM10/PM2.5 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/PM2.5 before Control (tons/yr) = PTE of PM/PM10/PM2.5 after Control (tons/yr) / (1-Control Efficiency)

Description: (1) table saw and (1) radial arm saw
Control Device: Uncontrolled
Particulate Collected*: 1.00 lb/hr

PTE Before Control			
Pollutant	**PM**	**PM10**	**PM2.5**
Weight %**	**100.00%**	**52.90%**	**29.50%**
Lb/hr	1.00	0.53	0.30
Tons/yr	**4.38**	**2.32**	**1.29**

*Amount of dust collected provided by source

**AP-42, Appednix B.1, 10.5 Woodworking Waste Collection Operations is used to determine the particle size distribution. For PM10 and PM2.5 the worst-case distribution was used.

Methodology
PTE Before Control (lb/hr) = Particulate Collected (lb/hr) x Weight %
PTE Before Control (tons/yr) = PTE Before Control (lb/hr) x 8,760 (hr/yr) x 1/2,000 (ton/lb)

Appendix A - Emissions Calculations
Insignificant Natural Gas Combustion Devices

Company Name: **Interstate Castings**
Address City IN Zip: **3823 Massachusetts Avenue, Indianapolis, Indiana 46218**
Permit Number: **F 097-337402-00063**
Reviewer: **Brian Williams**

Insignificant Natural Gas Combustion Devices

Process	MMBtu/hr	Process	MMBtu/hr
Core Oven	1.60	Air-set conveyor Infra-red	0.02
Maintenance West Space Heater	0.23	Core Room Core Prep Infra-red	0.02
Maintenance East Space Heater	0.23	Bench Core Table Infra-red	0.02
Chipping Booth Space Heater	0.20	Bench Core Table Infra-red	0.02
Old Dock Space Heater	0.40	Core Assembly Table Infra-red	0.02
Maintenance Shower Room Furnace	0.13	Air-set Core & Mold assembly Table Infrared	0.02
Old Conference Room Boiler	0.11	Air-set Core & Mold assembly Table Infrared	0.02
Airset Oven	0.12	Air-set Mold Assembly Infrared	0.02
Airset Torpedo	0.40	Air-set Mold Assembly Infrared	0.02
Airset Torpedo	0.40	Sinto Infro-red (basement)	0.02
Bull Ladle Torch -2"	0.28	Sinto Infro-red (basement)	0.02
Control Room Furnace	0.13	#9 Molding Machine Infra-red (overhead)	0.02
Core Dip Drying Table Infra-red	0.05	#9 Molding Machine Infra-red (basement)	0.02
Ladle Torch 2" Floor Molding	0.28	Molding Line Setup Table Infra-red (basement)	0.02
Ladle Torch 2" Floor Molding	0.28	#8 Molding Machine Infra-red (basement)	0.02
Ladle Torch 2" Floor Molding	0.28	#8 Molding Machine Infra-red (overhead)	0.02
Bull Ladle Torch -2"	0.28	#7 Molding Machine Infra-red (basement)	0.02
Heavey Chip Torpedo	0.40	#7 Molding Machine Infra-red (overhead)	0.02
Shipping Office North Infra-red	0.01	#6 Molding Machine Infra-red (basement)	0.02
Shipping Office South Infra-red	0.01	#6 Molding Machine Infra-red (overhead)	0.02
Core Assembly Table Heater	0.01	#5 Molding Machine Infra-red (basement)	0.02
Muller Trash Chute Torch	0.01	#5 Molding Machine Infra-red (overhead)	0.02
Muller Gearbox Infra-red	0.02	#4 Molding Machine Infra-red (basement)	0.02
Muller Manifold Infra-red	0.02	#4 Molding Machine Infra-red (overhead)	0.02
Compressor Water Manifold Infra-red	0.02	#3 Molding Machine Infra-red (basement)	0.02
Air-set room space heater	0.15	#3 Molding Machine Infra-red (overhead)	0.02
Air-set room Infra-red	0.02	#1 Molding Machine Infra-red (basement)	0.02
Air-set room Infra-red	0.02	#1 Molding Machine Infra-red (overhead)	0.02
Air-set conveyor Infra-red	0.02	Ladle Prep Area Sink Infra-red	0.02
Air-set conveyor Infra-red	0.02	#2 Stand Grinder Infra-red	0.02
Floor Molding North Station Infra-red	0.02	#1 Stand Grinder Infra-red	0.02
Floor Molding South Station Infra-red	0.02	Brinell Tester Infrared	0.02
Floor Molding Water Barell Infra-red	0.02	Single Pedestal Dual Wheel Grinder Infra-red	0.02
Floor Molding Simpson Muller Infra-red	0.02	Floor Molding Rollaround Triple Unit Infra-red	0.02

Total Heat Input Capacity	**7.04**	**MMBtu/hr**

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

Company Name: **Interstate Castings**
Address City IN Zip: **3823 Massachusetts Avenue, Indianapolis, IN 46218**
Permit Number: **F 097-37402-00063**
Reviewer: **Brian Williams**

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	1.90	7.60	7.60	0.60	100.00 **see below	5.50	84.00
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

Hazardous Air Pollutants (HAPs)

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	**Total - Organics**
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	6.3E-05	3.6E-05	2.3E-03	0.05	1.0E-04	**0.06**

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	**Total - Metals**
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	1.5E-05	3.3E-05	4.2E-05	1.1E-05	6.3E-05	**1.7E-04**
					Total HAPs	**0.06**
					Worst HAP	**0.05**

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

Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
#2 Fuel Oil
Two (2) Dayton Salamanders

Company Name: **Interstate Castings**
Address City IN Zip: **3823 Massachusetts Avenue, Indianapolis, IN 46218**
Permit Number: **F 097-37402-00063**
Reviewer: **Brian Williams**

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur
0.655	41.0	0.5

	Pollutant						
	PM*	PM10**	direct PM2.5***	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	2.0	2.38	2.13	71 *(142.0S)*	20.0	0.34	5.0
Potential Emission in tons/yr	0.04	0.05	0.04	1.45	0.41	0.01	0.10

Methodology
1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu
Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu
Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see erata file)
*PM emission factor is filterable PM only.
**PM10 emission factor is filterable PM10 of 1.08 lb/kgal + condensable PM emission factor of 1.3 lb/kgal.
***Direct PM2.5 emission factor is filterable PM2.5 of 0.83 lb/kgal + condensable PM emission factor of 1.3 lb/kgal.
Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

Hazardous Air Pollutants (HAPs)

	HAPs - Metals				
	Arsenic	Beryllium	Cadmium	Chromium	Lead
Emission Factor in lb/mmBtu	4.0E-06	3.0E-06	3.0E-06	3.0E-06	9.0E-06
Potential Emission in tons/yr	1.1E-05	8.6E-06	8.6E-06	8.6E-06	2.6E-05

	HAPs - Metals (continued)			
	Mercury	Manganese	Nickel	Selenium
Emission Factor in lb/mmBtu	3.0E-06	6.0E-06	3.0E-06	1.5E-05
Potential Emission in tons/yr	8.6E-06	1.7E-05	8.6E-06	4.3E-05

Methodology
No data was available in AP-42 for organic HAPs.
Potential Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton

Appendix A: Emissions Calculations
LPG-Propane - Industrial Boilers
(Heat input capacity: > 10 MMBtu/hr and < 100 MMBtu/hr)
Propane Hand Torch

Company Name: **Interstate Castings**
Address City IN Zip: **3823 Massachusetts Avenue, Indianapolis, IN 46218**
Permit Number: **F 097-37402-00063**
Reviewer: **Brian Williams**

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year
0.30	28.7

SO2 Emission factor = 0.10 x S
S = Sulfur Content = 0.00 grains/100ft^3

	Pollutant						
	PM*	PM10*	direct PM2.5**	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	0.2	0.7	0.7	0.0 *(0.10S)*	13.0	1.0 **TOC value	7.5
Potential Emission in tons/yr	0.003	0.01	0.01	0.00	0.19	0.01	0.11

*PM emission factor is filterable PM only. PM emissions are stated to be all less than 10 microns in aerodynamic equivalent diameter, footnote in Table 1.5-1, therefore PM10 is based on the filterable and condensable PM emission factors.
** No direct PM2.5 emission factor was given. Direct PM2.5 is a subset of PM10. If one assumes all PM10 to be all direct PM2.5, then a worst case assumption of direct PM2.5 can be made.
**The VOC value given is TOC. The methane emission factor is 0.2 lb/kgal.

Methodology
1 gallon of LPG has a heating value of 94,000 Btu
1 gallon of propane has a heating value of 91,500 Btu (use this to convert emission factors to an energy basis for propane)
(Source - AP-42 (Supplement B 10/96) page 1.5-1)
Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.0915 MMBtu
Emission Factors are from AP42 (7/08), Table 1.5-1 (SCC #1-02-010-02)
Propane Emission Factors shown. Please see AP-42 for butane.
Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal) / 2,000 lb/ton

Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads

Company Name: **Interstate Castings**
Address City IN Zip: **3823 Massachusetts Avenue, Indianapolis, IN 46218**
Permit Number: **F 097-37402-00063**
Reviewer: **Brian Williams**

Paved Roads at Industrial Site
The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Informtation (provided by source)

Type	Maximum round trips per year (trip/yr)	Maximum Weight Loaded (tons/round trip)	Total Weight driven per year (ton/yr)	Maximum round trip distance (feet/round trip)	Maximum round trip distance (mi/trip)	Maximum miles (miles/yr)
12k pound vehicle	235.0	6.0	1,410.0	528	0.10	23.500
34k pound vehicle	107.0	17.0	1,819.0	528	0.10	10.700
30k pound vehicle	98.0	15.0	1,470.0	528	0.10	9.800
34k pound vehicle	147.0	17.0	2,499.0	1056	0.20	29.400
40k pound vehicle	147.0	20.0	2,940.0	1056	0.20	29.400
	734.0		**10,138.0**			**102.8**

Average Vehicle Weight Per Trip = 13.8 tons/trip
Average Miles Per Trip = 0.14 miles/trip

Unmitigated Emission Factor, Ef = [k * (sL)^0.91 * (W)^1.02] (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	13.8	13.8	13.8	tons = average vehicle weight (provided by source)
sL =	9.7	9.7	9.7	g/m^2 = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)] (Equation 2 from AP-42 13.2.1)
Mitigated Emission Factor, Eext = Ef * [1 - (p/4N)]
where p = 120 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
N = 365 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	1.266	0.253	0.0621	lb/mile
Mitigated Emission Factor, Eext =	1.162	0.232	0.0570	lb/mile
Dust Control Efficiency =	50%	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
12k pound vehicle	1.49E-02	2.97E-03	7.30E-04	1.37E-02	2.73E-03	6.70E-04	6.83E-03	1.37E-03	3.35E-04
34k pound vehicle	6.77E-03	1.35E-03	3.32E-04	6.22E-03	1.24E-03	3.05E-04	3.11E-03	6.22E-04	1.53E-04
30k pound vehicle	6.20E-03	1.24E-03	3.05E-04	5.69E-03	1.14E-03	2.79E-04	2.85E-03	5.69E-04	1.40E-04
34k pound vehicle	1.86E-02	3.72E-03	9.14E-04	1.71E-02	3.42E-03	8.38E-04	8.54E-03	1.71E-03	4.19E-04
40k pound vehicle	1.86E-02	3.72E-03	9.14E-04	1.71E-02	3.42E-03	8.38E-04	8.54E-03	1.71E-03	4.19E-04
Totals	**0.046**	**0.009**	**0.002**	**0.043**	**0.009**	**0.002**	**0.021**	**0.004**	**0.001**

Methodology
Total Weight driven per year (ton/year) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per yr (trip/yr)]
Maximum round trip distance (mi/trip) = [Maximum round trip distance (feet/trip) / [5280 ft/mile]
Maximum round trip miles (miles/yr) = [Maximum trips per year (trip/yr)] * [Maximum distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per year (ton/yr)] / SUM[Maximum trips per yr (trip/yr)]
Average Miles Per Trip (miles/trip) = SUM[Maximum round trip miles (miles/yr)] / SUM[Maximum trips per year (trip/yr)]
Unmitigated PTE (tons/yr) = [Maximum round trip miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (tons/yr) = [Maximum round trip miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particle Matter (<2.5 um)
PTE = Potential to Emit

Indiana Department of Environmental Management
We Protect Hoosiers and Our Environment.
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Michael R. Pence
Governor

Carol S. Comer
Commissioner

September 21, 2016

David Clark
Interstate Castings
3823 Massachusetts Ave
Indianapolis, IN 46218

Re: Public Notice
Interstate Castings
Permit Level: FESOP - Renewal
Permit Number: 097 - 37402 - 00063

Dear David Clark:

Enclosed is a copy of your draft FESOP - Renewal, Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has prepared two versions of the Public Notice Document. The abbreviated version will be published in the newspaper, and the more detailed version will be made available on the IDEM's website and provided to interested parties. Both versions are included for your reference. The OAQ has requested that the Indianapolis Star in Indianapolis, IN publish the abbreviated version of the public notice no later than September 26, 2016. You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper.

OAQ has submitted the draft permit package to the Indianapolis Central Library Branch, 40 East St. Clair Street in Indianapolis IN. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Brian Williams, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 4-5375 or dial (317) 234-5375.

Sincerely,
Len Pogost

Len Pogost
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover letter 2/17/2016

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Michael R. Pence
Governor

Carol S. Comer
Commissioner

ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

September 21, 2016

Indianapolis Star
Attn: Classifieds
130 S. Meridian St.
Indianapolis, Indiana 46225

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Interstate Castings, Marion County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than September 26, 2016.

Please send a notarized form, clippings showing the date of publication, and the billing to the Indiana Department of Environmental Management, Accounting, Room N1345, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

To ensure proper payment, please reference account # 100174737.

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call Len Pogost at 800-451-6027 and ask for extension 3-2803 or dial 317-233-2803.

Sincerely,

Len Pogost

Len Pogost
Permit Branch
Office of Air Quality

Permit Level: FESOP - Renewal
Permit Number: 097 - 37402 - 00063

Enclosure
PN Newspaper.dot 6/13/2013

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Michael R. Pence
Governor

Carol S. Comer
Commissioner

September 21, 2016

To: Indianapolis Central Library Branch 40 East St. Clair Street Indianapolis IN

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

Subject: **Important Information to Display Regarding a Public Notice for an Air Permit**

Applicant Name: Interstate Castings
Permit Number: 097 - 37402 - 00063

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Request to publish the Notice of 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. **Please make this information readily available until you receive a copy of the final package.**

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. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures
PN Library.dot 2/16/2016

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Michael R. Pence
Governor

Carol S. Comer
Commissioner

Notice of Public Comment

September 21, 2016
Interstate Castings
097 - 37402 - 00063

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has been placed in the Legal Advertising section of your local newspaper. The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana's Air Permitting Program.

Please Note: *If you feel you have received this Notice 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. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.*

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8		Anthony Henley August Mack Environmental, Inc. 1302 North Meridian Street, Suite 300 Indianapolis IN 46202 *(Consultant)*									
9		Johan & Susan Van Den Heuvel 4409 Blue Creek Drive Carmel IN 46033 *(Affected Party)*									
10		Indiana Members Credit Union 5103 Madison Avenue Indianapolis IN 46227 *(Affected Party)*									
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