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

Thomas W. Easterly
Commissioner

To:	Interested Parties
Date:	July 21, 2014
From:	Matthew Stuckey, Chief Permits Branch Office of Air Quality
Source Name:	ID Castings, LLC
Permit Level:	Part 70 Operating Permit Renewal
Permit Number:	057-33889-00002
Source Location:	1600 South 8th Street, Noblesville, IN 46060
Type of Action Taken:	Permit Renewal

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the matter referenced above.

The final decision is available on the IDEM website at: http://www.in.gov/apps/idem/caats/
To view the document, select Search option 3, then enter permit 33889

If you would like to request a paper copy of the permit document, please contact IDEM's central file room:

Indiana Government Center North, Room 1201
100 North Senate Avenue, MC 50-07
Indianapolis, IN 46204
Phone: 1-800-451-6027 (ext. 4-0965)
Fax (317) 232-8659

Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

(continues on next page)

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204.

For an **initial Title V Operating Permit**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **thirty (30)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(b).

For a **Title V Operating Permit renewal**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **fifteen (15)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(a).

The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of an initial Title V operating permit, permit renewal, or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impractible to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency
401 M Street
Washington, D.C. 20406

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

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Commissioner

Part 70 Operating Permit Renewal
OFFICE OF AIR QUALITY

ID Castings, LLC
1600 South 8th Street
Noblesville, Indiana 46060

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

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T057-33889-00002	
Issued by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: July 21, 2014 Expiration Date: July 21, 2019

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Attachment A - NESHAP Subpart ZZZZZ: Iron and Steel Foundries Area Sources

SECTION A SOURCE SUMMARY

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

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(14)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary ductile iron foundry.

Source Address:	1600 South 8th Street, Noblesville, Indiana 46060
General Source Phone Number:	(317) 773-3313
SIC Code:	3321 (Gray and Ductile Iron Foundries)
County Location:	Hamilton
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 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 2-7-4(c)(3)][326 IAC 2-7-5(14)]

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

Metal Melting

(a) One (1) electric induction furnace, identified as EU-3A, constructed in 1998, with a maximum capacity of 10.2 tons of iron per hour, with emissions uncontrolled, and exhausting to the general area ventilation;

The electric induction furnace is considered part of the affected source under 40 CFR Part 63, Subpart ZZZZZ.

Raw Material Handling and Preparation

(b) One (1) scrap and charge handling operation, identified as EU-2, constructed in 1998, with a maximum capacity of 10.2 tons of iron per hour, with emissions uncontrolled, and exhausting to the general area ventilation;

The scrap and charge handling system is considered part of the affected source under 40 CFR Part 63, Subpart ZZZZZ.

(c) One (1) magnesium treatment/inoculation operation, identified as EU-6, constructed in 1971, with a maximum capacity of 10.2 tons of iron per hour, with emissions controlled by a sealed reaction chamber, and exhausting to the general area ventilation;

(d) Sand handling operations, with a maximum capacity of 100 tons per hour of sand and 10.2 tons of iron per hour of castings, consisting of the following equipment:

(1) One (1) “A” Shaker (vibrating casting conveyor), identified as EU-16, constructed in 1996, with emissions uncontrolled, and exhausting to the general ventilation area;

(2) One (1) muller, identified as EU-17, constructed in 1971, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(3) Overhead shaker screen, identified as EU-18, constructed in 1971, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(4) One (1) Mag belt/bin top belt, identified as EU-27, constructed in 1971, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

And the following storage bins:

(5) Two (2) return sand storage silos (East and West), identified as EU-19 and EU-20, both constructed in 1971, with capacities of 80 and 100 tons, respectively, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(6) One (1) outdoor bond silo, identified as EU-22, constructed in 1978, with a capacity of 80 tons of premixed casting sand binder, with emissions controlled by a sock filter system;

(7) One (1) indoor bond storage silo, identified as EU-23, constructed in 1971, with a capacity of 1 ton of premixed casting sand binder, with emissions controlled dust collector DC-1, and exhausting to stack 003;

(8) One (1) West outdoor sand storage bin, identified as EU-24, constructed in 1971, with a capacity of 150 tons, with emissions uncontrolled;

(9) One (1) indoor new sand storage bin, identified as EU-26, constructed in 1971, with a capacity of 1 ton, emissions controlled by dust collector DC-1, and exhausting to stack 003;

<u>Pouring, Cooling, and Shakeout</u>

(e) One (1) Disa pouring/casting machine, identified as EU-8, constructed in 1997, with a maximum capacity of 3.4 tons of iron and 39 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(f) One (1) Disa cooling line, identified as EU-8A, constructed in 1997, with a maximum capacity of 3.4 tons of iron and 39 tons of sand per hour, with emissions uncontrolled, and exhausting to the general ventilation area;

(g) One (1) shake-out unit, identified as EU-11, constructed in 2007, with a maximum capacity of 3.4 tons of iron and 39 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting through stack 003;

Note: The source consists of another casting shakeout unit, listed above in the sand handling operations (d)(1).

<u>Finishing Operations</u>

(h) One (1) No. 3 cleaning machine, identified as EU-34, constructed in 2001, with a maximum capacity of 5.6 tons per hour of castings and 15 tons per hour of steel shot, with emissions controlled by baghouse BH-2, and exhausting to stack 007;

(i) Casting, grinding and finishing operations with a maximum throughput of 5.6 tons per hour of finished castings, consisting of the following equipment:

(1) Nine (9) stand grinders, identified as EU-32, constructed in 1965, with emissions controlled by baghouse BH-1, and exhausting to stack 006;

(2) Ten (10) finishing (Burr Stations) units, identified as EU-33, all constructed in 1992, with emissions uncontrolled, and exhausting to the general ventilation area.

Core Making

(j) Core manufacturing operations with a maximum production rate of 0.34 tons per hour of manufactured cores, consisting of the following equipment:

(1) Two (2) shell core machines, identified as EU-28, constructed in 1964, each with maximum capacity of 0.17 tons of cores per hour, a heat input capacity of 2.09 MMBtu/hr per machine, with emissions uncontrolled, and exhausting to the general area ventilation;

A.3 Specifically Regulated Insignificant Activities
[326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(14)]

This stationary source does not currently have any insignificant activities, as defined in 326 IAC 2-7-1(21) that have applicable requirements.

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

(b) Propane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour:

(1) Two (2) 0.5 MMBtu/hr heating ladle torches;

(2) One (1) 0.5 MMBtu/hr core drying conveyor heating torch;

(3) Two (2) 0.5 MMBtu/hr auto pour torches.

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

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

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

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

SECTION B GENERAL CONDITIONS

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

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

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

(a) This permit, T057-33889-00002, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

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

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

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

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

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

B.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12]

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

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

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

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

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

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

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

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

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

(a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:

(1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(35), 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) A "responsible official" is defined at 326 IAC 2-7-1(35).

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

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

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

and

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

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

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

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

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

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

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

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(12)][326 IAC 1-6-3]

(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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

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

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

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

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

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ 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 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

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

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

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

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(8) be revised in response to an emergency.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(a) All terms and conditions of permits established prior to T057-33889-00002 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

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

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

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

B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]

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

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

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit.

[326 IAC 2-7-5(6)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

(1) That this permit contains a material mistake.

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

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

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

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

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

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(42). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

Request for renewal shall be submitted to:

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

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

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

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

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if,

subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

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

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

Indiana Department of Environmental Management
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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

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

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

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

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b) or (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 preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

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

(4) The Permittee notifies the:

Indiana Department of Environmental Management

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

and

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

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

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b)(1) and (c)(1). The Permittee shall make such records available, upon reasonable request, for public review.

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

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(37)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

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

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

(3) Any change in emissions; and

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

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Indiana Department of Environmental Management
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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

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

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

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

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

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (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 forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

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

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

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

The Permittee shall not operate an incinerator 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). 326 IAC 6-4-2(4) is not federally enforceable.

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

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

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

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least

thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

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

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

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

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

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

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

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to

thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

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

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

(a) 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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

C.10 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)][40 CFR 64][326 IAC 3-8]

(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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(c) For monitoring required by CAM, at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(d) For monitoring required by CAM, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

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

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale. 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 2-7-5][326 IAC 2-7-6]

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

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

C.13 Response to Excursions or Exceedances [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5] [326 IAC 2-7-6]

(I) Upon detecting an excursion where a response step is required by the D Section, or an exceedance of a limitation, not subject to CAM, 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.

(II)

(a) CAM *Response to excursions or exceedances.*

(1) Upon detecting an excursion or exceedance, subject to CAM, the Permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(2) 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, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

(b) If the Permittee identifies a failure to achieve compliance with an emission limitation, subject to CAM, or standard, subject to CAM, for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the IDEM, OAQ and, if necessary, submit a proposed significant permit modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

(c) Based on the results of a determination made under paragraph (II)(a)(2) of this condition, the EPA or IDEM, OAQ may require the Permittee to develop and implement a QIP. The Permittee shall develop and implement a QIP if notified to in writing by the EPA or IDEM, OAQ.

(d) Elements of a QIP:
The Permittee shall maintain a written QIP, if required, and have it available for inspection. The plan shall conform to 40 CFR 64.8 b (2).

(e) If a QIP is required, the Permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the IDEM, OAQ if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

(f) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)(a)(2) of this condition the EPA or the IDEM, OAQ may require that the Permittee make reasonable changes to the QIP if the QIP is found to have:

(1) Failed to address the cause of the control device performance problems; or

(2) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(g) Implementation of a QIP shall not excuse the Permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

(h) *CAM recordkeeping requirements.*

(1) The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to paragraph (II)(a)(2) of this condition and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this condition (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

(2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks,

or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall 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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

C.15 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

Pursuant to 326 IAC 2-6-3(b)(2), starting in 2005 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

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

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(33) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

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

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. 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 Part 70 permit.

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 2-7-5(3)(C)] [326 IAC 2-1.1-11] [40 CFR 64][326 IAC 3-8]

(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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

On and after the date by which the Permittee must use monitoring that meets the requirements of 40 CFR Part 64 and 326 IAC 3-8, the Permittee shall submit CAM reports to the IDEM, OAQ.

A report for monitoring under 40 CFR Part 64 and 326 IAC 3-8 shall include, at a minimum, the information required under paragraph (a) of this condition and 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 actions 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 daily calibration checks, if applicable); and

(3) A description of the actions taken to implement a QIP during the reporting period as specified in Section C-Response to Excursions or Exceedances. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed

and reduced the likelihood of similar levels of excursions or exceedances occurring.

The Permittee may combine the Quarterly Deviation and Compliance Monitoring Report and a report pursuant to 40 CFR 64 and 326 IAC 3-8.

(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:

Metal Melting

(a) One (1) electric induction furnace, identified as EU-3A, constructed in 1998, with a maximum capacity of 10.2 tons of iron per hour, with emissions uncontrolled, and exhausting to the general area ventilation;

The electric induction furnace is considered part of the affected source under 40 CFR Part 63, Subpart ZZZZZ.

Raw Material Handling and Preparation

(b) One (1) scrap and charge handling operation, identified as EU-2, constructed in 1998, with a maximum capacity of 10.2 tons of iron per hour, with emissions uncontrolled, and exhausting to the general area ventilation;

The scrap and charge handling system is considered part of the affected source under 40 CFR Part 63, Subpart ZZZZZ.

(c) One (1) magnesium treatment/inoculation operation, identified as EU-6, constructed in 1971, with a maximum capacity of 10.2 tons of iron per hour, with emissions controlled by a sealed reaction chamber, and exhausting to the general area ventilation;

(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 2-7-5(1)]

D.1.1 PSD Minor Limits for PM, PM_{10}, and $PM_{2.5}$ [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 limits:

(a) The total iron throughput to the electric induction furnace (EU-3A) shall not exceed 17,500 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) The PM, PM_{10}, and $PM_{2.5}$ emissions from the following operations shall not exceed the emission limits listed in the table below:

Emission Unit	PM Emission Limit (pounds per ton of iron throughput)	PM_{10} Emission Limit (pounds per ton of iron throughput)	$PM_{2.5}$ Emission Limit (pounds per ton of iron throughput)
Charge Handling (EU-2)	0.6	0.36	0.36
Induction Furnace (EU-3A)	0.9	0.86	0.86
Magnesium Treatment (EU-6)	0.09	0.09	0.09

Compliance with these limits, combined with the potential to emit PM, PM_{10}, and $PM_{2.5}$ from other emission units at this source, shall limit the source-wide PM, PM_{10}, and $PM_{2.5}$ to less than 100 tons per twelve (12) consecutive month period, each, and render 326 IAC 2-2 not applicable.

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

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

Facility/Process	Process weight rate (tons/hr)	Allowable Emissions (lbs/hr)
EIF Furnace EU-3A	10.20	19.43
Melting Dept. - Charge Handling (EU-2)	10.20	19.43
Melting Dept. - Magnesium Treatment (EU-6)	10.20	19.43

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

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

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

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

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

Compliance Determination Requirements

D.1.4 Particulate Control

In order to comply with Conditions D.1.1 and D.1.2, the sealed reaction chambers for particulate control shall be in operation at all times whenever the magnesium treatment/inoculation process (EU-6) is in operation.

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

D.1.5 Visible Emissions Notations

(a) Visible emission notations of the general ventilation exhaust from EU-2, EU-3A and EU-6 shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

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

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

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

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

shall be considered a deviation from this permit.

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

D.1.6 Record Keeping Requirements

(a) To document the compliance status with Condition D.1.1(a), the Permittee shall maintain monthly records of the iron throughput to the electric induction furnace (EU-3A).

(b) To document the compliance status with Condition D.1.5, the Permittee shall maintain records of the daily visible emission notations as required by Condition D.1.5. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(c) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the record keeping required by this condition.

D.1.7 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1(a) shall be submitted using the reporting forms located at the end of this permit, or their equivalent not later than thirty (30) days following the end of each calendar year. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(35). Section C - General Reporting Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Raw Material Handling and Preparation

(d) Sand handling operations, with a maximum capacity of 100 tons per hour of sand and 10.2 tons of iron per hour of castings, consisting of the following equipment:

(1) One (1) "A" Shaker (vibrating casting conveyor), identified as EU-16, constructed in 1996, with emissions uncontrolled, and exhausting to the general ventilation area;

(2) One (1) muller, identified as EU-17, constructed in 1971, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(3) Overhead shaker screen, identified as EU-18, constructed in 1971, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(4) One (1) Mag belt/bin top belt, identified as EU-27, constructed in 1971, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

And the following storage bins:

(5) Two (2) return sand storage silos (East and West), identified as EU-19 and EU-20, both constructed in 1971, with capacities of 80 and 100 tons, respectively, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(6) One (1) outdoor bond silo, identified as EU-22, constructed in 1978, with a capacity of 80 tons of premixed casting sand binder, with emissions controlled by a sock filter system;

(7) One (1) indoor bond storage silo, identified as EU-23, constructed in 1971, with a capacity of 1 ton of premixed casting sand binder, with emissions controlled dust collector DC-1, and exhausting to stack 003;

(8) One (1) West outdoor sand storage bin, identified as EU-24, constructed in 1971, with a capacity of 150 tons, with emissions uncontrolled;

(9) One (1) indoor new sand storage bin, identified as EU-26, constructed in 1971, with a capacity of 1 ton, emissions controlled by dust collector DC-1, and exhausting to stack 003;

Pouring, Cooling, and Shakeout

(e) One (1) Disa pouring/casting machine, identified as EU-8, constructed in 1997, with a maximum capacity of 3.4 tons of iron and 39 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(f) One (1) Disa cooling line, identified as EU-8A, constructed in 1997, with a maximum capacity of 3.4 tons of iron and 39 tons of sand per hour, with emissions uncontrolled, and exhausting to the general ventilation area;

(g) One (1) shake-out unit, identified as EU-11, constructed in 2007, with a maximum capacity of 3.4 tons of iron and 39 tons of sand per hour, with emissions controlled by dust collector DC-1,

and exhausting through stack 003;

Note: The source consists of another casting shakeout unit, listed above in the sand handling operations (d)(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 2-7-5(1)]

D.2.1 PSD Minor Limits for PM, PM_{10}, $PM_{2.5}$, and CO [326 IAC 2-2]

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

(a) The CO emissions from the following operations shall not exceed the emission limit listed in the table below:

Emission Units	CO Emission Limit (pounds per ton of iron throughput)
Pouring/Casting Line (EU-8)	6.0 (combined)
Casting Shakeout (Shake-out Unit EU-11)	
Casting Shakeout ("A" Shaker EU-16)	
Cooling Line (EU-8A)	

(b) The PM, PM_{10}, and $PM_{2.5}$ emissions from the following operations shall not exceed the emission limits listed in the table below:

Emission Unit	PM Emission Limit (pounds per ton of iron throughput)	PM_{10} Emission Limit (pounds per ton of iron throughput)	$PM_{2.5}$ Emission Limit (pounds per ton of iron throughput)
Dust collector DC-1	1.3	1.3	1.3
Cooling Lines (EU-8A)	1.4 (total)	1.4 (total)	1.4 (total)
"A" Shaker (EU-16)	3.2	2.24	2.24

* Dust collector DC-1 controls the Disa pouring/casting machines (EU-8), shakeout unit (EU-11), and the sand handling operations (EU-17 through EU-20, EU-22 through EU-24, EU-26, and EU-27).

Compliance with these limits, combined with the total iron throughput limit to the electric induction furnace (EU-3A) in Condition D.1.1(a) and the potential to emit PM, PM_{10}, $PM_{2.5}$, and CO from other emission units at this source, shall limit the source-wide PM, PM_{10}, $PM_{2.5}$, and CO to less than 100 tons per twelve (12) consecutive month period, each, and render 326 IAC 2-2 not applicable.

D.2.2 Particulate Matter [326 IAC 6-3-2]

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

Facility/Process	Process weight rate (tons/hr)	Allowable Emissions (lbs/hr)
Sand Handling (EU-17 through EU-20, EU-22 through EU-24, EU-26 & EU-27)	100.00	51.28

Facility/Process	Process weight rate (tons/hr)	Allowable Emissions (lbs/hr)
Pouring/Casting Line (EU-8)	42.40	43.06
Cooling Line (EU-8A)	42.40	43.06
Casting Shakeout ("A" Shaker EU-16)	49.20	44.43
Casting Shakeout (Shake-out Unit EU-11)	45.80	43.76

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

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

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

D.2.3 VOC BACT Avoidance Limits [326 IAC 8-1-6]

(a) In order to render the requirements of 326 IAC 8-1-6 (VOC BACT) not applicable, the VOC emissions from the Casting Shakeout ("A" Shaker EU-16) shall not exceed 1.20 lb/ton of iron throughput.

Compliance with this limit, combined with the total iron throughput limit to the electric induction furnace (EU-3A) in Condition D.1.1(a), will limit the VOC emissions from the Casting Shakeout ("A" Shaker EU-16) to less than twenty-five (25) tons per year and render the requirements of 326 IAC 8-1-6 (BACT) not applicable to the Casting Shakeout ("A" Shaker EU-16).

(b) In order to render the requirements of 326 IAC 8-1-6 (VOC BACT) not applicable, the VOC emissions from the Casting Shakeout (Shake-out Unit EU-11) shall not exceed 1.20 lb/ton of iron throughput.

Compliance with this limit, combined with the total iron throughput limit to the electric induction furnace (EU-3A) in Condition D.1.1(a), will limit the VOC emissions from the Casting Shakeout (Shake-out Unit EU-11) to less than twenty-five (25) tons per year and render the requirements of 326 IAC 8-1-6 (BACT) not applicable to the Casting Shakeout (Shake-out Unit EU-11).

D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

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

Compliance Determination Requirements

D.2.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Conditions D.2.1(b) and D.2.2, the Permittee shall perform PM testing not later than 180 days after startup of Dust collector DC-1 (stack 003), controlling the following:

casting machines (EU-8),
shakeout unit (EU-11),
sand handling operations, including muller (EU-17),
over head shaker screen (EU-18),
return sand storage silos (East and West) (EU-19 and EU-20),
outdoor bond silo (EU-22),
indoor bond storage silo (EU-23),

West outdoor sand storage bins (EU-24),
indoor new sand storage bin (EU-26), and
mag belt/bin top belt (EU-27),
utilizing methods as approved by the Commissioner.

This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.

The respective facilities shall process 100% ductile iron during the tests.

(b) In order to demonstrate compliance with Conditions D.2.1(b) and D.2.2, the Permittee shall perform PM10 and PM2.5 testing Not later than 180 days after startup of Dust collector DC-1 (stack 003), controlling the following:
casting machines (EU-8),
shakeout unit (EU-11),
sand handling operations, including muller (EU-17),
over head shaker screen (EU-18),
return sand storage silos (East and West) (EU-19 and EU-20),
outdoor bond silo (EU-22),
indoor bond storage silo (EU-23),
West outdoor sand storage bins (EU-24),
indoor new sand storage bin (EU-26), and
mag belt/bin top belt (EU-27),
utilizing methods as approved by the Commissioner.

This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.

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

The respective facilities shall process 100% ductile iron during the tests.

(c) In order to demonstrate compliance with Condition D.2.3(a), within one hundred and eighty (180) days after the issuance of Part 70 Renewal No. T057-33889-00002, the Permittee shall perform one-time VOC testing on the Casting Shakeout ("A" Shaker EU-16) operation, using methods as approved by the Commissioner.

(d) In order to demonstrate compliance with Condition D.2.3(b), within one hundred and eighty (180) days after the issuance of Part 70 Renewal No. T057-33889-00002, the Permittee shall perform one-time VOC testing on the Casting Shakeout (Shake-out Unit EU-11) operation, using methods as approved by the Commissioner.

(e) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C- Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.2.6 Particulate Control

(a) In order to comply with Conditions D.2.1 and D.2.2, the dust collector DC-1 for particulate control shall be in operation at all times whenever any of the following:
casting machines (EU-8),
shakeout unit (EU-11),
sand handling operations including muller (EU-17),
over head shaker screen (EU-18),
return sand storage silos (East and West) (EU-19 and EU-20),

outdoor bond silo (EU-22),
indoor bond storage silo (EU-23),
West outdoor sand storage bins (EU-24),
indoor new sand storage bin (EU-26), and
mag belt/bin top belt (EU-27)

are in operation.

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

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

D.2.7 Visible Emissions Notations [40 CFR 64]

(a) Pursuant to 40 CFR 64, visible emission notations of the exhaust from dust collector DC-1, exhausting to stack 003, shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) Visible emission notations of the general ventilation exhaust from EU-8A and EU-16 shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(c) 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.

(d) 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.

(e) 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.

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

D.2.8 Parametric Monitoring - Dust Collector [40 CFR 64]

Pursuant to 40 CFR 64, the Permittee shall record the pressure drop across the dust collector DC-1 used in conjunction with the following:

casting machines (EU-8),
shakeout unit (EU-11),
sand handling operations including muller (EU-17),
over head shaker screen (EU-18),
return sand storage silos (East and West) (EU-19 and EU-20),
outdoor bond silo (EU-22),
indoor bond storage silo (EU-23),
West outdoor sand storage bins (EU-24),
indoor new sand storage bin (EU-26), and
mag belt/bin top belt (EU-27)

at least once per day when the casting, shake out, and sand handling processes are in operation. When for any one reading, the pressure drop across the control device is outside the normal range, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. The normal range for the dust collector DC-1 is a pressure drop range between 2.0 and 6.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the most recent valid stack test. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.2.9 Broken or Failed Bag or Cartridge Detection [40 CFR 64]

Pursuant to 40 CFR 64,

(a) For single compartment bag filters or cartridge dust collectors controlling emissions from a process operated continuously, failed units 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 single compartment bag filters or cartridge dust collectors 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 or Cartridge failure can be indicated by a significant drop in the pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.2.10 Record Keeping Requirements

(a) To document the compliance status with Condition D.2.7, the Permittee shall maintain records of daily visible emission notations of the exhaust from stack 003 and general ventilation 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 (e.g. the process did not operate that day).

(b) To document the compliance status with Condition D.2.8, the Permittee shall maintain daily records of the pressure drop of dust collector DC-1 as required by Condition D.2.8. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

(c) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the record keeping required by this condition.

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Finishing Operations

(h) One (1) No. 3 cleaning machine, identified as EU-34, constructed in 2001, with a maximum capacity of 5.6 tons per hour of castings and 15 tons per hour of steel shot, with emissions controlled by baghouse BH-2, and exhausting to stack 007;

(i) Casting, grinding and finishing operations with a maximum throughput of 5.6 tons per hour of finished castings, consisting of the following equipment:

(1) Nine (9) stand grinders, identified as EU-32, constructed in 1965, with emissions controlled by baghouse BH-1, and exhausting to stack 006;

(2) Ten (10) finishing (Burr Stations) units, identified as EU-33, all constructed in 1992, with emissions uncontrolled, and exhausting to the general ventilation area.

(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 2-7-5(1)]

D.3.1 PSD Minor Limits for PM, PM_{10}, and $PM_{2.5}$ [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 limits:

The PM, PM_{10}, and $PM_{2.5}$ emissions from the following operations shall not exceed the emission limits listed in the table below:

Emission Unit	PM Emission Limit (pounds per ton of iron throughput)	PM_{10} Emission Limit (pounds per ton of iron throughput)	$PM_{2.5}$ Emission Limit (pounds per ton of iron throughput)
No. 3 Cleaning Machine (EU-34)	0.17	0.02	0.02
Grinding (EU-32)	0.01	0.0045	0.0045
Finishing (EU-33)	0.01	0.0045	0.0045

Compliance with these limits, combined with the total iron throughput limit to the electric induction furnace (EU-3A) in Condition D.1.1(a) and the potential to emit PM, PM_{10}, and $PM_{2.5}$ from other emission units at this source, shall limit the source-wide PM, PM_{10}, and $PM_{2.5}$ to less than 100 tons per twelve (12) consecutive month period, each, and render 326 IAC 2-2 not applicable.

D.3.2 Particulate Matter [326 IAC 6-3-2]

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

Facility/Process	Process weight rate (tons/hr)	Allowable Emissions (lbs/hr)
No. 3 Cleaning Machine (EU-34)*	95.20	31.12
Grinding (EU-32)	0.06	13.00
Finishing (EU-33)	0.06	13.00

*Process weight rate includes the weight of the steel shot plus the weight of the castings

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

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

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

D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

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

Compliance Determination Requirements

D.3.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Conditions D.3.1 and D.3.2, within one hundred and eighty (180) days after the issuance of Part 70 Renewal No. T057-33889-00002, the Permittee shall perform PM, PM10, and PM2.5 testing on the No. 3 Cleaning Machine (EU-34), controlled by Baghouse BH-2, using methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.

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

D.3.5 Particulate Control

(a) In order to comply with Conditions D.3.1 and D.3.2:

(1) The baghouse, identified as BH-1, for particulate control shall be in operation at all times when the nine (9) grinding units (EU-32) are in operation.

(2) The baghouse, identified as BH-2, for particulate control shall be in operation at all times when the No. 3 Cleaning Machine (EU-34) is in operation.

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

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

D.3.6 Visible Emissions Notations [40 CFR 64]

(a) Pursuant to 40 CFR 64, visible emission notations of the exhaust from stacks 006 and

007 shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) Visible emission notations of the exhaust from general ventilation exhausts from EU-33 shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(c) 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.

(d) 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.

(e) 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.

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

D.3.7 Parametric Monitoring - Baghouses [40 CFR 64]

Pursuant to 40 CFR 64, the Permittee shall record the pressure drop across the baghouses, identified as BH-1 and BH-2, used in conjunction with the nine (9) grinding units (EU-32) and No. 3 Cleaning Machine (EU-34) at least once per day when the respective facilities are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. The normal range for the baghouses, identified as BH-1 and BH-2 is a pressure drop range between 2.0 and 8.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the most recent valid stack test. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.3.8 Broken or Failed Bag Detection [40 CFR 64]

Pursuant to 40 CFR 64,

(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).

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

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

D.3.9 Record Keeping Requirements

(a) To document the compliance status with Condition D.3.6, the Permittee shall maintain records of daily visible emission notations of the exhausts from stacks 006 and 007 and general ventilation 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 (e.g. the process did not operate that day).

(b) To document the compliance status with Condition D.3.7, the Permittee shall maintain daily records of the pressure drop across each baghouse as required by Condition D.3.6. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

(c) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the record keeping required by this condition.

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Core Making

(j) Core manufacturing operations with a maximum production rate of 0.34 tons per hour of manufactured cores, consisting of the following equipment:

(1) Two (2) shell core machines, identified as EU-28, constructed in 1964, each with maximum capacity of 0.17 tons of cores per hour, a heat input capacity of 2.09 MMBtu/hr per machine, with emissions uncontrolled, and exhausting to the general area ventilation;

(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 2-7-5(1)]

D.4.1 PSD Minor Limits for PM, PM_{10}, and $PM_{2.5}$ [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 limits:

The PM, PM_{10}, and $PM_{2.5}$ emissions from the following operations shall not exceed the emission limits listed in the table below:

Emission Unit	PM Emission Limit (pounds per ton of iron throughput)	PM_{10} Emission Limit (pounds per ton of iron throughput)	$PM_{2.5}$ Emission Limit (pounds per ton of iron throughput)
Core Manufacturing (EU-28)	1.10	1.10	1.10

Compliance with these limits, combined with the total iron throughput limit to the electric induction furnace (EU-3A) in Condition D.1.1(a) and the potential to emit PM, PM_{10}, and $PM_{2.5}$ from other emission units at this source, shall limit the source-wide PM, PM_{10}, and $PM_{2.5}$ to less than 100 tons per twelve (12) consecutive month period, each, and render 326 IAC 2-2 not applicable.

D.4.2 Particulate Matter [326 IAC 6-3-2]

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

Facility/Process	Process weight rate (tons/hr)	Allowable Emissions (lbs/hr)
Core Manufacturing (EU-28)	0.34	1.99

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

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

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

D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

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

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

D.4.4 Visible Emissions Notations

(a) Visible emission notations of the exhaust from general ventilation exhausts from EU-28 shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

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

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

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

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

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

D.4.5 Record Keeping Requirements

(a) To document the compliance status with Condition D.4.4, the Permittee shall maintain records of daily visible emission notations of the exhausts from general ventilation 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 (e.g. the process did not operate that day).

(b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the record keeping required by this condition.

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Metal Melting

(a) One (1) electric induction furnace, identified as EU-3A, constructed in 1998, with a maximum capacity of 10.2 tons per hour, with emissions uncontrolled, and exhausting to the general area ventilation;

The electric induction furnace is considered part of the affected source under 40 CFR Part 63, Subpart ZZZZZ.

Raw Material Handling and Preparation

(b) One (1) scrap and charge handling operation, identified as EU-2, constructed in 1998, with a maximum capacity of 10.2 tons per hour, with emissions uncontrolled, and exhausting to the general area ventilation;

The scrap and charge handling system is considered part of the affected source under 40 CFR Part 63, Subpart ZZZZZ.

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

E.1.1 General Provisions Relating to National Emissions Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

The Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1, as specified in 40 CFR 63.10890(i) in accordance with schedule in 40 CFR Part 63, Subpart ZZZZZ.

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

The Permittee which engages in iron and steel iron foundry operations shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZZ (included as Attachment A of this permit) for a small foundry, with a compliance date of January 2, 2009 for 40 CFR 63.10885(a) and 40 CFR 63.10886 and a compliance date of January 4, 2010 for 40 CFR 63.10885(b):

(a) 40 CFR 63.10880(a), (b)(1), (c), (f);
(b) 40 CFR 63.10881(a)(1), (a)(2), (d);
(c) 40 CFR 63.10885(a)(1), (a)(2)(i), (b);
(d) 40 CFR 63.10886;
(e) 40 CFR 63.10890;
(f) 40 CFR 63.10899(a), (b)(1)-(b)(6), (c)(3), (d);
(g) 40 CFR 63.10905; and
(h) 40 CFR 63.10906.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: ID Castings, LLC
Source Address: 1600 South 8th Street, Noblesville, Indiana 46060
Part 70 Permit No.: T057-33889-00002

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

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify)

☐ Report (specify)

☐ Notification (specify)

☐ Affidavit (specify)

☐ Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Signature:
Printed Name:
Title/Position:
Phone:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: ID Castings, LLC
Source Address: 1600 South 8th Street, Noblesville, Indiana 46060
Part 70 Permit No.: T057-33889-00002

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

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

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

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

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

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

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N
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

Part 70 Quarterly Report

Source Name: ID Castings, LLC
Source Address: 1600 South 8th Street, Noblesville, Indiana 46060
Part 70 Permit No.: T057-33889-00002
Facility: One (1) 10.2 ton per hour electric induction furnace (EU-3A)
Parameter: Throughput of metal melted
Limit: Shall not exceed 17,500 tons of iron per twelve (12) consecutive month period with compliance determined at the end of each month

QUARTER : YEAR:

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

☐ No deviation occurred in this quarter.

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

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

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

Source Name: ID Castings, LLC
Source Address: 1600 South 8th Street, Noblesville, Indiana 46060
Part 70 Permit No.: T057-33889-00002

Months: _____ to _____ Year: _____

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C-General Reporting. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".
☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.
☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

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

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

Page 2 of 2

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

Form Completed by:_____

Title / Position: _____

Date:_____

Phone: _____

Indiana Department of Environmental Management
Office of Air Quality

Attachment A

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 (E^p) for each test run using Equation 1 of this section:

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

Where:

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

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

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

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

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

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

(e) To determine compliance with the applicable emissions limit in § 63.10895(c) for a group of all metal melting furnaces using emissions averaging,

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

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

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

Where:

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

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

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

n = The total number of metal melting furnaces at the iron and steel foundry.

(3) For an uncontrolled electric induction furnace that is not equipped with a capture system and has not been previously tested for PM or total metal HAP, you may assume an emissions factor of 2 pounds per ton of PM or 0.13 pounds of total metal HAP per ton of metal melted in Equation 2 of this section instead of a measured test value. If the uncontrolled electric induction furnace is equipped with a capture system, you must use a measured test value.

(f) To determine compliance with the applicable PM or total metal HAP emissions limit for a metal melting furnace in § 63.10895(c) when emissions from one or more regulated furnaces are combined with other non-regulated emissions sources, you may demonstrate compliance using the procedures in paragraphs (f)(1) through (3) of this section.

(1) Determine the PM or total metal HAP process-weighted mass emissions for each of the regulated streams prior to the combination with other exhaust streams or control device.

(2) Measure the flow rate and PM or total metal HAP concentration of the combined exhaust stream both before and after the control device and calculate the mass removal efficiency of the control device using Equation 3 of this section.

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

Where:

E_i = Mass emissions rate of PM or total metal HAP at the control device inlet, lb/hr;

E_o = Mass emissions rate of PM or total metal HAP at the control device outlet, lb/hr.

(3) Meet the applicable emissions limit based on the calculated PM or total metal HAP process-weighted mass emissions for the regulated emissions source using Equation 4 of this section:

$$E_{p1released} = E_{p1i} \times \left(1 - \frac{\%\ \text{reduction}}{100}\right) \qquad \text{(Eq. 4)}$$

Where:

$E_{p1released}$ = Calculated process-weighted mass emissions of PM (or total metal HAP) predicted to be released to the atmosphere from the regulated emissions source, pounds of PM or total metal HAP per ton of metal charged; and

E_{p1i} = Process-weighted mass emissions of PM (or total metal HAP) in the uncontrolled regulated exhaust stream, pounds of PM or total metal HAP per ton of metal charged.

(g) To determine compliance with an emissions limit for situations when multiple sources are controlled by a single control device, but only one source operates at a time or other situations that are not expressly considered in paragraphs (d) through (f) of this section, you must submit a site-specific test plan to the Administrator for approval according to the requirements in § 63.7(c)(2) and (3).

(h) You must conduct each opacity test for fugitive emissions according to the requirements in § 63.6(h)(5) and Table 1 to this subpart.

(i) You must conduct subsequent performance tests to demonstrate compliance with the opacity limit in § 63.10895(e) no less frequently than every 6 months and each time you make a process change likely to increase fugitive emissions.

(j) In your performance test report, you must certify that the capture system operated normally during the performance test.

(k) You must establish operating limits for a new affected source during the initial performance test according to the requirements in Table 2 of this subpart.

(l) You may change the operating limits for a wet scrubber, electrostatic precipitator, or baghouse if you meet the requirements in paragraphs (l)(1) through (3) of this section.

(1) Submit a written notification to the Administrator of your plan to conduct a new performance test to revise the operating limit.

(2) Conduct a performance test to demonstrate compliance with the applicable emissions limitation in § 63.10895(c).

(3) Establish revised operating limits according to the applicable procedures in Table 2 to this subpart.

§ 63.10899 What are my recordkeeping and reporting requirements?

(a) As required by § 63.10(b)(1), you must maintain files of all information (including all reports and notifications) for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

(b) In addition to the records required by 40 CFR 63.10, you must keep records of the information specified in paragraphs (b)(1) through (13) of this section.

(1) You must keep records of your written materials specifications according to § 63.10885(a) and records that demonstrate compliance with the requirements for restricted metallic scrap in § 63.10885(a)(1) and/or for the use of general scrap in § 63.10885(a)(2) and for mercury in § 63.10885(b)(1) through (3), as applicable. You must keep records documenting compliance with § 63.10885(b)(4) for scrap that does not contain motor vehicle scrap.

(2) If you are subject to the requirements for a site-specific plan for mercury under § 63.10885(b)(1), you must:

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

(ii) Submit semiannual reports of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and a certification that the recovered mercury switches were recycled at RCRA-permitted facilities. The semiannual reports must include a certification that you have conducted periodic inspections or taken other means of corroboration as required under § 63.10885(b)(1)(ii)(C). You must identify which option in § 63.10885(b) applies to each scrap provider, contract, or shipment. You may include this information in the semiannual compliance reports required under paragraph (c) of this section.

(3) If you are subject to the option for approved mercury programs under § 63.10885(b)(2), you must maintain records identifying each scrap provider and documenting the scrap provider's participation in an

approved mercury switch removal program. If your scrap provider is a broker, you must maintain records identifying each of the broker's scrap suppliers and documenting the scrap supplier's participation in an approved mercury switch removal program.

(4) You must keep records to document use of any binder chemical formulation that does not contain methanol as a specific ingredient of the catalyst formulation for each furfuryl alcohol warm box mold or core making line as required by § 63.10886. These records must be the Material Safety Data Sheet (provided that it contains appropriate information), a certified product data sheet, or a manufacturer's hazardous air pollutant data sheet.

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

(6) You must keep records of monthly metal melt production for each calendar year.

(7) You must keep a copy of the operation and maintenance plan as required by § 63.10896(a) and records that demonstrate compliance with plan requirements.

(8) If you use emissions averaging, you must keep records of the monthly metal melting rate for each furnace at your iron and steel foundry, and records of the calculated pounds of PM or total metal HAP per ton of metal melted for the group of all metal melting furnaces required by § 63.10897(h).

(9) If applicable, you must keep records for bag leak detection systems as follows:

(i) Records of the bag leak detection system output;

(ii) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and

(iii) The date and time of all bag leak detection system alarms, and for each valid alarm, the time you initiated corrective action, the corrective action taken, and the date on which corrective action was completed.

(10) You must keep records of capture system inspections and repairs as required by § 63.10897(e).

(11) You must keep records demonstrating conformance with your specifications for the operation of CPMS as required by § 63.10897(f).

(12) You must keep records of corrective action(s) for exceedances and excursions as required by § 63.10897(g).

(13) You must record the results of each inspection and maintenance required by § 63.10897(a) for PM control devices in a logbook (written or electronic format). You must keep the logbook onsite and make the logbook available to the Administrator upon request. You must keep records of the information specified in paragraphs (b)(13)(i) through (iii) of this section.

(i) The date and time of each recorded action for a fabric filter, the results of each inspection, and the results of any maintenance performed on the bag filters.

(ii) The date and time of each recorded action for a wet or dry electrostatic precipitator (including ductwork), the results of each inspection, and the results of any maintenance performed for the electrostatic precipitator.

(iii) The date and time of each recorded action for a wet scrubber (including ductwork), the results of each inspection, and the results of any maintenance performed on the wet scrubber.

(c) You must submit semiannual compliance reports to the Administrator according to the requirements in § 63.10(e). The reports must include, at a minimum, the following information as applicable:

(1) Summary information on the number, duration, and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective action taken;

(2) Summary information on the number, duration, and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other calibration checks, if applicable); and

(3) Summary information on any deviation from the pollution prevention management practices in §§ 63.10885 and 63.10886 and the operation and maintenance requirements § 63.10896 and the corrective action taken.

(d) You must submit written notification to the Administrator of the initial classification of your new or existing affected source as a large iron and steel facility as required in § 63.10880(f) and (g), as applicable, and for any subsequent reclassification as required in § 63.10881(d) or (e), as applicable.

§ 63.10900 What parts of the General Provisions apply to my large foundry?

(a) If you own or operate a new or existing affected source that is classified as a large foundry, you must comply with the requirements of the General Provisions (40 CFR part 63, subpart A) according to Table 3 of this subpart.

(b) If you own or operator a new or existing affected source that is classified as a large foundry, your notification of compliance status required by § 63.9(h) must include each applicable certification of compliance, signed by a responsible official, in Table 4 of this subpart.

Other Requirements and Information

§ 63.10905 Who implements and enforces this subpart?

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

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency.

(c) The authorities that cannot be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (6) of this section.

(1) Approval of an alternative non-opacity emissions standard under 40 CFR 63.6(g).

(2) Approval of an alternative opacity emissions standard under § 63.6(h)(9).

(3) Approval of a major change to test methods under § 63.7(e)(2)(ii) and (f). A “major change to test method” is defined in § 63.90.

(4) Approval of a major change to monitoring under § 63.8(f). A “major change to monitoring” under is defined in § 63.90.

(5) Approval of a major change to recordkeeping and reporting under § 63.10(f). A “major change to recordkeeping/reporting” is defined in § 63.90.

(6) Approval of a local, State, or national mercury switch removal program under § 63.10885(b)(2).

§ 63.10906 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, in § 63.2, and in this section.

Annual metal melt capacity means the lower of the total metal melting furnace equipment melt rate capacity assuming 8,760 operating hours per year summed for all metal melting furnaces at the foundry or, if applicable, the maximum permitted metal melt production rate for the iron and steel foundry calculated on an annual basis. Unless otherwise specified in the permit, permitted metal melt production rates that are not specified on an annual basis must be annualized assuming 24 hours per day, 365 days per year of operation. If the permit limits the operating hours of the furnace(s) or foundry, then the permitted operating hours are used to annualize the maximum permitted metal melt production rate.

Annual metal melt production means the quantity of metal melted in a metal melting furnace or group of all metal melting furnaces at the iron and steel foundry in a given calendar year. For the purposes of this subpart, metal melt production is determined on the basis on the quantity of metal charged to each metal melting furnace; the sum of the metal melt production for each furnace in a given calendar year is the annual metal melt production of the foundry.

Bag leak detection system means a system that is capable of continuously monitoring relative particulate matter (dust) loadings in the exhaust of a baghouse to detect bag leaks and other upset conditions. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, electrodynamic, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

Binder chemical means a component of a system of chemicals used to bind sand together into molds, mold sections, and cores through chemical reaction as opposed to pressure.

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

Chlorinated plastics means solid polymeric materials that contain chlorine in the polymer chain, such as polyvinyl chloride (PVC) and PVC copolymers.

Control device means the air pollution control equipment used to remove particulate matter from the effluent gas stream generated by a metal melting furnace.

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

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

(1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emissions limitation (including operating limits), management practice, or operation and maintenance requirement;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any iron and steel foundry required to obtain such a permit; or

(3) Fails to meet any emissions limitation (including operating limits) or management standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

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

Electric induction furnace means a vessel in which forms of iron and steel such as scrap and foundry returns are melted though resistance heating by an electric current that is induced in the metal by passing an alternating current through a coil surrounding the metal charge or surrounding a pool of molten metal at the bottom of the vessel.

Exhaust stream means gases emitted from a process through a conveyance as defined in this subpart.

Foundry operations mean all process equipment and practices used to produce metal castings for shipment. *Foundry operations* include: Mold or core making and coating; scrap handling and preheating; metal melting and inoculation; pouring, cooling, and shakeout; shotblasting, grinding, and other metal finishing operations; and sand handling.

Free liquids means material that fails the paint filter liquids test by EPA Method 9095B, Revision 2, November 1994 (incorporated by reference—see § 63.14). That is, if any portion of the material passes through and drops from the filter within the 5-minute test period, the material contains *free liquids* .

Fugitive emissions means any pollutant released to the atmosphere that is not discharged through a system of equipment that is specifically designed to capture pollutants at the source, convey them through ductwork, and exhaust them using forced ventilation. *Fugitive emissions* include pollutants released to the atmosphere through windows, doors, vents, or other building openings. *Fugitive emissions* also include pollutants released to the atmosphere through other general building ventilation or exhaust systems not specifically designed to capture pollutants at the source.

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

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

Large foundry means, for an existing affected source, an iron and steel foundry with an annual metal melt production greater than 20,000 tons. For a new affected source, *large foundry* means an iron and steel foundry with an annual metal melt capacity greater than 10,000 tons.

Mercury switch means each mercury-containing capsule or switch assembly that is part of a convenience light switch mechanism installed in a vehicle.

Metal charged means the quantity of scrap metal, pig iron, metal returns, alloy materials, and other solid forms of iron and steel placed into a metal melting furnace. Metal charged does not include the quantity of fluxing agents or, in the case of a cupola, the quantity of coke that is placed into the metal melting furnace.

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

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

Motor vehicle means an automotive vehicle not operated on rails and usually is operated with rubber tires for use on highways.

Motor vehicle scrap means vehicle or automobile bodies, including automobile body hulks, that have been processed through a shredder. *Motor vehicle scrap* does not include automobile manufacturing bundles, or miscellaneous vehicle parts, such as wheels, bumpers, or other components that do not contain mercury switches.

Nonferrous metal means any pure metal other than iron or any metal alloy for which an element other than iron is its major constituent in percent by weight.

On blast means those periods of cupola operation when combustion (blast) air is introduced to the cupola furnace and the furnace is capable of producing molten metal. On blast conditions are characterized by both blast air introduction and molten metal production.

Responsible official means responsible official as defined in § 63.2.

Scrap preheater means a vessel or other piece of equipment in which metal scrap that is to be used as melting furnace feed is heated to a temperature high enough to eliminate volatile impurities or other tramp materials by direct flame heating or similar means of heating. Scrap dryers, which solely remove moisture from metal scrap, are not considered to be scrap preheaters for purposes of this subpart.

Scrap provider means the person (including a broker) who contracts directly with an iron and steel foundry to provide motor vehicle scrap. Scrap processors such as shredder operators or vehicle dismantlers that do not sell scrap directly to a foundry are not *scrap providers* .

Scrubber blowdown means liquor or slurry discharged from a wet scrubber that is either removed as a waste stream or processed to remove impurities or adjust its composition or pH.

Small foundry means, for an existing affected source, an iron and steel foundry that has an annual metal melt production of 20,000 tons or less. For a new affected source, *small foundry* means an iron and steel foundry that has an annual metal melt capacity of 10,000 tons or less.

Total metal HAP means, for the purposes of this subpart, the sum of the concentrations of compounds of antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, mercury, nickel, and selenium as measured by EPA Method 29 (40 CFR part 60, appendix A-8). Only the measured concentration of the listed analytes that are present at concentrations exceeding one-half the quantitation limit of the analytical method are to be used in the sum. If any of the analytes are not detected or are detected at concentrations less than one-half the quantitation limit of the analytical method, the concentration of those analytes will be assumed to be zero for the purposes of calculating the total metal HAP for this subpart.

Table 1 to Subpart ZZZZZ of Part 63—Performance Test Requirements for New and Existing Affected Sources Classified as Large Foundries

As required in § 63.10898(c) and (h), you must conduct performance tests according to the test methods and procedures in the following table:

For. . .	You must. . .	According to the following requirements. . .
1. Each metal melting furnace subject to a PM or total metal HAP limit in § 63.10895(c)	a. Select sampling port locations and the number of traverse points in each stack or duct using EPA Method 1 or 1A (40 CFR part 60, appendix A) b. Determine volumetric flow rate of the stack gas using Method 2, 2A, 2C, 2D, 2F, or 2G (40 CFR part 60, appendix A) c. Determine dry molecular weight of the stack gas using EPA Method 3, 3A, or 3B (40 CFR part 60, appendix A).[1] d. Measure moisture content of the stack gas using EPA Method 4 (40 CFR part 60, A) e. Determine PM concentration using EPA Method 5, 5B, 5D, 5F, or 5I, as applicable or total metal HAP concentration using EPA Method 29 (40 CFR part 60, 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

For. . .	You must. . .	According to the following requirements. . .
		§ 63.10898(e) for the group of all metal melting furnaces at the foundry.
2. Fugitive emissions from buildings or structures housing any iron and steel foundry emissions sources subject to opacity limit in § 63.10895(e)	a. Using a certified observer, conduct each opacity test according to EPA Method 9 (40 CFR part 60, appendix A-4) and 40 CFR 63.6(h)(5)	i. The certified observer may identify a limited number of openings or vents that appear to have the highest opacities and perform opacity observations on the identified openings or vents in lieu of performing observations for each opening or vent from the building or structure. Alternatively, a single opacity observation for the entire building or structure may be performed, if the fugitive release points afford such an observation.
		ii. During testing intervals when PM or total metal HAP performance tests, if applicable, are being conducted, conduct the opacity test such that the opacity observations are recorded during the PM or total metal HAP performance tests.
	b. As alternative to Method 9 performance test, conduct visible emissions test by Method 22 (40 CFR part 60, appendix A-7). The test is successful if no visible emissions are observed for 90 percent of the readings over 1 hour. If VE is observed greater than 10 percent of the time over 1 hour, then the facility must conduct another performance test as soon as possible, but no later than 15 calendar days after the Method 22 test, using Method 9 (40 CFR part 60, appendix A-4)	i. The observer may identify a limited number of openings or vents that appear to have the highest visible emissions and perform observations on the identified openings or vents in lieu of performing observations for each opening or vent from the building or structure. Alternatively, a single observation for the entire building or structure may be performed, if the fugitive release points afford such an observation. ii. During testing intervals when PM or total metal HAP performance tests, if applicable, are being conducted, conduct the visible emissions test such that the observations are recorded during the PM or total metal HAP performance tests.

[1] You may also use as an alternative to EPA Method 3B (40 CFR part 60, appendix A), the manual method for measuring the oxygen, carbon dioxide, and carbon monoxide content of exhaust gas, ANSI/ASME PTC 19.10-1981, “Flue and Exhaust Gas Analyses” (incorporated by reference—see § 63.14).

Table 2 to Subpart ZZZZZ of Part 63—Procedures for Establishing Operating Limits for New Affected Sources Classified as Large Foundries

As required in § 63.10898(k), you must establish operating limits using the procedures in the following table:

For . . .	You must . . .
1. Each wet scrubber subject to the operating limits in § 63.10895(d)(1) for pressure drop and scrubber water flow rate.	Using the CPMS required in § 63.10897(b), measure and record the pressure drop and scrubber water flow rate in intervals of no more than 15 minutes during each PM or total metal HAP test run. Compute and record the average pressure drop and average scrubber water flow rate for all the valid sampling runs in which the applicable emissions limit is met.
2. Each electrostatic precipitator subject to operating limits in § 63.10895(d)(2) for voltage and secondary current (or total power input).	Using the CPMS required in § 63.10897(c), measure and record voltage and secondary current (or total power input) in intervals of no more than 15 minutes during each PM or total metal HAP test run. Compute and record the minimum hourly average voltage and secondary current (or total power input) from all the readings for each valid sampling run in which the applicable emissions limit is met.

Table 3 to Subpart ZZZZZ of Part 63—Applicability of General Provisions to New and Existing Affected Sources Classified as Large Foundries

As required in § 63.10900(a), you must meet each requirement in the following table that applies to you:

Citation	Subject	Applies to large foundry?	Explanation
63.1	Applicability	Yes.	
63.2	Definitions	Yes.	
63.3	Units and abbreviations	Yes.	
63.4	Prohibited activities	Yes.	
63.5	Construction/reconstruction	Yes.	
63.6(a)-(g)	Compliance with standards and maintenance requirements	Yes.	
63.6(h)	Opacity and visible emissions standards	Yes.	
63.6(i)(i)-(j)	Compliance extension and Presidential compliance exemption	Yes.	
63.7(a)(3), (b)-(h)	Performance testing requirements	Yes.	
63.7(a)(1)-(a)(2)	Applicability and performance test dates	No	Subpart ZZZZZ specifies applicability and performance test dates.

Citation	Subject	Applies to large foundry?	Explanation
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)."

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document (ATSD) for a Part 70 Operating Permit Renewal

Source Background and Description

Source Name:	**ID Castings, LLC**
Source Location:	**1600 South 8th Street, Noblesville, Indiana 46060**
County:	**Hamilton**
SIC Code:	**3321 (Gray and Ductile Iron Foundries)**
Permit Renewal No.:	**T057-33889-00002**
Permit Reviewer:	**Sarah Street**

On May 30, 2014, the Office of Air Quality (OAQ) had a notice published in The Times in Noblesville, Indiana, stating that ID Castings, LLC had applied for a Part 70 Operating Permit Renewal to continue the operation of its existing stationary ductile iron foundry. The notice also stated that the OAQ proposed to issue a Part 70 Operating Permit Renewal for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Comments and Responses

No comments were received during the public notice period.

Additional Changes

IDEM, OAQ has decided to make additional revisions to the permit as described below, with deleted language as ~~strikeouts~~ and new language **bolded**.

Additional Change 1:

In order to minimize future revisions to permit attachments, IDEM will not include the company name or the source city/state on federal rule attachments to a permit. Therefore, the following attachments have been revised to reflect this change:

Attachment A: NESHAP Subpart ZZZZZ (National Emission Standard for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources)

Additional Change 2:

With this Renewal, the source removed the Disa pouring/casting machines, identified as EU-9 and the Disa cooling lines, identified as EU-9A, as documented in the Technical Support Document. References to these units in the following permit requirements have been removed, as shown below, since these emission units are no longer listed in the permit and were included due to a typographical error:

...

PSD Minor Limits for PM, PM_{10}, $PM_{2.5}$, and CO [326 IAC 2-2]

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

...

(b) The PM, PM_{10}, and $PM_{2.5}$ emissions from the following operations shall not exceed the emission limits listed in the table below:

Emission Unit	PM Emission Limit (pounds per ton of iron throughput)	PM_{10} Emission Limit (pounds per ton of iron throughput)	$PM_{2.5}$ Emission Limit (pounds per ton of iron throughput)
Dust collector DC-1	1.3	1.3	1.3
Cooling Lines (EU-8A ~~& EU-9A~~)	1.4 (total)	1.4 (total)	1.4 (total)
"A" Shaker (EU-16)	3.2	2.24	2.24

* Dust collector DC-1 controls the Disa pouring/casting machines (EU-8 ~~and EU-9~~), shakeout unit (EU-11), and the sand handling operations (EU-17 through EU-20, EU-22 through EU-24, EU-26, and EU-27).

...

D.2.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Conditions D.2.1(b) and D.2.2, the Permittee shall perform PM testing not later than 180 days after startup of Dust collector DC-1 (stack 003), controlling the following:

casting machines (EU-8 ~~and EU-9~~),
shakeout unit (EU-11),
sand handling operations, including muller (EU-17),
over head shaker screen (EU-18),
return sand storage silos (East and West) (EU-19 and EU-20),
outdoor bond silo (EU-22),
indoor bond storage silo (EU-23),
West outdoor sand storage bins (EU-24),
indoor new sand storage bin (EU-26), and
mag belt/bin top belt (EU-27),

utilizing methods as approved by the Commissioner.

This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.

The respective facilities shall process 100% ductile iron during the tests.

(b) In order to demonstrate compliance with Conditions D.2.1(b) and D.2.2, the Permittee shall perform PM10 and PM2.5 testing Not later than 180 days after startup of Dust collector DC-1 (stack 003), controlling the following:

casting machines (EU-8 ~~and EU-9~~),
shakeout unit (EU-11),
sand handling operations, including muller (EU-17),
over head shaker screen (EU-18),
return sand storage silos (East and West) (EU-19 and EU-20),
outdoor bond silo (EU-22),
indoor bond storage silo (EU-23),
West outdoor sand storage bins (EU-24),
indoor new sand storage bin (EU-26), and
mag belt/bin top belt (EU-27),

utilizing methods as approved by the Commissioner.

This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.

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

...

D.2.6 Particulate Control

(a) In order to comply with Conditions D.2.1 and D.2.2, the dust collector DC-1 for particulate control shall be in operation at all times whenever any of the following:

casting machines (EU-8 ~~and EU-9~~),
shakeout unit (EU-11),
sand handling operations including muller (EU-17),
over head shaker screen (EU-18),
return sand storage silos (East and West) (EU-19 and EU-20),
outdoor bond silo (EU-22),
indoor bond storage silo (EU-23),
West outdoor sand storage bins (EU-24),
indoor new sand storage bin (EU-26), and
mag belt/bin top belt (EU-27)

are in operation.

...

D.2.8 Parametric Monitoring - Dust Collector [40 CFR 64]

Pursuant to 40 CFR 64, the Permittee shall record the pressure drop across the dust collector DC-1 used in conjunction with the following:

casting machines (EU-8 ~~and EU-9~~),
shakeout unit (EU-11),
sand handling operations including muller (EU-17),
over head shaker screen (EU-18),
return sand storage silos (East and West) (EU-19 and EU-20),
outdoor bond silo (EU-22),
indoor bond storage silo (EU-23),
West outdoor sand storage bins (EU-24),
indoor new sand storage bin (EU-26), and
mag belt/bin top belt (EU-27)

...

IDEM Contact

(a) Questions regarding this proposed Part 70 Permit Renewal can be directed Sarah Street 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) 232-8427 or toll free at 1-800-451-6027 extension 2-8427.

(b) A copy of the permit 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.

Indiana Department of Environmental Management
Office of Air Quality

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

Source Background and Description

Source Name:	**ID Castings, LLC**
Source Location:	**1600 South 8th Street, Noblesville, Indiana 46060**
County:	**Hamilton**
SIC Code:	**3321 (Gray and Ductile Iron Foundries)**
Permit Renewal No.:	**T057-33889-00002**
Permit Reviewer:	**Sarah Street**

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from ID Castings, LLC relating to the operation of a stationary ductile iron foundry. On November 18, 2013, ID Castings, LLC submitted an application to the OAQ requesting to renew its operating permit. ID Castings, LLC was issued its first Part 70 Operating Permit Renewal T057-25584-00002 on August 18, 2009.

Permitted Emission Units and Pollution Control Equipment

Note: The following emission unit list has been revised with this Renewal for clarity.

With Significant Permit Modification No. 057-34089-00002, issued on April 24, 2014, the source was approved to replace the wet collector WC-W with dust collector DC-1. The source has indicated that they have installed the dust collector DC-1 and all references in the permit to wet collector WC-W should be removed.

The source consists of the following permitted emission units:

Metal Melting

(a) One (1) electric induction furnace, identified as EU-3A, constructed in 1998, with a maximum capacity of 10.2 tons of iron per hour, with emissions uncontrolled, and exhausting to the general area ventilation;

The electric induction furnace is considered part of the affected source under 40 CFR Part 63, Subpart ZZZZZ.

Raw Material Handling and Preparation

(b) One (1) scrap and charge handling operation, identified as EU-2, constructed in 1998, with a maximum capacity of 10.2 tons of iron per hour, with emissions uncontrolled, and exhausting to the general area ventilation;

The scrap and charge handling system is considered part of the affected source under 40 CFR Part 63, Subpart ZZZZZ.

(c) One (1) magnesium treatment/inoculation operation, identified as EU-6, constructed in 1971, with a maximum capacity of 10.2 tons of iron per hour, with emissions controlled by a sealed reaction chamber, and exhausting to the general area ventilation;

(d) Sand handling operations, with a maximum capacity of 100 tons per hour of sand and 10.2 tons of iron per hour of castings, consisting of the following equipment:

(1) One (1) “A” Shaker (vibrating casting conveyor), identified as EU-16, constructed in 1996, with emissions uncontrolled, and exhausting to the general ventilation area;

(2) One (1) muller, identified as EU-17, constructed in 1971, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(3) Overhead shaker screen, identified as EU-18, constructed in 1971, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(4) One (1) Mag belt/bin top belt, identified as EU-27, constructed in 1971, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

And the following storage bins:

(5) Two (2) return sand storage silos (East and West), identified as EU-19 and EU-20, both constructed in 1971, with capacities of 80 and 100 tons, respectively, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(6) One (1) outdoor bond silo, identified as EU-22, constructed in 1978, with a capacity of 80 tons of premixed casting sand binder, with emissions controlled by a sock filter system;

(7) One (1) indoor bond storage silo, identified as EU-23, constructed in 1971, with a capacity of 1 ton of premixed casting sand binder, with emissions controlled dust collector DC-1, and exhausting to stack 003;

(8) One (1) West outdoor sand storage bin, identified as EU-24, constructed in 1971, with a capacity of 150 tons, with emissions uncontrolled;

(9) One (1) indoor new sand storage bin, identified as EU-26, constructed in 1971, with a capacity of 1 ton, emissions controlled by dust collector DC-1, and exhausting to stack 003;

<u>Pouring, Cooling, and Shakeout</u>

(e) One (1) Disa pouring/casting machine, identified as EU-8, constructed in 1997, with a maximum capacity of 3.4 tons of iron and 39 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(f) One (1) Disa cooling line, identified as EU-8A, constructed in 1997, with a maximum capacity of 3.4 tons of iron and 39 tons of sand per hour, with emissions uncontrolled, and exhausting to the general ventilation area;

(g) One (1) shake-out unit, identified as EU-11, constructed in 2007, with a maximum capacity of 3.4 tons of iron and 39 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting through stack 003;

Note: The source consists of another casting shakeout unit, listed above in the sand handling operations (d)(1).

<u>Finishing Operations</u>

(h) One (1) No. 3 cleaning machine, identified as EU-34, constructed in 2001, with a maximum capacity of 5.6 tons per hour of castings and 15 tons per hour of steel shot, with emissions controlled by baghouse BH-2, and exhausting to stack 007;

(i) Casting, grinding and finishing operations with a maximum throughput of 5.6 tons per hour of finished castings, consisting of the following equipment:

(1) Nine (9) stand grinders, identified as EU-32, constructed in 1965, with emissions controlled by baghouse BH-1, and exhausting to stack 006;

(2) Ten (10) finishing (Burr Stations) units, identified as EU-33, all constructed in 1992, with emissions uncontrolled, and exhausting to the general ventilation area.

Core Making

(j) Core manufacturing operations with a maximum production rate of 0.34 tons per hour of manufactured cores, consisting of the following equipment:

(1) Two (2) shell core machines, identified as EU-28, constructed in 1964, each with maximum capacity of 0.17 tons of cores per hour, a heat input capacity of 2.09 MMBtu/hr per machine, with emissions uncontrolled, and exhausting to the general area ventilation;

Emission Units and Pollution Control Equipment Removed From the Source

The source has removed the following emission units:

(a) One (1) Disa pouring/casting machines, identified as EU-9, constructed in 1997, with emissions controlled by wet collector WC-W, exhausting to stack 003, with a maximum capacity of 3.4 tons of metal and 39 tons of sand per hour;

(b) One (1) Disa cooling lines, identified as EU-9A, constructed in 1997, with a maximum capacity of 3.4 tons of metal and 39 tons of sand per hour, with emissions uncontrolled, and exhausting to the general ventilation area;

With Significant Permit Modification No. 057-34089-00002, issued on April 24, 2014, the source was approved to replace the wet collector WC-W with dust collector DC-1. The source has indicated that they have installed the dust collector DC-1 and all references in the permit to wet collector WC-W should be removed.

Insignificant Activities

The source also consists of the following insignificant activities:

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

(b) Propane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour:

(1) Two (2) 0.5 MMBtu/hr heating ladle torches;

(2) One (1) 0.5 MMBtu/hr core drying conveyor heating torch;

(3) Two (2) 0.5 MMBtu/hr auto pour torches.

The propane combustion units are being added back into the permit with this renewal. These insignificant activities were originally listed the initial Part 70 permit No. T057-13975-00002, issued on August 28, 2003. These units were omitted from the Renewal No. T057-25584-00002, issued on August 18, 2009, and are being added back into the permit with this renewal.

Existing Approvals

Since the issuance of the Part 70 Operating Permit Renewal T057-25584-00002 on August 18, 2009, the source has constructed or has been operating under the following additional approvals:

(a) Administrative Amendment No.057-33772-00002, issued on October 23, 2013; and

(b) Significant Permit Modification No. 057-34089-00002, issued on April 24, 2014.

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.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Hamilton County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
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]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which 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. Hamilton 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) $PM_{2.5}$
Hamilton County has been classified as attainment for $PM_{2.5}$. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for $PM_{2.5}$ emissions. These rules became effective on July 15, 2008. On May 4, 2011, the air pollution control board issued an emergency rule establishing the direct $PM_{2.5}$ significant level at ten (10) tons per year. This rule became effective June 28, 2011. 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) Other Criteria Pollutants
Hamilton 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.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Unrestricted Potential Emissions	
Pollutant	Tons/year
PM	Greater than 100
PM_{10}	Greater than 100
$PM_{2.5}$	Greater than 100
SO_2	Less than 100
NO_x	Less than 100
VOC	Less than 100
CO	Greater than 100
GHGs as CO_2e	Less than 100,000
Single HAP	Less than 10
Total HAP	Less than 25

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(29)) of PM10, PM2.5, and CO is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7 and will be issued a Part 70 Operating Permit Renewal.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of GHGs is less than one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per year.

(c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, because the source met the following:

(a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.

(b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any new control equipment is considered federally enforceable only after issuance of this Part 70 permit renewal, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

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	GHGs	Total HAPs	Worst Single HAP
EIF Furnace EU-3A	7.88	7.53	7.53	0.00	0.00	0.00	0.00	0	4.92	3.81 (Organic HAPs)
Melting Dept. - Charge Handling (EU-2)	5.25	3.15	3.15	0.00	0.00	0.00	0.00	0		
Melting Dept. - Magnesium Treatment (EU-6)	0.79	0.79	0.79	0.00	0.00	0.09	0.00	0		
Sand Handling (EU-17 through EU-20, EU-22 through EU-24, EU-26 & EU-27)	11.38	11.38	11.38	0.00	0.00	0.00	0.00	0		
Pouring/Casting Line (EU-8)				0.18	0.09	1.23	52.50	613		
Casting Shakeout (Shake-out Unit EU-11)				0.00	0.00	10.50 ****				
Casting Shakeout ("A" Shaker EU-16)	28.00	19.60	19.60	0.00	0.00	10.50 ****				
Cooling Line (EU-8A)	12.25	12.25	12.25	0.00	0.00	0.00				
No. 3 Cleaning Machine (EU-34)	1.49	0.18	0.18	0.00	0.00	0.00	0.00	0		
Grinding (EU-32)	0.09	0.04	0.04	0.00	0.00	0.00	0.00	0		
Finishing (EU-33)	0.09	0.04	0.04	0.00	0.00	0.00	0.00	0		
Shell Core Machines (EU-28)	1.64	1.64	1.64	0.48	0.74	0.03	0.00	0		
Combustion	0.06	0.22	0.22	0.35	4.16	0.32	2.40	4,084		
Paved & Unpaved Roads	0.77	0.15	0.02	0.00	0.00	0.00	0.00	0		
Total PTE of Entire Source	**69.68*** **	**56.95*** **	**56.83*** **	**1.00**	**4.99**	**22.66**	**54.90*** **	**4,697**	**4.92**	**3.81**
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000 CO_2e	25	10
PSD Major Source Thresholds	100	100	100	100	100	100	100	100,000 CO_2e	NA	NA

* 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 $PM_{2.5}$.
*** Limits specified to be PSD minor source (326 IAC 2-2).
**** VOC limits to render 326 IAC 8-1-6 not applicable.

This existing stationary source is not major for PSD because the emissions of each criteria pollutant are less than one hundred (<100) tons per year and it is in one of the twenty-eight (28) listed source categories.

PSD Minor Limits:

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

(a) The total iron throughput to the electric induction furnace (EU-3A) shall not exceed 17,500 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Note: This is an existing limit.

(b) The PM, PM_{10}, and $PM_{2.5}$ emissions from the following operations shall not exceed the emission limits listed in the table below:

Emission Units	Control Device	PM Emission Limit (pounds per ton of iron throughput)	PM_{10} Emission Limit (pounds per ton of iron throughput)	$PM_{2.5}$ Emission Limit (pounds per ton of iron throughput)
Charge Handling (EU-2)	N/A	0.6	0.36	0.36
Induction Furnace (EU-3A)	N/A	0.9	0.86	0.86
Magnesium Treatment (EU-6)	N/A	0.09	0.09	0.09
Disa pouring/casting machine (EU-8), shakeout unit (EU-11), and the sand handling operations (EU-16 through EU-20, EU-22 through EU-24, EU-26, and EU-27)	Dust collector DC-1	1.3	1.3	1.3
Cooling Line (EU-8A)	N/A	1.4	1.4	1.4
"A" Shaker (EU-16)	N/A	3.2	2.24	2.24
No. 3 Cleaning Machine (EU-34)	Baghouse BH-2	0.17	0.02	0.02
Grinding (EU-32)	Baghouse BH-1	0.01	0.0045	0.0045
Finishing (EU-33)	N/A	0.01	0.0045	0.0045
Core Manufacturing (EU-28)	N/A	1.10	1.10	1.10

Note: These are existing limits.

(c) The CO emissions from the following operations shall not exceed the emission limit listed in the table below:

Emission Units	CO Emission Limit (pounds per ton of iron throughput)
Pouring/Casting Line (EU-8)	6.0 (combined)
Casting Shakeout (Shake-out Unit EU-11)	
Casting Shakeout ("A" Shaker EU-16)	
Cooling Line (EU-8A)	

Note: This is an existing limit.

Compliance with these limits, combined with the potential to emit PM, PM_{10}, $PM_{2.5}$, and CO from other emission units at this source, shall limit the source-wide emit PM, PM_{10}, $PM_{2.5}$, and CO to less than 100 tons per twelve (12) consecutive month period, each, and render 326 IAC 2-2 not applicable.

Federal Rule Applicability

Compliance Assurance Monitoring (CAM)

(a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each existing pollutant-specific emission unit that meets the following criteria:

(1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;

(2) is subject to an emission limitation or standard for that pollutant; and

(3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each existing emission unit and specified pollutant subject to CAM:

Emission Unit(s)	Pollutant	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (ton/yr)	Controlled PTE (ton/yr)	Part 70 Major Source Threshold (ton/yr)	CAM Applicable (Y/N)	Large Unit (Y/N)
EIF Furnace EU-3A	PM	This emission unit is not subject to CAM because it does not use a control device.						
	PM10							
	PM2.5							
	HAPs							
Melting Dept. - Charge Handling (EU-2)	PM	This emission unit is not subject to CAM because it does not use a control device.						
	PM10							
	PM2.5							
	HAPs							
Melting Dept. - Magnesium Treatment (EU-6)	PM	Sealed Reaction Chambers	Y	<100	The uncontrolled PTE of each pollutant is <100; therefore CAM is not applicable to this emission unit for these pollutants.			
	PM10		Y	<100				
	PM2.5		Y	<100				
	VOC		N	<100				
	HAPs		N	<100				
Sand Handling (EU-17 through EU-20, EU-22 through EU-24, EU-26 & EU-27)	PM	Dust Collector DC-1	Y	>100	<100	100	Y	N
	PM10		Y	<100	The uncontrolled PTE of each pollutant is <100; therefore CAM is not applicable to this emission unit for these pollutants.			
	PM2.5		Y	<100				
Pouring/Casting Line (EU-8)	PM	Dust Collector DC-1	Y	<100	The uncontrolled PTE of each pollutant is <100; therefore CAM is not applicable to this emission unit for these pollutants.			
	PM10		Y	<100				
	PM2.5		Y	<100				
	SO2	No control	This emission unit is not subject to CAM because it does not use a control device for these pollutants.					
	NOx							
	VOC							
	CO							

Emission Unit(s)	Pollutant	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (ton/yr)	Controlled PTE (ton/yr)	Part 70 Major Source Threshold (ton/yr)	CAM Applicable (Y/N)	Large Unit (Y/N)
Cooling Line (EU-8A)	PM	This emission unit is not subject to CAM because it does not use a control device.						
	PM10							
	PM2.5							
	CO							
Casting Shakeout ("A" Shaker EU-16)	PM	This emission unit is not subject to CAM because it does not use a control device.						
	PM10							
	PM2.5							
	VOC							
	CO							
Casting Shakeout (Shake-out Unit EU-11)	PM	Dust Collector DC-1	Y	<100	The uncontrolled PTE of each pollutant is <100; therefore CAM is not applicable to this emission unit for these pollutants.			
	PM10		Y	<100				
	PM2.5		Y	<100				
	VOC	No control	This emission unit is not subject to CAM because it does not use a control device for these pollutants.					
	CO							
No. 3 Cleaning Machine (EU-34)	PM	Baghouse BH-2	Y	>100	<100	100	Y	N
	PM10		Y	<100	The uncontrolled PTE of each pollutant is <100; therefore CAM is not applicable to this emission unit for these pollutants.			
	PM2.5		Y	<100				
	HAPs		N	<100				
Grinding (EU-32)	PM	Baghouse BH-1	Y	<100	The uncontrolled PTE of each pollutant is <100; therefore CAM is not applicable to this emission unit for these pollutants.			
	PM10		Y	<100				
	PM2.5		Y	<100				
	HAPs		N	<100				
Finishing (EU-33)	PM	This emission unit is not subject to CAM because it does not use a control device.						
	PM10							
	PM2.5							
	HAPs							
Shell Core Machines (EU-28)	PM	This emission unit is not subject to CAM because it does not use a control device.						
	PM10							
	PM2.5							
	SO2							
	NOx							
	VOC							
	CO							
Two (2) shell core machine burners	PM	This emission unit is not subject to CAM because it does not use a control device.						
	PM10							
	PM2.5							
	SO2							
	NOx							
	VOC							
	CO							

Note:
* Sand handling operations EU-16 and EU-24 are not controlled.
Sand handling operations EU-17 through EU-20, EU-23, EU-26, and EU-27 are controlled by Dust Collector DC-1.
Sand handling operation EU-22 is controlled by a sock filter system.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to:
(1) Sand Handling (EU-17 through EU-20, EU-22 through EU-24, EU-26 & EU-27) for PM,
(2) No. 3 Cleaning Machine (EU-34) for PM

New Source Performance Standards (NSPS)

(b) The requirements of the following New Source Performance Standards (NSPS) under 40 CFR Part 60 are not included in the permit renewal because the source still does not utilize any storage vessels with a capacity greater than or equal to 75 cubic meters (19,812 gallons):

(1) Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978 (40 CFR Part 60.110, Subpart K);

(2) Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984 (40 CFR Part 60.110a, Subpart Ka); and

(3) Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 (40 CFR Part 60.110b, Subpart Kb).

(c) The requirements of the New Source Performance Standard for Ferroalloy Production Facilities, 40 CFR 60.260, Subpart Z, are not included in the permit renewal because the source still does not use electric submerged arc furnaces as defined in 40 CFR 60.261.

(d) The requirements of the New Source Performance Standard for Steel Plants: Electric Arc Furnaces, 40 CFR 60.270, Subpart AA, are not included in the permit renewal because the source is not a steel plant with electric arc furnaces or dust handling equipment as defined in 40 CFR 60.271.

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

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

(g) The requirements of the New Source Performance Standard for Calciners and Dryers in Mineral Industries, 40 CFR Part 60.730, Subpart UUU, are not included in the permit renewal because ID Castings, LLC utilizes mechanical sand reclamation and not thermal sand reclamation.

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

(h) There no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit renewal for this source.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

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

(1) National Emission Standards for Hazardous Air Pollutants for Ferroalloys Production: Ferromanganese and Silicomanganese (40 CFR Part 63.1650, Subpart XXX);

(2) National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries (40 CFR Part 63.7680, Subpart EEEEE); and

(3) National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities (40 CFR Part 63.7780, Subpart FFFFF).

These NESHAPs apply only to major sources of HAPs. Since the potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year, ID Castings, LLC is a minor source of HAPs.

(j) The requirements of the National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities, 40 CFR 63.10680, Subpart YYYYY, are not included in the permit renewal because the source still does not utilize electric arc furnaces as defined in 40 CFR 63.10692.

(k) ID Castings, LLC is subject to the National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources (40 CFR Part 63, Subpart ZZZZZ) because it is an iron foundry that is an area source of HAPs that commenced construction before September 17, 2007. The units subject to this rule include the following:

<u>Metal Melting</u>

(1) One (1) electric induction furnace, identified as EU-3A, constructed in 1998, with a maximum capacity of 10.2 tons per hour, with emissions uncontrolled, and exhausting to the general area ventilation;

<u>Raw Material Handling and Preparation</u>

(2) One (1) scrap and charge handling operation, identified as EU-2, constructed in 1998, with a maximum capacity of 10.2 tons per hour, with emissions uncontrolled, and exhausting to the general area ventilation;

Pursuant to 40 CFR 63.10880(f), ID Castings, LLC is considered a small foundry under Subpart ZZZZZ because the facility's metal melt production for calendar year 2008 did not exceed 20,000 tons. The following provisions are applicable to ID Castings, LLC as a small foundry:

(1) 40 CFR 63.10880(a), (b)(1), (c), (f);
(2) 40 CFR 63.10881(a)(1), (a)(2), (d);
(3) 40 CFR 63.10885(a)(1), (a)(2)(i), (b);
(4) 40 CFR 63.10886;
(5) 40 CFR 63.10890;
(6) 40 CFR 63.10899(a), (b)(1)-(b)(6), (c)(3), (d);
(7) 40 CFR 63.10905; and
(8) 40 CFR 63.10906.

Pursuant to 40 CFR 63.10880(f), the Permittee was required to sumbit a written notification to USEPA identifying the area source as a small foundry no later than January 2, 2009. Pursuant to 40 CFR 63.10881(a)(1), the Permittee shall comply with 40 CFR 63.10885(a) and 40 CFR 63.10886 for the polllution prevention management practices for metallic scrap and binder formulations no later than January 2, 2009. Pursuant to 40 CFR 63.10881(a)(2), the Permittee shall comply with 40 CFR 63.10885(b) for pollution prevention management practices for mercury no later than January 4, 2010.

ID Castings, LLC is currently permitted to melt up to 17,500 tons of metal per twelve (12) consecutive month period (to be PSD minor source under 326 IAC 2-2). Pursuant to 40 CFR 63.10881(d)(1), beginning January 1, 2010, if the annual metal melt production of ID Castings, LLC exceeds 20,000 tons during the preceding caldenar year, the Permittee must submit a notification of foundry reclassification to USEPA within 30 days and must comply with the requirements for a large foundry no later than two (2) years after the date of notification that the annual metal melt production rate exceeded 20,000 tons. In addition, the Permittee shall submit an application to IDEM, OAQ for a Significant Permit Modification to update the applicable provisions of 40 CFR 63, Subpart ZZZZZ in the permit.

The provisions of 40 CFR 63 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63 Subpart ZZZZZ.

There are no testing requirements for ID Castings, LLC, classified as a small foundry pursuant to 40 CFR 63.10906.

(l) The requirements of the National Emission Standards for Hazardous Air Pollutants for Area Sources: Ferroalloys Production Facilities, 40 CFR 63.11524, Subpart YYYYYY, are not included in the permit renewal because the source still does not utilize electrometallurgical operations as defined in 40 CFR 63.11532.

(m) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit renewal.

State Rule Applicability - Entire Source

(a) 326 IAC 2-2 (PSD)
The potential to emit PM, PM_{10}, $PM_{2.5}$, and CO from the entire source is each greater than one hundred (100) tons per year, and this source is one of the 28 listed source categories under 326 IAC 2-2. However, ID Castings, LLC is not subject to the PSD requirements of 326 IAC 2-2 because the source is taking limits to be a minor source.

See "Potential to Emit After Issuance" section above for discussion and PSD Minor limits.

(b) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
None of the facilities at this source will emit greater than 10 tons per year of a single HAP or greater than 25 tons per year of a combination of HAPs. Therefore, the requirements of 326 IAC 2-4.1 do not apply to any of the facilities located at this source.

(c) 326 IAC 2-6 (Emission Reporting)
This source is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit under 326 IAC 2-7, Part 70 program. Pursuant to this rule, the Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. In accordance with the compliance schedule specified in 326 IAC 2-6-3, an emission statement must be submitted triennially by July 1 beginning in 2005 and every 3 years after. Therefore, the next emission statement for this source must be submitted by July 1, 2014. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

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

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

(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.

(e) 326 IAC 6-4 (Fugitive Dust)
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.

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

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

State Rule Applicability – Individual Facilities

(a) 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)
This source only operates combustion devices which are sources of direct heating. Therefore, the requirements of 326 IAC 6-2 do not apply.

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

(1) The combustion units are exempt from the requirements of 326 IAC 6-3, because, pursuant to 326 IAC 1-2-59, liquid and gaseous fuels and combustion air are not considered as part of the process weight rate.

(2) The potential to emit for particulate matter (PM) from each of the following facilities is less than 0.551 pounds per hour and is below the particulate exemption level pursuant to 326 IAC 6-3-1(14): grinding (EU-32), finishing (EU-33), and shell core machines (EU-28). Therefore, the requirements of 326 IAC 6-3-2 do not apply to these units.

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

Emission Units	Control Device	Process Weight Rate (tons/hr)	Ucontrolled PM (lb/hr)	Controlled PM (lb/hr)	PM Limit (lb/hr) (326 IAC 6-3)	Able to Comply?
EIF Furnace EU-3A	No control	10.20	9.18	-	19.43	Y
Melting Dept. - Charge Handling (EU-2)	No control	10.20	6.12	-	19.43	Y
Melting Dept. - Magnesium Treatment (EU-6)	Sealed Reaction Chambers	10.20	18.36	0.92	19.43	Y - without the use of control

Emission Units	Control Device	Process Weight Rate (tons/hr)	Ucontrolled PM (lb/hr)	Controlled PM (lb/hr)	PM Limit (lb/hr) (326 IAC 6-3)	Able to Comply?
Sand Handling (EU-17 through EU-20, EU-22 through EU-24, EU-26 & EU-27)	Dust Collector DC-1	100.00	360.00	0.36	51.28	Y - with the use of control
Pouring/Casting Line (EU-8)	Dust Collector DC-1	42.40	9.52	0.01	43.06	Y - without the use of control
Cooling Line (EU-8A)	No control	42.40	4.76	-	43.06	Y
Casting Shakeout ("A" Shaker EU-16)	No control	49.20	32.64	-	44.43	Y
Casting Shakeout (Shake-out Unit EU-11)	Dust Collector DC-1	45.80	21.76	0.02	43.76	Y - without the use of control
No. 3 Cleaning Machine (EU-34)*	Baghouse BH-2	20.60	95.20	19.04	31.12	Y - with the use of control
Grinding (EU-32)	Baghouse BH-1	5.60	0.06	0.001	13.00	Y - without the use of control
Finishing (EU-33)	No control	5.60	0.06	-	13.00	Y
Core Manufacturing (EU-28)	No control	0.34	0.37	-	1.99	Y

*Process weight rate includes the weight of the steel shot plus the weight of the castings

These limitations are based upon the following:

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

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

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

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

In order to comply with these limits, the Dust Collector DC-1 shall be in operation at all times any of the sand handling processes (EU-17 through EU-20, EU-22 through EU-24, EU-26, and EU-27) are in operation, and the baghouse BH-2 shall be in operation at all times the No. 3 Cleaning Machine (EU-34) is in operation.

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

(d) 326 IAC 8-1-6 (Best Available Control Technology)
(1) The following facilities have the potential to emit VOCs, but were constructed prior to the applicability date of January 1, 1980, and also do not have potential VOC emissions greater than 25 tons per year:

(A) One (1) magnesium treatment/inoculation operation, identified as EU-6, constructed in 1971;

(B) Two (2) shell core machines, identified as EU-28, constructed in 1964;

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

(2) The following facilities were constructed after January 1, 1980; however, the potential to emit VOC emissions is less than 25 tons per year for each unit:

(A) One (1) Disa pouring/casting machine, identified as EU-8, constructed in 1997;

(B) One (1) shake-out unit, identified as EU-11, constructed in 2007

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

(3) The Casting Shakeout ("A" Shaker EU-16), constructed in 1996, has the potential to emit more than 25 tons VOC per year.

In order to render the requirements of 326 IAC 8-1-6 (VOC BACT) not applicable, the VOC emissions from the Casting Shakeout ("A" Shaker EU-16) shall not exceed 1.20 lb/ton of iron throughput.

Compliance with this limit, combined with the total iron throughput limit to the electric induction furnace (EU-3A), will limit the VOC emissions from the Casting Shakeout ("A" Shaker EU-16) to less than twenty-five (25) tons per year and render the requirements of 326 IAC 8-1-6 (BACT) not applicable to the Casting Shakeout ("A" Shaker EU-16).

VOC = 17,500 tons/yr * 1.2 lb/ton = 21,000 lb/yr = 10.5 tons/yr

This is an existing limit.

(4) The one (1) Casting Shakeout (Shake-out Unit EU-11), constructed in 2007, has the potential to emit more than 25 tons VOC per year.

In order to render the requirements of 326 IAC 8-1-6 (VOC BACT) not applicable, the VOC emissions from the Casting Shakeout (Shake-out Unit EU-11) shall not exceed 1.20 lb/ton of iron throughput.

Compliance with this limit, combined with the total iron throughput limit to the electric induction furnace (EU-3A), will limit the VOC emissions from the Casting Shakeout (Shake-out Unit EU-11) to less than twenty-five (25) tons per year and render the requirements of 326 IAC 8-1-6 (BACT) not applicable to the Casting Shakeout (Shake-out Unit EU-11).

VOC = 17,500 tons/yr * 1.2 lb/ton = 21,000 lb/yr = 10.5 tons/yr

This is an existing limit.

(e) 326 IAC 8 (VOC Rules)
There are no VOC Rules applicable to these facilities.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions

that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

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

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

Control Device	Emission Units	Parameter	Frequency	Range	Excursions and Exceedances
Dust Collector DC-1 (Stack 003) *	Pouring/Casting Line (EU-8), Casting Shakeout (Shake-out Unit EU-11), and the sand handling operations (EU-17 through EU-20, EU-22 through EU-24, EU-26, and EU-27)	Water Pressure Drop	Daily	2.0 to 6.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	
Baghouse BH-2 (Stack 007) *	No. 3 Cleaning Machine (EU-34)	Water Pressure Drop	Daily	2.0 to 8.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	
Baghouse BH-1 (Stack 006)	Grinding (EU-32)	Water Pressure Drop	Daily	2.0 to 8.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	
General ventilation	EU-2, EU-3A, EU-6, EU-8A, EU-16, EU-28, and EU-33	Visible Emissions	Daily	Normal-Abnormal	Response Steps

Notes:
* Pursuant to 40 CFR 64, since CAM is applicable to these facilities.

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

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

Emission Units	Control Device	Timeframe for Testing	Pollutants	Frequency of Testing
Pouring/Casting Line (EU-8), Casting Shakeout (Shake-out Unit EU-11), and the sand handling operations (EU-17 through EU-20, EU-22 through EU-24, EU-26, and EU-27)	Dust Collector DC-1	Within 180 days of the installation of Dust Collector DC-1	PM, PM10, PM2.5	Every five (5) years
Casting Shakeout ("A" Shaker EU-16)	None	Within 180 days of the issuance of Part 70 Renewal No. T057-33889-00002 (1)	VOC	One time (2)

Emission Units	Control Device	Timeframe for Testing	Pollutants	Frequency of Testing
Casting Shakeout (Shake-out Unit EU-11)	None	Within 180 days of the issuance of Part 70 Renewal No. T057-33889-00002 (1)	VOC	One time (2)
No. 3 Cleaning Machine (EU-34)	Baghouse BH-2	Within 180 days of the issuance of Part 70 Renewal No. T057-33889-00002 (3)	PM, PM10, PM2.5	Every five (5) years

The respective facilities shall process 100% ductile iron during the tests.

Notes:

(1) These are new requirements. The VOC emission limitations of 1.2 lb/ton were based on U.S. EPA WebFIRE emission factors that are unrated, which means that emission factor is developed from source tests which have not been thoroughly evaluated, research papers, modeling data, or other sources that may lack supporting documentation. The source is required to test to verify compliance with the VOC BACT avoidance limitations for EU-16 and EU-11.

(2) Testing is only one-time because emissions are uncontrolled.

(3) This is a new testing requirement. The No. 3 Cleaning Machine (EU-34) is required to have a high control efficiency (>99%) in order to comply with the PSD Minor limits for PM, PM10, and PM2.5. Emissions from this operation have not be previously tested; since the baghouse is required to operate for the source to comply with PSD Minor limits, testing will be required to be repeated every five (5) years.

There is no testing requirement for the CO PSD Minor Limits for the pouring, cooling, and shakeout operations, because the CO limit of 6.0 lb/ton was determined based on an IDEM Memo from 2006. On August 11, 2006, IDEM Compliance and Enforcement Branch sent a memo to members of the foundry sector pertaining to unknown or unidentified carbon monoxide (CO) emissions generated by the pouring, cooling and shakeout operations common to foundries. The memo offered the foundries an opportunity for self disclosure of potential violations related to CO emissions from the pouring, cooling and shakeout operations. The memo suggested that several methods could be used to complete an evaluation including using a default emission factor of 6.0 lbs/ton of metal poured for the combined pouring, cooling and shakeout operations.

There is no testing requirement for the Shell Core Machines (EU-28) because unlimited emissions from this emission unit are small and the lb/ton PSD Minor limit is equivalent to the unlimited emission factor for PM, PM10, and PM2.5. Even though these emission factors are rated "E" (poor) in AP-42, the unlimited emissions are small and there is no control device for this operation.

Recommendation

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

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

An application for the purposes of this review was received on November 18, 2013. Additional information was received on January 27, 2014.

Conclusion

The operation of this stationary ductile iron foundry shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No. T057-33889-00002.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to *Sarah Street* 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) 232-8427 or toll free at 1-800-451-6027 extension 2-8427.

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

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Appendix A: Emissions Calculations
Summary
Unlimited PTE

Company Name: ID Castings, LLC
Source Address: 1600 South 8th Street, Noblesville, Indiana 46060
Part 70 Renewal No. : T057-33889-00002
Reviewer: Sarah Street

		Unlimited Potential to Emit (tons/year)									
		Criteria Pollutants							Greenhouse Gas Pollutants	Hazardous Air Pollutants	
Process Description / Emission Unit		**PM**	**PM10**	**PM2.5**	**SO_2**	**NOx**	**VOC**	**CO**	**CO2e**	**Metallic HAPs**	**Organic HAPs**
Metal Melting	EIF Furnace EU-3A	40.21	38.42	38.42	0.00	0.00	0.00	0.00	0	1.44	0.00
Raw Material Handling and Preparation	Melting Dept. - Charge Handling (EU-2)	26.81	16.08	16.08	0.00	0.00	0.00	0.00	0	0.14	0.00
	Melting Dept. - Magnesium Treatment (EU-6)	80.42	80.42	80.42	0.00	0.00	0.45	0.00	0	1.90	0.00
	Sand Handling (EU-17 through EU-20, EU-22 through EU-24, EU-26 & EU-27)	1,576.80	24.13	24.13	0.00	0.00	0.00	0.00	0	0.00	0.00
Pouring, Cooling, and Shakeout	Pouring/Casting Line (EU-8)	41.70	30.68	30.68	0.30	0.15	2.08	268.06	3,127	0.12	19.31
	Cooling Line (EU-8A)	20.85	20.85	20.85	0.00	0.00	0.00				
	Casting Shakeout ("A" Shaker EU-16)	142.96	100.07	100.07	0.00	0.00	53.61				
	Casting Shakeout (Shake-out Unit EU-11)	95.31	66.72	66.72	0.00	0.00	35.74				
Cleaning & Finishing	No. 3 Cleaning Machine (EU-34)	416.98	41.70	41.70	0.00	0.00	0.00	0.00	0	0.65	0.00
	Grinding (EU-32)	0.25	0.11	0.11	0.00	0.00	0.00	0.00	0	0.25	0.00
	Finishing (EU-33)	0.25	0.11	0.11	0.00	0.00	0.00	0.00	0	0.25	0.00
Core Making	Shell Core Machines (EU-28)	1.64	1.64	1.64	0.48	0.74	0.03	0.00	0	0.00	0.03
Combustion	Two (2) shell core machine burners	0.06	0.22	0.22	0.35	4.16	0.32	2.40	4,084	0.00	0.00
	Insignificant Combustion										
Fugitives	Paved & Unpaved Roads	0.77	0.15	0.02	0.00	0.00	0.00	0.00	0	0.00	0.00
	Total	**2,444.99**	**421.29**	**421.17**	**1.12**	**5.05**	**92.23**	**270.45**	**7,212**	**4.73**	**19.34**
										Total HAPs:	**24.07**

Appendix A: Emissions Calculations
Summary
Limited Emissions
Company Name: ID Castings, LLC
Source Address: 1600 South 8th Street, Noblesville, Indiana 46060
Part 70 Renewal No. : T057-33889-00002
Reviewer: Sarah Street

Limited Metal Melt Throughput (tons/yr)
17,500.00

			Limited Potential to Emit (tons/year)									
			Criteria Pollutants							Greenhouse Gas Pollutants	Hazardous Air Pollutants	
Process Description / Emission Unit		**Control Device**	**PM**	**PM10**	**PM2.5**	**SO_2**	**NOx**	**VOC**	**CO**	**CO2e**	**Metallic HAPs**	**Organic HAPs**
Metal Melting	EIF Furnace EU-3A	No control	7.88	7.53	7.53	0.00	0.00	0.00	0.00	0	0.28	0.00
Raw Material Handling and Preparation	Melting Dept. - Charge Handling (EU-2)	No control	5.25	3.15	3.15	0.00	0.00	0.00	0.00	0	0.03	0.00
	Melting Dept. - Magnesium Treatment (EU-6)	Sealed Reaction Chambers	0.79	0.79	0.79	0.00	0.00	0.09	0.00	0	0.37	0.00
	Sand Handling (EU-17 through EU-20, EU-22 through EU-24, EU-26 & EU-27)	Dust Collector DC-1	11.38	11.38	11.38	0.00	0.00	0.00	0.00	0	0.00	0.00
Pouring, Cooling, and Shakeout	Pouring/Casting Line (EU-8)					0.18	0.09	1.23	52.50	613	0.02	3.78
	Casting Shakeout (Shake-out Unit EU-11)					0.00	0.00	10.50				
	Casting Shakeout ("A" Shaker EU-16)	No control	28.00	19.60	19.60	0.00	0.00	10.50				
	Cooling Line (EU-8A)	No control	12.25	12.25	12.25	0.00	0.00	0.00				
Cleaning & Finishing	No. 3 Cleaning Machine (EU-34)	Baghouse BH-2	1.49	0.18	0.18	0.00	0.00	0.00	0.00	0	0.23	0.00
	Grinding (EU-32)	Baghouse BH-1	0.09	0.04	0.04	0.00	0.00	0.00	0.00	0	0.09	0.00
	Finishing (EU-33)	No control	0.09	0.04	0.04	0.00	0.00	0.00	0.00	0	0.09	0.00
Core Making	Shell Core Machines (EU-28)	No control	1.64	1.64	1.64	0.48	0.74	0.03	0.00	0	0.00	0.03
Combustion	Two (2) shell core machine burners	No control	0.06	0.22	0.22	0.35	4.16	0.32	2.40	4,084	0.00	0.00
	Insignificant Combustion											
Fugitives	Paved & Unpaved Roads	No control	0.77	0.15	0.02	0.00	0.00	0.00	0.00	0	0.00	0.00
		Total	**69.68**	**56.95**	**56.83**	**1.00**	**4.99**	**22.66**	**54.90**	**4,697**	**1.11**	**3.81**
											Total HAPs:	**4.92**

This table represents limited emissions only; control efficiencies are not taken into account in the calculations.
With no permit limits, Limited PTE = Unlimited PTE

Appendix A: Emissions Calculations
Ductile Iron Foundries
Metal Melting

Company Name: ID Castings, LLC
Source Address: 1600 South 8th Street, Noblesville, Indiana 46060
Part 70 Renewal No. : T057-33889-00002
Reviewer: Sarah Street

Emission Factors

Metal Melting		Emission Unit ID(s)	Maximum Throughput (tons/hr)	Uncontrolled Emission Factors (lb/ton)									
				PM	PM10	PM2.5	SO_2	NOx	VOC	CO	GHGs as CO2e	Metallic HAPs	Organic HAPs
Electric Induction Furnaces	(SCC-3-04-003-03)	EIF Furnace EU-3A	10.20	0.90	0.86	0.86	0	0	0	0	0	3.23E-02	0

Notes
Emission factors from AP-42 Chapter 12.10 Gray Iron Foundries and US EPA Fire Version 6.25, except as otherwise noted

Summary of Emissions (Uncontrolled)

Metal Melting		Uncontrolled Potential to Emit (tons/yr)									
		PM	PM10	PM2.5	SO_2	NOx	VOC	CO	GHGs as CO2e	Metallic HAPs	Organic HAPs
Electric Induction Furnaces	EIF Furnace EU-3A	40.21	38.42	38.42	0.00	0.00	0.00	0.00	0.00	1.44	0.00

Methodology
Uncontrolled PTE (tons/yr) = Maximum Throughput (tons/hr) * Emission Factor (lb/ton) * 8,760 hr/yr * 1 ton/2,000 lbs

Summary of Emissions (Controlled)

			Controlled Potential to Emit (tons/yr)									
Metal Melting	Control Device	Control Efficiency	PM	PM10	PM2.5	SO_2	NOx	VOC	CO	GHGs as CO2e	Metallic HAPs	Organic HAPs
EIF Furnace EU-3A	No control	0.00%	40.21	38.42	38.42	0.00	0.00	0.00	0.00	0.00	1.44	0.00

Methodology
Controlled PTE (tons/yr) = Uncontrolled PTE (tons/yr) * 1-Control Efficiency%

PSD Minor Limits

			Emission Factors (lb/ton)		
Emission Unit ID(s)	Limited Throughput (tons/yr)	Limited Throughput (tons/hr)	PM	PM10	PM2.5
EIF Furnace EU-3A	17,500.00	1.998	0.90	0.86	0.86

Summary of Emissions (Limited)

	Limited Potential to Emit (tons/yr)									
Metal Melting	PM	PM10	PM2.5	SO_2	NOx	VOC	CO	GHGs as CO2e	Metallic HAPs	Organic HAPs
EIF Furnace EU-3A	7.88	7.53	7.53	0.00	0.00	0.00	0.00	0.00	0.28	0.00

Methodology
Limited PTE (tons/yr) = Limited Throughput (tons/hr) * Emission Factor (lb/ton) * 8,760 hr/yr * 1 ton/2,000 lbs

Appendix A: Emissions Calculations
Ductile Iron Foundries
Raw Material Handling and Preparation

Company Name: ID Castings, LLC
Source Address: 1600 South 8th Street, Noblesville, Indiana 46060
Part 70 Renewal No. : T057-33889-00002
Reviewer: Sarah Street

Emission Factors

Raw Material Handling and Preparation		Emission Unit ID(s)	Maximum Throughput (tons/hr)	Uncontrolled Emission Factors (lb/ton)									
				PM	PM10	PM2.5	SO_2	NOx	VOC	CO	GHGs as CO2e	Metallic HAPs	Organic HAPs
Scrap and Charge Handling	(SCC 3-04-003-15)	Melting Dept. - Charge Handling (EU-2)	10.20	0.60	0.36	0.36	0	0	0	0	0	3.08E-03	0
Magnesium Treatment	(SCC 3-04-003-21)	Melting Dept. - Magnesium Treatment (EU-6)	10.20	1.80	1.80	1.80	0	0	0.01	0	0	4.25E-02	0
Sand Handling	(SCC 3-04-003-50)	Sand Handling (EU-17 through EU-20, EU-22 through EU-24, EU-26 & EU-27)	100.00	3.60	0.54	0.54	0	0	0	0	0	0	0

Notes
Emission factors from AP-42 Chapter 12.10 Gray Iron Foundries and US EPA Fire Version 6.25, except as otherwise noted

Summary of Emissions (Uncontrolled)

Raw Material Handling and Preparation	Uncontrolled Potential to Emit (tons/yr)									
	PM	PM10	PM2.5	SO_2	NOx	VOC	CO	GHGs as CO2e	Metallic HAPs	Organic HAPs
Melting Dept. - Charge Handling (EU-2)	26.81	16.08	16.08	0.00	0.00	0.00	0.00	0.00	0.14	0.00
Melting Dept. - Magnesium Treatment (EU-6)	80.42	80.42	80.42	0.00	0.00	0.45	0.00	0.00	1.90	0.00
Sand Handling (EU-17 through EU-20, EU-22 through EU-24, EU-26 & EU-27)	1,576.80	24.13	24.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Methodology
Uncontrolled PTE (tons/yr) = Maximum Throughput (tons/hr) * Emission Factor (lb/ton) * 8,760 hr/yr * 1 ton/2,000 lbs

Summary of Emissions (Controlled)

Raw Material Handling and Preparation	Control Device	Control Efficiency	Controlled Potential to Emit (tons/yr)									
			PM	PM10	PM2.5	SO_2	NOx	VOC	CO	GHGs as CO2e	Metallic HAPs	Organic HAPs
Melting Dept. - Charge Handling (EU-2)	No control	0.00%	26.81	16.08	16.08	0.00	0.00	0.00	0.00	0.00	0.14	0.00
Melting Dept. - Magnesium Treatment (EU-6)	Sealed Reaction Chambers	95.00%	4.02	4.02	4.02	0.00	0.00	0.02	0.00	0.00	0.09	0.00
Sand Handling (EU-17 through EU-20, EU-22 through EU-24, EU-26 & EU-27)	Dust Collector DC-1	99.90%	1.58	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Methodology
Controlled PTE (tons/yr) = Uncontrolled PTE (tons/yr) * 1-Control Efficiency%
Sealed Reaction Chambers is for PM, PM10, PM2.5, VOC, and Metallic HAPs
Dust Collector DC-1 control is for PM, PM10, PM2.5, and Metallic HAPs

Appendix A: Emissions Calculations
Ductile Iron Foundries
PSD Minor Limits
Raw Material Handling and Preparation and
Pouring, Cooling, Shakeout

Company Name: ID Castings, LLC
Source Address: 1600 South 8th Street, Noblesville, Indiana 46060
Part 70 Renewal No. : T057-33889-00002
Reviewer: Sarah Street

PSD Minor Limits

				Emission Factors (lb/ton)		
Emission Unit ID(s)	**Control Device**	**Limited Throughput (tons/yr)**	**Limited Throughput (tons/hr)**	**PM**	**PM10**	**PM2.5**
Melting Dept. - Charge Handling (EU-2)	No control	17,500.00	1.998	0.60	0.36	0.36
Melting Dept. - Magnesium Treatment (EU-6)	Sealed Reaction Chambers	17,500.00	1.998	0.09	0.09	0.09
Sand Handling (EU-17 through EU-20, EU-22 through EU-24, EU-26 & EU-27)	Dust Collector DC-1	17,500.00	1.998	1.30	1.30	1.30
Pouring/Casting Line (EU-8)						
Pouring/Casting Line (EU-9)						
Casting Shakeout (Shake-out Unit EU-11)						

Summary of Emissions (Limited)

	Limited Potential to Emit (tons/yr)									
	PM	**PM10**	**PM2.5**	**SO_2**	**NOx**	**VOC**	**CO**	**GHGs as CO2e**	**Metallic HAPs**	**Organic HAPs**
Melting Dept. - Charge Handling (EU-2)	5.25	3.15	3.15	0.00	0.00	0.00	0.00	0.00	0.03	0.00
Melting Dept. - Magnesium Treatment (EU-6)	0.79	0.79	0.79	0.00	0.00	0.09	0.00	0.00	0.37	0.00
Sand Handling (EU-17 through EU-20, EU-22 through EU-24, EU-26 & EU-27)	11.38	11.38	11.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pouring/Casting Line (EU-8)				0.18	0.09	1.23	52.50	612.50	0.02	3.78
Casting Shakeout (Shake-out Unit EU-11)				0.00	0.00	10.50				
Casting Shakeout ("A" Shaker EU-16)	28.00	19.60	19.60	0.00	0.00	10.50				
Cooling Line (EU-8A)	12.25	12.25	12.25	0.00	0.00	0.00				

Methodology
Limited PTE (tons/yr) = Limited Throughput (tons/hr) * Emission Factor (lb/ton) * 8,760 hr/yr * 1 ton/2,000 lbs
When no limits exist, Limited PTE (tons/yr) = Limited Throughput (tons/hr) * Unlimited Emission Factor (lb/ton) * 8,760 hr/yr * 1 ton/2,000 lbs

Appendix A: Emissions Calculations
Ductile Iron Foundries
Pouring, Cooling, and Shakeout
Company Name: ID Castings, LLC
Source Address: 1600 South 8th Street, Noblesville, Indiana 46060
Part 70 Renewal No. : T057-33889-00002
Reviewer: Sarah Street

Emission Factors

Pouring, Cooling, and Shakeout		Emission Unit ID(s)	Maximum Sand Throughput (tons/hr)	Maximum Metal Throughput (tons/hr)	Uncontrolled Emission Factors (lb/ton)									
					PM	PM10	PM2.5	SO_2	NOx	VOC	CO(1)	GHGs as CO2e(2)	Metallic HAPs(3)	Organic HAPs(4)
Pouring/Casting	(SCC 3-04-003-20)	Pouring/Casting Line (EU-8)	39.00	3.40	2.80	2.06	2.06	0.02	0.01	0.14	6.00	70	2.64E-03	0.4322
Cooling	(SCC 3-04-003-25)	Cooling Line (EU-8A)	39.00	3.40	1.40	1.40	1.40	0	0	0				
Casting Shakeout	(SCC 3-04-003-31)	Casting Shakeout ("A" Shaker EU-16)	39.00	10.20	3.20	2.24	2.24	0	0	1.20				
		Casting Shakeout (Shake-out Unit EU-11)	39.00	6.80	3.20	2.24	2.24	0	0	1.20				

Notes
Emission factors from AP-42 Chapter 12.10 Gray Iron Foundries and US EPA Fire Version 6.25, except as otherwise noted
Emission factors are in lb/ton of metal throughput
(1) CO emission factor based on "CO Emissions Guidelines" notice for CO emissions from pouring, cooling and shakeout operations combined.
(2) GHGs as CO2e emissions is equal to CO2 emissions. CO2 emission factors from: Casting Emission Reduction Program (CERP), Carbon Monoxide and Carbon Dioxide Emissions in Metalcasting Pouring, Cooling and Shakeout Operations, March 2008, page 9. For shell mold process operations ((based on this document, 10 lb/ton is the emission factor for greensand casting operations)).
(3) Metallic HAPs emission factor for pouring/cooling and shakeout combined are from Kennedy Valve Engineering Estimate.
(4) Organic HAPs emission factor for pouring/cooling and shakeout combined are from CERP Study.

Summary of Emissions (Uncontrolled)

Pouring, Cooling, and Shakeout		Uncontrolled Potential to Emit (tons/yr)									
		PM	PM10	PM2.5	SO_2	NOx	VOC	CO	GHGs as CO2e	Metallic HAPs	Organic HAPs
Pouring/Casting	Pouring/Casting Line (EU-8)	41.70	30.68	30.68	0.30	0.15	2.08	268.06	3,127.32	0.12	19.31
Cooling	Cooling Line (EU-8A)	20.85	20.85	20.85	0.00	0.00	0.00				
Casting Shakeout	Casting Shakeout ("A" Shaker EU-16)	142.96	100.07	100.07	0.00	0.00	53.61				
	Casting Shakeout (Shake-out Unit EU-11)	95.31	66.72	66.72	0.00	0.00	35.74				

Methodology
Uncontrolled PTE (tons/yr) = Maximum Throughput (tons/hr) * Emission Factor (lb/ton) * 8,760 hr/yr * 1 ton/2,000 lbs

Summary of Emissions (Controlled)

Pouring, Cooling, and Shakeout	Control Device	Control Efficiency	Controlled Potential to Emit (tons/yr)									
			PM	PM10	PM2.5	SO_2	NOx	VOC	CO	GHGs as CO2e	Metallic HAPs	Organic HAPs
Pouring/Casting Line (EU-8)	Dust Collector DC-1	99.90%	0.04	0.03	0.03	0.30	0.15	2.08	268.06	3,127.32	0.12	19.31
Cooling Line (EU-8A)	No control	0.00%	20.85	20.85	20.85	0.00	0.00	0.00				
Casting Shakeout ("A" Shaker EU-16)	No control	0.00%	142.96	100.07	100.07	0.00	0.00	53.61				
Casting Shakeout (Shake-out Unit EU-11)	Dust Collector DC-1	99.90%	0.10	0.07	0.07	0.00	0.00	35.74				

Methodology
Controlled PTE (tons/yr) = Uncontrolled PTE (tons/yr) * 1-Control Efficiency%

Appendix A: Emissions Calculations
Ductile Iron Foundries
Cleaning & Finishing

Company Name: ID Castings, LLC
Source Address: 1600 South 8th Street, Noblesville, Indiana 46060
Part 70 Renewal No. : T057-33889-00002
Reviewer: Sarah Street

Emission Factors

Cleaning & Finishing		Emission Unit ID(s)	Maximum Throughput (tons/hr)	Uncontrolled Emission Factors (lb/ton)									
				PM	PM10	PM2.5	SO_2	NOx	VOC	CO	GHGs as CO2e	Metallic HAPs	Organic HAPs
Cleaning	(SCC 3-04-003-40)	No. 3 Cleaning Machine (EU-34)	5.60	17.00	1.70	1.70	0	0	0	0	0	2.63E-02	0
Castings Finishing	(SCC 3-04-003-60)	Grinding (EU-32)	5.60	0.01	0.0045	0.0045	0	0	0	0	0	0.01	0
Castings Finishing	(SCC 3-04-003-60)	Finishing (EU-33)	5.60	0.01	0.0045	0.0045	0	0	0	0	0	0.01	0

Notes
Emission factors from AP-42 Chapter 12.10 Gray Iron Foundries and US EPA Fire Version 6.25, except as otherwise noted

Summary of Emissions (Uncontrolled)

	Uncontrolled Potential to Emit (tons/yr)									
Cleaning & Finishing	PM	PM10	PM2.5	SO_2	NOx	VOC	CO	GHGs as CO2e	Metallic HAPs	Organic HAPs
No. 3 Cleaning Machine (EU-34)	416.98	41.70	41.70	0.00	0.00	0.00	0.00	0.00	0.65	0.00
Grinding (EU-32)	0.25	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.25	0.00
Finishing (EU-33)	0.25	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.25	0.00

Methodology
Uncontrolled PTE (tons/yr) = Maximum Throughput (tons/hr) * Emission Factor (lb/ton) * 8,760 hr/yr * 1 ton/2,000 lbs

Summary of Emissions (Controlled)

			Controlled Potential to Emit (tons/yr)									
Cleaning & Finishing	Control Device	Control Efficiency	PM	PM10	PM2.5	SO_2	NOx	VOC	CO	GHGs as CO2e	Metallic HAPs	Organic HAPs
No. 3 Cleaning Machine (EU-34)	Baghouse BH-2	80.00%	83.40	8.34	8.34	0.00	0.00	0.00	0.00	0.00	0.13	0.00
Grinding (EU-32)	Baghouse BH-1	99.00%	0.002	0.001	0.001	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Finishing (EU-33)	No control	0.00%	0.25	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.25	0.00

Methodology
Controlled PTE (tons/yr) = Uncontrolled PTE (tons/yr) * 1-Control Efficiency%
Baghouse BH-1 and BH-2 controls are for PM, PM10, PM2.5, and Metallic HAPs

PSD Minor Limits

				Emission Factors (lb/ton)		
Emission Unit ID(s)	Control Device	Limited Throughput (tons/yr)	Limited Throughput (tons/hr)	PM	PM10	PM2.5
No. 3 Cleaning Machine (EU-34)	Baghouse BH-2	17,500.00	1.998	0.17	0.02	0.02
Grinding (EU-32)	Baghouse BH-1	17,500.00	1.998	0.01	0.0045	0.0045
Finishing (EU-33)	No control	17,500.00	1.998	0.01	0.0045	0.0045

Summary of Emissions (Limited)

		Limited Potential to Emit (tons/yr)									
Cleaning & Finishing	Control Device	PM	PM10	PM2.5	SO_2	NOx	VOC	CO	GHGs as CO2e	Metallic HAPs	Organic HAPs
No. 3 Cleaning Machine (EU-34)	Baghouse BH-2	1.49	0.18	0.18	0.00	0.00	0.00	0.00	0.00	0.23	0.00
Grinding (EU-32)	Baghouse BH-1	0.09	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.09	0.00
Finishing (EU-33)	No control	0.09	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.09	0.00

Methodology
Limited PTE (tons/yr) = Limited Throughput (tons/hr) * Emission Factor (lb/ton) * 8,760 hr/yr * 1 ton/2,000 lbs

Appendix A: Emissions Calculations
Ductile Iron Foundries
Core Making
Company Name: ID Castings, LLC
Source Address: 1600 South 8th Street, Noblesville, Indiana 46060
Part 70 Renewal No. : T057-33889-00002
Reviewer: Sarah Street

Emission Factors

Core Making		Emission Unit ID(s)	Maximum Throughput (tons/hr)	Uncontrolled Emission Factors (lb/ton)									
				PM	PM10	PM2.5	SO_2	NOx	VOC	CO	GHGs as CO2e	Metallic HAPs	Organic HAPs
Core Machines	(SCC 3-04-003-19)	Shell Core Machines (EU-28)	0.34	1.10	1.10	1.10							
	(SCC 3-04-003-70)						0.32	0.50	0.02	0	0	0	0.02

Notes
Emission factors from AP-42 Chapter 12.10 Gray Iron Foundries and US EPA Fire Version 6.25, except as otherwise noted
Organic HAPs = formaldehyde

Summary of Emissions (Uncontrolled)

Core Making		Uncontrolled Potential to Emit (tons/yr)									
		PM	PM10	PM2.5	SO_2	NOx	VOC	CO	GHGs as CO2e	Metallic HAPs	Organic HAPs
Core Machines	Shell Core Machines (EU-28)	1.64	1.64	1.64	0.48	0.74	0.03	0.00	0.00	0.00	0.03

Methodology
Uncontrolled PTE (tons/yr) = Maximum Throughput (tons/hr) * Emission Factor (lb/ton) * 8,760 hr/yr * 1 ton/2,000 lbs

Summary of Emissions (Controlled)

Core Making	Control Device	Control Efficiency	Controlled Potential to Emit (tons/yr)									
			PM	PM10	PM2.5	SO_2	NOx	VOC	CO	GHGs as CO2e	Metallic HAPs	Organic HAPs
Shell Core Machines (EU-28)	No control	0.00%	1.64	1.64	1.64	0.48	0.74	0.03	0.00	0.00	0.00	0.03

Methodology
Controlled PTE (tons/yr) = Uncontrolled PTE (tons/yr) * 1-Control Efficiency%

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

Company Name: **ID Castings, LLC**
Source Address: **1600 South 8th Street, Noblesville, Indiana 46060**
Part 70 Renewal No. : **T057-33889-00002**

Reviewer: **Sarah Street**

Emission unit	MMBtu/hr
Core machine	2.09
Core machine	2.09
heating ladle torches	1.00
core drying conveyor heating torch	0.50
auto pour torches	1.00

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year
6.68	639.53

SO2 Emission factor = 0.10 x S
S = Sulfur Content = 10.90 grains/100ft^3

	Pollutant						
	PM*	PM10*	direct PM2.5**	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	0.2	0.7	0.7	1.1	13.0	1.0	7.5
				(0.10S)		**TOC value	
Potential Emission in tons/yr	0.1	0.2	0.2	0.3	4.2	0.3	2.4

*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.

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/kgal	12,500	0.2	0.9
Potential Emission in tons/yr	3,997	0.1	0.3
Summed Potential Emissions in tons/yr	3,997		
CO2e Total in tons/yr	4,084		

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

The CO2 Emission Factor for Propane is 12500. The CO2 Emission Factor for Butane is 14300.
Emission Factors are from AP 42 (7/08), Table 1.5-1 (SCC #1-02-010-02)
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton
CO2e (tons/yr)= CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).

Appendix A: Emissions Calculations
Ductile Iron Foundries
Fugitives from Paved & Unpaved Roads
Company Name: ID Castings, LLC
Source Address: 1600 South 8th Street, Noblesville, Indiana 46060
Part 70 Renewal No. : T057-33889-00002
Reviewer: Sarah Street

VEHICLE TRAFFIC ON PAVED AND UNPAVED ROADS

Estimated Regulated Criteria Air Pollutant Emission Rate

		PM Emissions		PM_{10} Emissions		$PM_{2.5}$ Emissions	
Air Emission Source	**Total VMT**	**Emission Factor (lb/VMT)**	**Emissions (tons/yr)**	**Emission Factor (lb/VMT)**	**Emissions (tons/yr)**	**Emission Factor (lb/VMT)**	**Emissions (tons/yr)**
In-Plant Paved Roads	152.08	10.19	0.77	1.99	0.15	0.30	0.02

Methodology:

1100 ft per trip X 2 trips per round trip ÷ 5280 ft per mile = 0.4167 VMT/round trip
0.4167 VMT per round trip X 1 round trip per day X 365 days per year = 152.08 VMT/year

AP-42, Section 13.2.1 - Paved Roads
lbs/VMT: E = {[k*(sL/2)^0.65 * (W/3)^1.5] - C} * (1 - P/4N)
Where:

E = Particulate Matter Emission Factor			
k (for PM) = Particle Size Number	0.082	lb/VMT	(Table 13.2.1-1)
k (for PM10) = Particle Size Number	0.016	lb/VMT	(Table 13.2.1-1)
k (for PM2.5) = Particle Size Number	0.0024	lb/VMT	(Table 13.2.1-1)
sL = Road Surface Silt Loading	9.7	g/m^2	(Table 13.2.1-4)
W = Average Vehicle Weight	40	tons	
C (for PM) = Exhaust Emission Factor	0.00047	lb/VMT	(Table 13.2.1-2)
C (for PM10) = Exhaust Emission Factor	0.00047	lb/VMT	(Table 13.2.1-2)
C (for PM2.5) = Exhaust Emission Factor	0.00036	lb/VMT	(Table 13.2.1-2)
P = Number of "wet" days during an averaging period	125	days	(Figure 13.2.1-2)
N = number of days in averaging	365	days	

Notes:
PM/PM10/PM2.5, tons/yr = Total VMT * EF, lb/VMT * ton/2000 lbs

Appendix A: Emissions Calculations
Compliance with 326 IAC 6-3-2 PM Limitations

Company Name: **ID Castings, LLC**
Source Address: **1600 South 8th Street, Noblesville, Indiana 46060**
Part 70 Renewal No. : **T057-33889-00002**
Reviewer: **Sarah Street**

	Emission Units	Control Device	Process Weight Rate (tons/hr)	Unlimited PM (lb/hr)	Controlled PM (lb/hr)	**PM Limit (lb/hr)**	Able to Comply?
Metal Melting	EIF Furnace EU-3A	No control	10.20	9.18	9.18	**19.43**	Y - without control
Raw Material Handling and Preparation	Melting Dept. - Charge Handling (EU-2)	No control	10.20	6.12	6.12	**19.43**	Y - without control
	Melting Dept. - Magnesium Treatment (EU-6)	Sealed Reaction Chambers	10.20	18.36	0.92	**19.43**	Y - without control
	Sand Handling (EU-17 through EU-20, EU-22 through EU-24, EU-26 & EU-27)	**Dust Collector DC-1**	100.00	360.00	0.36	**51.28**	**Y - with control**
Pouring, Cooling, and Shakeout	Pouring/Casting Line (EU-8)	Dust Collector DC-1	42.40	9.52	0.01	**43.06**	Y - without control
	Cooling Line (EU-8A)	No control	42.40	4.76	4.76	**43.06**	Y - without control
	Casting Shakeout ("A" Shaker EU-16)	No control	49.20	32.64	32.64	**44.43**	Y - without control
	Casting Shakeout (Shake-out Unit EU-11)	Dust Collector DC-1	45.80	21.76	0.02	**43.76**	Y - without control
Cleaning & Finishing	No. 3 Cleaning Machine (EU-34)*	**Baghouse BH-2**	20.60	95.20	19.04	**31.12**	**Y - with control**
	Grinding (EU-32)	Baghouse BH-1	5.60	0.06	0.001	**13.00**	Y - without control
	Finishing (EU-33)	No control	5.60	0.06	0.06	**13.00**	Y - without control
Core Making	Shell Core Machines (EU-28)	No control	0.34	0.37	0.37	**1.99**	Y - without control

*Process weight rate includes the weight of the steel shot plus the weight of the castings

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

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

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

$$E = 55.0 * P^{0.11} - 40$$

Where:

E=Rate of emission in pounds per hour.
P=Process weight rate in tons per hour.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

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

TO: Brian Duffy
ID Castings, LLC
1600 South 8th Street
Noblesville, IN 46060

DATE: July 21, 2014

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

SUBJECT: Final Decision
Part 70 Operating Permit Renewal
057-33889-00002

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

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

A copy of the final decision and supporting materials has also been sent via standard mail to:
Mark Overton, Keramida Environmental, Inc.
OAQ Permits Branch Interested Parties List

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

Final Applicant Cover letter.dot 6/13/2013

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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

July 21, 2014

TO: Noblesville Public Library

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

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

Applicant Name: ID Castings, LLC
Permit Number: 057-33889-00002

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

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

Enclosures
Final Library.dot 6/13/2013

Mail Code 61-53

IDEM Staff	PWAY July 21, 2014 ID Castings LLC 057-33889-00002 (final)			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Brian Duffy ID Castings LLC 1600 South 8th Street Noblesville IN 46060 (Source CAATS)									
2		Noblesville City Council and Mayors Office 16 S. 10th St. Noblesville IN 46060 *(Local Official)*									
3		Hamilton County Health Department 18030 Foundation Dr. #A Noblesville IN 46060-5405 *(Health Department)*									
4		Mr. Mack Overton Keramida Environmental, Inc. 401 North College Avenue Indianapolis IN 46202 *(Consultant)*									
5		Hamilton County Board of Commissioners One Hamilton County Square, Suite 157 Noblesville IN 46064 *(Local Official)*									
6		Noblesville Public Library 1 Library Plaza Noblesville IN 46060 *(Library)*									
7		Glidden Fence Co. 17804 Spring Mill Rd Westfield IN 46074 *(Affected Party)*									
8		Environmental Field Services, Inc. 40 SR 32 W Westfield IN 46074 *(Affected Party)*									
9											
10											
11											
12											
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