INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

To:	Interested Parties
Date:	September 19, 2014
From:	Matthew Stuckey, Chief Permits Branch Office of Air Quality
Source Name:	ID Castings, LLC
Permit Level:	Title V – Significant Permit Modification
Permit Number:	057-34576-00002
Source Location:	1600 South 8th Street, Noblesville, Indiana
Type of Action Taken:	Modification at an existing source Revisions to permit requirements

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 34576.

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 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, 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 13-15-7-3 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 Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of a Title V operating permit 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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Brian Duffy
ID Castings, LLC
1600 South 8th Street
Noblesville, IN 46060

September 19, 2014

Re: 057-34576-00002
Significant Permit Modification to
Part 70 Renewal No.: T057-33889-00002

Dear Mr. Duffy:

ID Castings, LLC was issued a Part 70 Operating Permit Renewal No. T057-33889-00002 on July 21, 2014 for a stationary ductile iron foundry located at 1600 South 8th Street, Noblesville, Indiana. An application requesting changes to this permit was received on May 7, 2014. Pursuant to the provisions of 326 IAC 2-7-12, a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

Please find attached the entire Part 70 Operating Permit as modified. The permit references the below listed attachment. Since this attachment has been provided in previously issued approvals for this source, IDEM OAQ has not included a copy of this attachment with this modification:

Attachment A: 40 CFR 63, Subpart ZZZZZ, Iron and Steel Foundries Area Sources NESHAP

Previously issued approvals for this source containing these attachments are available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.

Federal rules under Title 40 of United States Code of Federal Regulations may also be found on the U.S. Government Printing Office's Electronic Code of Federal Regulations (eCFR) website, located on the Internet at: http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40tab_02.tpl.

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

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Sarah Street, of my staff, at 317-232-8427 or 1-800-451-6027, and ask for extension 2-8427.

Sincerely,

Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

Attachment(s): Updated Permit, Technical Support Document and Appendix A

cc: File - Hamilton County
Hamilton County Health Department
U.S. EPA, Region V
Compliance and Enforcement Branch

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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.: 057-33889-00002	
Issued by: Original Signed Iryn Calilung, Section Chief, Permits Branch Office of Air Quality	Issuance Date: July 21, 2014 Expiration Date: July 21, 2019

Significant Permit Modification No.: 057-34576-00002	
Issued by: Iryn Calilung, Section Chief, Permits Branch Office of Air Quality	Issuance Date: September 19, 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) "A", "B", and "C" shakers, 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 and approved in 2014 for reconstruction, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(3) One (1) overhead shaker screen, identified as EU-18, constructed in 1971 and approved in 2014 for reconstruction, 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 and approved in 2014 for reconstruction, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(5) One (1) vibratory conveyor, identified as EU-37, approved in 2014 for construction, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

And the following storage bins:

(6) 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;

(7) 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;

(8) 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;

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

(10) 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) Didion 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).

(h) One (1) Hunter 1 pouring/casting line, identified as EU-35, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour,

with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(i) One (1) Hunter 1 cooling line and shake-out unit, collectively identified as EU-35A, consisting of the following:

(1) One (1) Hunter 1 cooling line, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(2) One (1) Hunter 1 shake-out unit, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(j) One (1) Hunter 2 pouring/casting line, identified as EU-36, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(k) One (1) Hunter 2 cooling line and shake-out unit, collectively identified as EU-36A, consisting of the following:

(1) One (1) Hunter 2 cooling line, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(2) One (1) Hunter 2 shake-out unit, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

Note: Dust collector DC-1 is also approved in 2014 to increase its air flow to accommodate Hunter 1 and Hunter 2 lines.

Finishing Operations

(l) 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;

(m) 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

(n) 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]

(l) 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) "A", "B", and "C" shakers, 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 and approved in 2014 for reconstruction, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(3) One (1) overhead shaker screen, identified as EU-18, constructed in 1971 and approved in 2014 for reconstruction, 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 and approved in 2014 for reconstruction, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(5) One (1) vibratory conveyor, identified as EU-37, approved in 2014 for construction, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

And the following storage bins:

(6) 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;

(7) 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;

(8) 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;

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

(10) 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) Didion 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).

(h) One (1) Hunter 1 pouring/casting line, identified as EU-35, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(i) One (1) Hunter 1 cooling line and shake-out unit, collectively identified as EU-35A, consisting of the following:

(1) One (1) Hunter 1 cooling line, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(2) One (1) Hunter 1 shake-out unit, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(j) One (1) Hunter 2 pouring/casting line, identified as EU-36, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(k) One (1) Hunter 2 cooling line and shake-out unit, collectively identified as EU-36A, consisting of the following:

(1) One (1) Hunter 2 cooling line, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(2) One (1) Hunter 2 shake-out unit, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

Note: Dust collector DC-1 is also approved in 2014 to increase its air flow to accommodate Hunter 1 and Hunter 2 lines.

(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)
Disa Pouring/Casting Line (EU-8)	6.0 (combined)
Hunter 1 pouring/casting line	
Hunter 2 pouring/casting line	
Hunter 1 cooling line	
Hunter 2 cooling line	
Hunter 1 shake-out unit	
Hunter 2 shake-out unit	
Casting Shakeout (Didion shake-out Unit EU-11)	
Casting Shakeout ("A", "B", and "C" shakers EU-16)	
Disa 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 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)
Sand Handling (EU-16 through EU-20, EU-22 through EU-24, EU-26, EU-27, EU-37) *	Dust collector DC-1	1.3	1.3	1.3
Disa Pouring/Casting Line (EU-8)				
Hunter 1 pouring/casting line				
Hunter 2 pouring/casting line				
Hunter 1 cooling line				
Hunter 2 cooling line				
Hunter 1 shake-out unit				
Hunter 2 shake-out unit				
Casting Shakeout (Didion shake-out Unit EU-11)				
Disa Cooling Line (EU-8A)	N/A	1.4	1.4	1.4
Casting Shakeout ("A", "B", and "C" shakers EU-16)	N/A	3.2	2.24	2.24

* Sand handling units EU-16 and EU-24 are uncontrolled.

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 HAPs Limits [40 CFR Part 63]

In order to render the requirements of 40 CFR Part 63, Subpart EEEEE (National Emission Standard for Hazardous Air Pollutants for Iron and Steel Foundries) not applicable, the combined organic HAPs emissions from the following operations shall not exceed the emission limit listed in the table below:

Emission Units	Organic HAPs Emission Limit (pounds per ton of iron throughput)
Disa Pouring/Casting Line (EU-8)	0.4322 (combined)
Hunter 1 pouring/casting line	
Hunter 2 pouring/casting line	
Hunter 1 cooling line	
Hunter 2 cooling line	
Hunter 1 shake-out unit	
Hunter 2 shake-out unit	
Casting Shakeout (Didion shake-out Unit EU-11)	
Casting Shakeout ("A", "B", and "C" shakers EU-16)	
Disa Cooling Line (EU-8A)	

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 HAPs from other emission units at this source, shall limit the source-wide single HAPs to less than ten (10) tons per year and the source-wide combination of HAPs to less than twenty-five (25) tons per year and shall render 40 CFR Part 63, Subpart EEEEE (National Emission Standard for Hazardous Air Pollutants for Iron and Steel Foundries) not applicable.

D.2.3 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-16 through EU-20, EU-22 through EU-24, EU-26, EU-27, EU-37) *	100.00	51.28
Disa Pouring/Casting Line (EU-8)	42.40	43.06
Disa Cooling Line (EU-8A)	42.40	43.06
Casting Shakeout ("A", "B", and "C" shakers EU-16)	49.20	44.43
Casting Shakeout (Didion shake-out Unit EU-11)	45.80	43.76
Hunter 1 pouring/casting line	46.00	43.80
Hunter 2 pouring/casting line	46.00	43.80
Hunter 1 cooling line	46.00	43.80
Hunter 2 cooling line	46.00	43.80
Hunter 1 shake-out unit	46.00	43.80
Hunter 2 shake-out unit	46.00	43.80

* Sand handling units EU-16 and EU-24 are uncontrolled.

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.2.4 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", "B", and "C" Shakers 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", "B", and "C" Shakers 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", "B", and "C" Shakers 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.2.5 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.2.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

PM Testing

(a) Dust collector DC-1 – upon initial start up of DC-1 and prior to the installation of Hunter 1 and Hunter 2 Lines

In order to demonstrate compliance with Conditions D.2.1(b) and D.2.3, the Permittee shall perform PM testing not later than 180 days after startup of Dust collector DC-1 (stack 003), controlling the following:

Disa casting machines (EU-8),
Didion 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 if either Hunter 1 or Hunter 2 are not constructed.

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

(b) Dust collector DC-1 – upon initial start up of either Hunter 1 or Hunter 2

In order to demonstrate compliance with Conditions D.2.1(b) and D.2.3, not later than 180 days after startup of the Hunter 1 pouring/casting line, Hunter 2 pouring/casting line, Hunter 1 cooling line, Hunter 2 cooling line, Hunter 1 shake-out unit, and Hunter 2 shake-out unit, the Permittee shall perform PM testing of Dust collector DC-1 (stack 003), controlling the following:

Hunter 1 pouring/casting line,
Hunter 2 pouring/casting line,
Hunter 1 cooling line,
Hunter 2 cooling line,
Hunter 1 shake-out unit,
Hunter 2 shake-out unit,
Disa casting machines (EU-8),
Didion 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),
vibratory conveyor (EU-37),
indoor new sand storage bin (EU-26), and
mag belt/bin top belt (EU-27),

utilizing methods as approved by the Commissioner.

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

(c) Dust collector DC-1 - after construction of either Hunter 1 or Hunter 2, or both, and fulfilling testing requirement (b)

In order to demonstrate compliance with Conditions D.2.1(b) and D.2.3, not later than five (5) years after the most recent valid compliance demonstration for Dust collector DC-1 (stack 003), the Permittee shall perform PM testing of Dust collector DC-1 (stack 003), controlling the following:

Hunter 1 pouring/casting line,
Hunter 2 pouring/casting line,
Hunter 1 cooling line,
Hunter 2 cooling line,
Hunter 1 shake-out unit,
Hunter 2 shake-out unit,
Disa casting machines (EU-8),
Didion 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),
vibratory conveyor (EU-37),
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 most recent valid compliance demonstration of DC-1.

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

PM10 and PM2.5 Testing

(d) Dust collector DC-1 – upon initial start up of DC-1 and prior to the installation of Hunter 1 and Hunter 2 Lines

In order to demonstrate compliance with Conditions D.2.1(b) and D.2.3, 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:

Disa casting machines (EU-8),
Didion 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 if either Hunter 1 or Hunter 2 are not constructed.

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.

(e) Dust collector DC-1 – upon initial start up of either Hunter 1 or Hunter 2

In order to demonstrate compliance with Conditions D.2.1(b) and D.2.3, not later than 180 days after startup of the Hunter 1 pouring/casting line, Hunter 2 pouring/casting line, Hunter 1 cooling line, Hunter 2 cooling line, Hunter 1 shake-out unit, and Hunter 2 shake-out unit, the Permittee shall perform PM10 and PM2.5 testing of Dust collector DC-1 (stack 003), controlling the following:

Hunter 1 pouring/casting line,
Hunter 2 pouring/casting line,
Hunter 1 cooling line,
Hunter 2 cooling line,
Hunter 1 shake-out unit,
Hunter 2 shake-out unit,
Disa casting machines (EU-8),
Didion 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),
vibratory conveyor (EU-37),
indoor new sand storage bin (EU-26), and
mag belt/bin top belt (EU-27),

utilizing methods as approved by the Commissioner.

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.

(f) Dust collector DC-1 - after construction of either Hunter 1 or Hunter 2, or both, and fulfilling testing requirement (e)

In order to demonstrate compliance with Conditions D.2.1(b) and D.2.3, not later than five (5) years after the most recent valid compliance demonstration for Dust collector DC-1 (stack 003), the Permittee shall perform PM10 and PM2.5 testing of Dust collector DC-1 (stack 003), controlling the following:

Hunter 1 pouring/casting line,
Hunter 2 pouring/casting line,
Hunter 1 cooling line,
Hunter 2 cooling line,
Hunter 1 shake-out unit,
Hunter 2 shake-out unit,
Disa casting machines (EU-8),
Didion 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),
vibratory conveyor (EU-37),
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 most recent valid compliance demonstration of DC-1.

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.

HAPs Testing

(g) In order to demonstrate compliance with Condition D.2.2, the Permittee shall perform one-time HAPs testing on the following:

Disa Pouring/Casting Line (EU-8)
Hunter 1 pouring/casting line,
Hunter 2 pouring/casting line,
Hunter 1 cooling line,
Hunter 2 cooling line,
Hunter 1 shake-out unit,
Hunter 2 shake-out unit,
Casting Shakeout (Didion shake-out Unit EU-11),
Casting Shakeout ("A", "B", and "C" shakers EU-16), and
Disa Cooling Line (EU-8A)

using methods as approved by the Commissioner.

VOC Testing

(h) In order to demonstrate compliance with Condition D.2.4(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", "B", and "C" Shakers EU-16) operation, using methods as approved by the Commissioner.

(i) In order to demonstrate compliance with Condition D.2.4(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 (Didion shake-out Unit EU-11) operation, using methods as approved by the Commissioner.

(j) 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.2.7 Particulate Control

(a) In order to comply with Conditions D.2.1 and D.2.3, the dust collector DC-1 for particulate control shall be in operation at all times whenever any of the following:
Hunter 1 pouring/casting line,
Hunter 2 pouring/casting line,
Hunter 1 cooling line,
Hunter 2 cooling line,
Hunter 1 shake-out unit,
Hunter 2 shake-out unit,
Disa 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),
vibratory conveyor (EU-37),
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.2.8 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.2.9 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:

Hunter 1 pouring/casting line,
Hunter 2 pouring/casting line,
Hunter 1 cooling line,
Hunter 2 cooling line,
Hunter 1 shake-out unit,
Hunter 2 shake-out unit,
Disa 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),
vibratory conveyor (EU-37),
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.2.10 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.2.11 Record Keeping Requirements

(a) To document the compliance status with Condition D.2.8, 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.2.9, the Permittee shall maintain daily records of the pressure drop of dust collector DC-1 as required by Condition D.2.9. 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

(l) 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;

(m) 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

(n) 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: _____

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

□ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

□ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

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

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

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

Indiana Department of Environmental Management
Office of Air Quality

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

Source Description and Location

Source Name:	**ID Castings, LLC**
Source Location:	**1600 South 8th Street, Noblesville, IN**
County:	**Hamilton**
SIC Code:	**3321 (Gray and Ductile Iron Foundries)**
Operation Permit No.:	**T057-33889-00002**
Operation Permit Issuance Date:	**July 21, 2014**
Source Modification No.:	**057-34505-00002**
Permit Modification No.:	**057-34576-00002**
Permit Reviewer:	**Sarah Street**

Existing Approvals

The source was issued Part 70 Operating Permit Renewal No. T057-33889-00002 on July 21, 2014. There have been no subsequent approvals issued.

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. 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.

Source Status - Existing Source

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

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

These emissions are based upon Technical Support Document to Part 70 Permit Renewal No. T057-33889-00002, issued on July 21, 2014.

(a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no PSD regulated pollutant, excluding GHGs, is emitted at a rate of one hundred (100) tons per year or more and it is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

(b) The source wide GHG emissions are less than one hundred thousand (<100,000) tons of CO_2 equivalent (CO_2e) emissions per year. GHG emissions do not affect the source PSD status.

(c) This existing source is not a major source of HAPs, as defined in 40 CFR 63.2, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than

twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

Description of the Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by ID Castings, LLC on May 7, 2014, relating to the following:

(1) the addition of two (2) new mold lines with associated cooling tables and shake-out units, which will be vented to an existing dust collector (DC-1),

(2) the expansion of the air flow of the existing dust collector (DC-1) to control emissions from the new units, and

(3) the reconstruction of existing sand handling operations.

The following is a list of the proposed new emission unit(s) and pollution control device(s):

(a) One (1) Hunter 1 pouring/casting line, identified as EU-35, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(b) One (1) Hunter 1 cooling line and shake-out unit, collectively identified as EU-35A, consisting of the following:

(1) One (1) Hunter 1 cooling line, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(2) One (1) Hunter 1 shake-out unit, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(c) One (1) Hunter 2 pouring/casting line, identified as EU-36, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(d) One (1) Hunter 2 cooling line and shake-out unit, collectively identified as EU-36A, consisting of the following:

(1) One (1) Hunter 2 cooling line, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(2) One (1) Hunter 2 shake-out unit, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

The following is a list of descriptive changes to existing sand handling equipment, at the request of the source. The source has indicated that these changes qualify as a reconstruction, as defined in 326 IAC 1-2-65; however, IDEM OAQ will not be making any determination in this regard. For the purposes of this modification, however, the potential to emit of the sand handling equipment will be included in the total potential to emit of the modification. See Permit Level Determination section below.

Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

(a) 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)~~ **"A", "B", and "C" shakers**, 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 **and approved in 2014 for reconstruction**, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(3) **One (1)** ~~Overhead~~ **overhead** shaker screen, identified as EU-18, constructed in 1971 **and approved in 2014 for reconstruction**, 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 **and approved in 2014 for reconstruction**, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(5) One (1) vibratory conveyor, identified as EU-37, approved in 2014 for construction, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

And the following storage bins:

~~(5)~~**(6)** 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)~~**(7)** 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)~~**(8)** 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)~~**(9)** One (1) West outdoor sand storage bin, identified as EU-24, constructed in 1971, with a capacity of 150 tons, with emissions uncontrolled;

~~(9)~~**(10)** 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;

In addition, the source has requested the following descriptive change to the existing shake-out unit:

Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

(a) One (1) **Didion** 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;

Enforcement Issues

There are no pending enforcement actions.

Stack Summary

Stack ID	Operation	Height (ft)	Outlet Concentration (gr/dscf)	Flow Rate (acfm)	Temperature (^{0}F)
Dust Collector DC-1 (Stack 003)	Sand Handling (EU-16 through EU-20, EU-22 through EU-24, EU-26, EU-27, EU-37) **	60	0.003	210,000	125
	Disa Pouring/Casting Line (EU-8)				
	Hunter 1 pouring/casting line *				
	Hunter 2 pouring/casting line *				
	Hunter 1 cooling line *				
	Hunter 2 cooling line *				
	Hunter 1 shake-out unit *				
	Hunter 2 shake-out unit *				
	Casting Shakeout (Didion shake-out Unit EU-11)				

* New units with this modification.
** Reconstructed units with this modification. Sand handling units EU-16 and EU-24 are uncontrolled.

Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

Permit Level Determination – Part 70 Modification to an Existing Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency."

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit. If the control equipment has been determined to be integral, the table reflects the PTE after consideration of the integral control device.

Increase in PTE Before Controls of the Modification	
Pollutant	**Potential To Emit** (ton/yr)
PM	**1,836.10**
PM_{10}	**223.85**
$PM_{2.5}$	**223.85**
SO_2	**0.70**
NO_X	**0.35**
VOC	**46.95**
CO	**210.24**
GHGs as CO2e	**2,453**
Single HAPs	**15.14**
Total HAPs	**15.24**

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

(a) Significant Source Modification – approval to construct

This source modification is considered a significant source modification pursuant to 326 IAC 2-7-10.5(g)(4), because the modification has a PTE of PM, PM10, PM2.5, and VOC greater than twenty-five (25) tons per year, each, and, pursuant to 326 IAC 2-7-10.5(g)(7), because the modification has a PTE of CO greater than one hundred (100) tons per year.

In addition, this source modification is considered a significant source modification pursuant to 326 IAC 2-7-10.5(g)(6), because the modification has a PTE greater than 10 tons per year of a single HAP as defined under Section 112(b) of the Clean Air Act.

(b) Significant Permit Modification – approval to operate

This permit modification is considered a significant permit modification, pursuant to 326 IAC 2-7-12(d)(1), because this modification does not qualify as a minor permit modification or administrative amendment, and includes significant changes in existing monitoring Part 70 permit terms and conditions as well as significant changes to reporting or record keeping permit terms and conditions. Further, this modification requires a case-by-case determination of an emission limitation or other standard (e.g. PSD Minor limit).

Permit Level Determination – PSD

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

	Potential To Emit of the Entire Source After Issuance of Modification (tons/year)									
Process/ Emission Unit	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) (d)
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-16 through EU-20, EU-22 through EU-24, EU-26, EU-27, EU-37) ***	11.38	11.38	11.38	0.00	0.00	0.00	0.00	0		
Disa Pouring/Casting Line (EU-8)				0.18	0.09	1.23	52.50 (c)	613		
Hunter 1 pouring/casting line (EU-35)				0.18	0.09	1.23				
Hunter 2 pouring/casting line (EU-36)				0.18	0.09	1.23				
Hunter 1 cooling line (EU-35A)				0.00	0.00	0.00				
Hunter 2 cooling line (EU-36A)				0.00	0.00	0.00				
Hunter 1 shake-out unit (EU-35A)				0.00	0.00	10.50				
Hunter 2 shake-out unit(EU-36A)				0.00	0.00	10.50				
Casting Shakeout (Didion shake-out Unit EU-11)				0.00	0.00	10.50 (b)				
Casting Shakeout ("A" Shaker EU-16)	28.00	19.60	19.60	0.00	0.00	10.50 (b)				
Disa 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** (a)	**56.95** (a)	**56.83** (a)	**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 $PM_{2.5}$.
*** Sand handling units EU-16 and EU-24 are uncontrolled.
(a) PM, PM10, and PM2.5 limits specified to be PSD minor source (326 IAC 2-2).
(b) VOC limits to render 326 IAC 8-1-6 not applicable.
(c) CO limits specified to be PSD minor source (326 IAC 2-2).
(d) HAP limits to continue to be a Minor Source under Section 112 of the Clean Air Act and render 40 CFR Part 63 Subpart EEEEE not applicable.

This modification to an existing minor PSD stationary source is not major because:

(a) The emissions increase of each PSD regulated pollutant, excluding GHGs, are less than the PSD major source thresholds; and

(b) The emissions increase of GHGs from this modification to an existing minor PSD source are less than one hundred thousand (100,000) tons of CO_2 equivalent (CO_2e) emissions per year
Therefore, pursuant to 326 IAC 2-2, the GHG emissions are not subject to regulation and the PSD requirements do not apply.

The existing source is a PSD minor source. With the proposed modification, the source will maintain its PSD minor source status.

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
Sand Handling (EU-16 through EU-20, EU-22 through EU-24, EU-26, EU-27, EU-37) *	Dust collector DC-1	1.3	1.3	1.3
Disa Pouring/Casting Line (EU-8)				
Hunter 1 pouring/casting line				
Hunter 2 pouring/casting line				
Hunter 1 cooling line				
Hunter 2 cooling line				
Hunter 1 shake-out unit				
Hunter 2 shake-out unit				
Casting Shakeout (Didion shake-out Unit EU-11)				
Disa Cooling Line (EU-8A)	N/A	1.4	1.4	1.4
Casting Shakeout ("A", "B", and "C" shakers 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

* Sand handling units EU-16 and EU-24 are uncontrolled.

Note: These are existing limits. The new pouring/casting, cooling, and shakeout units for the Hunter 1 and Hunter 2 lines will be exhausted to the existing dust collector DC-1, which

will comply with the existing PM, PM10, and PM2.5 limits. The dust collector is being modified to handle particulate emissions from these new units.

(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)
Disa Pouring/Casting Line (EU-8)	6.0 (combined)
Hunter 1 pouring/casting line	
Hunter 2 pouring/casting line	
Hunter 1 cooling line	
Hunter 2 cooling line	
Hunter 1 shake-out unit	
Hunter 2 shake-out unit	
Casting Shakeout (Didion shake-out Unit EU-11)	
Casting Shakeout ("A", "B", and "C" shakers EU-16)	
Disa Cooling Line (EU-8A)	

Note: This is an existing limit. The new pouring/casting, cooling, and shakeout units for the Hunter 1 and Hunter 2 lines will comply with this combined lb/ton 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 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 Determination

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)
Sand Handling (EU-16 through EU-20, EU-22 through EU-24, EU-26, EU-27, EU-37) *	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				
Hunter 1 pouring/casting line	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							
Hunter 2 pouring/casting line	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							
Hunter 1 cooling line	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				
	CO	No control	This emission unit is not subject to CAM because it does not use a control device for these pollutants.					
Hunter 2 cooling line	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				
	CO	No control	This emission unit is not subject to CAM because it does not use a control device for these pollutants.					
Hunter 1 shake-out unit	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							
Hunter 2 shake-out unit	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							
	CO							

* Sand handling units EU-16 and EU-24 are uncontrolled.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to the Sand Handling operations (EU-16 through EU-20, EU-22 through EU-24, EU-26, EU-27, EU-37) for PM.

New Source Performance Standards (NSPS)

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

National Emission Standards for Hazardous Air Pollutants (NESHAP)

(c) ID Castings, LLC is currently 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 (naturally minor for HAPs) that commenced construction before September 17, 2007.

With this proposed modification the PTE is now greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, the requirements of National Emission Standard for Hazardous Air Pollutants for Iron and Steel Foundries (40 CFR Part 63, Subpart EEEEE) would be applicable since this source would no longer be an area source of HAP emissions. However, the source has opted to limit HAP emissions to render the requirements of 40 CFR Part 63, Subpart EEEEE not applicable.

In order to render the requirements of 40 CFR Part 63, Subpart EEEEE (National Emission Standard for Hazardous Air Pollutants for Iron and Steel Foundries) not applicable, the Permittee shall comply with the following limits:

(1) 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 PSD Minor limit that will also serve as a limit for the source to be an area source for HAPs.

(2) The combined organic HAPs emissions from the following operations shall not exceed the emission limit listed in the table below:

Emission Units	Organic HAPs Emission Limit (pounds per ton of iron throughput)
Disa Pouring/Casting Line (EU-8)	0.4322 (combined)
Hunter 1 pouring/casting line	
Hunter 2 pouring/casting line	
Hunter 1 cooling line	
Hunter 2 cooling line	
Hunter 1 shake-out unit	
Hunter 2 shake-out unit	
Casting Shakeout (Didion shake-out Unit EU-11)	
Casting Shakeout ("A", "B", and "C" shakers EU-16)	
Disa Cooling Line (EU-8A)	

Compliance with these limits, combined with the potential to emit HAPs from other emission units at this source, shall limit the source-wide single HAPs to less than ten (10) tons per year and the source-wide combination of HAPs to less than twenty-five (25) tons per year and shall render 40 CFR Part 63, Subpart EEEEE (National Emission Standard for Hazardous Air Pollutants for Iron and Steel Foundries) not applicable.

(d) There are no new National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this modification.

State Rule Applicability Determination - 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.

(b) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The unlimited potential to emit of HAPs from the new/modified units is greater than ten (10) tons per year for any single HAP and/or greater than twenty-five (25) tons per year of a combination of HAPs. However, the source shall limit the potential to emit of HAPs from the pouring, cooling, and shakeout operations combined to less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs, to remain an area source of HAPs -- see Federal Rule Applicability Determination section above. Therefore, the source is not subject to the requirements of 326 IAC 2-4.1.

(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, 2017. 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)
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?
Sand Handling (EU-16 through EU-20, EU-22 through EU-24, EU-26, EU-27, EU-37) *	Dust Collector DC-1	100.00	360.00	0.36	**51.28**	Y - with the use of control
Hunter 1 pouring/casting line	Dust Collector DC-1	46.00	11.20	0.01	**43.80**	Y - without control
Hunter 2 pouring/casting line	Dust Collector DC-1	46.00	11.20	0.01	**43.80**	Y - without control
Hunter 1 cooling line	Dust Collector DC-1	46.00	5.60	0.01	**43.80**	Y - without control
Hunter 2 cooling line	Dust Collector DC-1	46.00	5.60	0.01	**43.80**	Y - without control
Hunter 1 shake-out unit	Dust Collector DC-1	46.00	12.80	0.01	**43.80**	Y - without control
Hunter 2 shake-out unit	Dust Collector DC-1	46.00	12.80	0.01	**43.80**	Y - without control

* Sand handling units EU-16 and EU-24 are uncontrolled.

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.

(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 are to be constructed after January 1, 1980; however, the potential to emit VOC emissions is less than 25 tons per year for each unit:

(A) Hunter 1 pouring/casting line,
(B) Hunter 2 pouring/casting line,
(C) Hunter 1 shake-out unit, and
(D) Hunter 2 shake-out unit.

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

(2) The following new facilities do not have the potential to emit VOCs:

(A) Hunter 1 cooling line, and
(B) Hunter 2 cooling line.

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

(e) 326 IAC 8 (VOC Rules)
There are no VOC Rules applicable to these new 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) *	Sand Handling (EU-16 through EU-20, EU-22 through EU-24, EU-26, EU-27, EU-37) **, Disa Pouring/Casting Line (EU-8), Hunter 1 pouring/casting line, Hunter 2 pouring/casting line, Hunter 1 cooling line, Hunter 2 cooling line, Hunter 1 shake-out unit, Hunter 2 shake-out unit, Casting Shakeout (Didion shake-out Unit EU-11)	Water Pressure Drop	Daily	2.0 to 6.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	

Notes:
* Pursuant to 40 CFR 64, since CAM is applicable to these facilities.
** Sand handling units EU-16 and EU-24 are uncontrolled.

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.

This is an existing requirement.

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

Emission Units	Control Device	Timeframe for Testing	Pollutants	Frequency of Testing
Sand Handling (EU-16 through EU-20, EU-22 through EU-24, EU-26, EU-27, EU-37) **, Disa Pouring/Casting Line (EU-8), Hunter 1 pouring/casting line, Hunter 2 pouring/casting line, Hunter 1 cooling line, Hunter 2 cooling line, Hunter 1 shake-out unit, Hunter 2 shake-out unit, and Casting Shakeout (Didion shake-out Unit EU-11)	Dust Collector DC-1	Within 180 days of the installation of Dust Collector DC-1 * - and - Within 180 days of startup of Hunter 1 pouring/casting line, Hunter 2 pouring/casting line, Hunter 1 cooling line, Hunter 2 cooling line, Hunter 1 shake-out unit, and Hunter 2 shake-out unit	PM, PM10, PM2.5	Every five (5) years
Disa Pouring/Casting Line (EU-8), Hunter 1 pouring/casting line, Hunter 2 pouring/casting line, Hunter 1 cooling line, Hunter 2 cooling line, Hunter 1 shake-out unit, Hunter 2 shake-out unit, Casting Shakeout (Didion shake-out Unit EU-11), Casting Shakeout ("A", "B", and "C" shakers EU-16), Disa Cooling Line (EU-8A)	None	Within 180 days of startup of Hunter 1 pouring/casting line, Hunter 2 pouring/casting line, Hunter 1 cooling line, Hunter 2 cooling line, Hunter 1 shake-out unit, and Hunter 2 shake-out unit	Organic HAPs	One-time **

* This is an existing requirement to test for PM, PM10 and PM2.5 for DC-1, which is not being changed with this modification if in case the construction of Hunter 1 or Hunter 2 is not of the same time or delayed.
** Emissions are uncontrolled, therefore a one-time only test is required at this time, to verify compliance with the HAPs limits.

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

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.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit Renewal No. T057-33889-00002:

(1) Section A - Emission Units and Pollution Control Equipment Summary has been updated with the equipment changes identified in this modification.

(2) Section D.2 has been updated with the change identified in this modification, including descriptive changes, emission limit changes, and changes to testing, compliance monitoring, and recordkeeping requirements.

(3) Sections D.3 and D.4 have been updated with descriptive changes based on the changes to Section A - Emission Units and Pollution Control Equipment Summary.

Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

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:

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)~~ **"A", "B", and "C" shakers**, 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 **and approved in 2014 for reconstruction**, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(3) **One (1)** ~~Overhead~~ **overhead** shaker screen, identified as EU-18, constructed in

1971 **and approved in 2014 for reconstruction**, 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 **and approved in 2014 for reconstruction**, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(5) One (1) vibratory conveyor, identified as EU-37, approved in 2014 for construction, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

And the following storage bins:

~~(5)~~**(6)** 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)~~**(7)** 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)~~**(8)** 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)~~**(9)** One (1) West outdoor sand storage bin, identified as EU-24, constructed in 1971, with a capacity of 150 tons, with emissions uncontrolled;

~~(9)~~**(10)** 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

...

(g) One (1) **Didion** 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;

(h) One (1) Hunter 1 pouring/casting line, identified as EU-35, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(i) One (1) Hunter 1 cooling line and shake-out unit, collectively identified as EU-35A, consisting of the following:

(1) One (1) Hunter 1 cooling line, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(2) One (1) Hunter 1 shake-out unit, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(j) One (1) Hunter 2 pouring/casting line, identified as EU-36, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(k) One (1) Hunter 2 cooling line and shake-out unit, collectively identified as EU-36A, consisting of the following:

(1) One (1) Hunter 2 cooling line, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(2) One (1) Hunter 2 shake-out unit, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

Note: Dust collector DC-1 is also approved in 2014 to increase its air flow to accommodate Hunter 1 and Hunter 2 lines.

Finishing Operations

~~(h)~~**(l)** 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)~~**(m)** 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)~~**(n)** 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;

...

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)~~ **"A", "B", and "C" shakers**, 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 **and approved in 2014 for reconstruction**, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(3) **One (1)** ~~Overhead~~ **overhead** shaker screen, identified as EU-18, constructed in 1971 **and approved in 2014 for reconstruction**, 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 **and approved in 2014 for reconstruction**, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(5) One (1) vibratory conveyor, identified as EU-37, approved in 2014 for construction, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

And the following storage bins:

~~(5)~~**(6)** 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)~~**(7)** 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)~~**(8)** 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)~~**(9)** One (1) West outdoor sand storage bin, identified as EU-24, constructed in 1971, with a capacity of 150 tons, with emissions uncontrolled;

~~(9)~~**(10)** 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) **Didion** 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).

(h) One (1) Hunter 1 pouring/casting line, identified as EU-35, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(i) One (1) Hunter 1 cooling line and shake-out unit, collectively identified as EU-35A, consisting of the following:

(1) One (1) Hunter 1 cooling line, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(2) One (1) Hunter 1 shake-out unit, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(j) One (1) Hunter 2 pouring/casting line, identified as EU-36, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(k) One (1) Hunter 2 cooling line and shake-out unit, collectively identified as EU-36A, consisting of the following:

(1) One (1) Hunter 2 cooling line, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

(2) One (1) Hunter 2 shake-out unit, approved in 2014 for construction, with a maximum capacity of 4.0 tons of iron and 42 tons of sand per hour, with emissions controlled by dust collector DC-1, and exhausting to stack 003;

Note: Dust collector DC-1 is also approved in 2014 to increase its air flow to accommodate Hunter 1 and Hunter 2 lines.

(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)~~	

Emission Units	CO Emission Limit (pounds per ton of iron throughput)
Disa Pouring/Casting Line (EU-8)	6.0 (combined)
Hunter 1 pouring/casting line	
Hunter 2 pouring/casting line	
Hunter 1 cooling line	
Hunter 2 cooling line	
Hunter 1 shake-out unit	
Hunter 2 shake-out unit	
Casting Shakeout (Didion shake-out Unit EU-11)	
Casting Shakeout ("A", "B", and "C" shakers EU-16)	
Disa 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).~~

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)
Sand Handling (EU-16 through EU-20, EU-22 through EU-24, EU-26, EU-27, EU-37) *	Dust collector DC-1	1.3	1.3	1.3
Disa Pouring/Casting Line (EU-8)				
Hunter 1 pouring/casting line				
Hunter 2 pouring/casting line				
Hunter 1 cooling line				
Hunter 2 cooling line				
Hunter 1 shake-out unit				
Hunter 2 shake-out unit				
Casting Shakeout (Didion shake-out Unit EU-11)				
Disa Cooling Line (EU-8A)	N/A	1.4	1.4	1.4
Casting Shakeout ("A", "B", and "C"	N/A	3.2	2.24	2.24

shakers EU-16)				

*** Sand handling units EU-16 and EU-24 are uncontrolled.**

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 HAPs Limits [40 CFR Part 63]

In order to render the requirements of 40 CFR Part 63, Subpart EEEEE (National Emission Standard for Hazardous Air Pollutants for Iron and Steel Foundries) not applicable, the combined organic HAPs emissions from the following operations shall not exceed the emission limit listed in the table below:

Emission Units	Organic HAPs Emission Limit (pounds per ton of iron throughput)
Disa Pouring/Casting Line (EU-8)	**0.4322 (combined)**
Hunter 1 pouring/casting line	
Hunter 2 pouring/casting line	
Hunter 1 cooling line	
Hunter 2 cooling line	
Hunter 1 shake-out unit	
Hunter 2 shake-out unit	
Casting Shakeout (Didion shake-out Unit EU-11)	
Casting Shakeout ("A", "B", and "C" shakers EU-16)	
Disa Cooling Line (EU-8A)	

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 HAPs from other emission units at this source, shall limit the source-wide single HAPs to less than ten (10) tons per year and the source-wide combination of HAPs to less than twenty-five (25) tons per year and shall render 40 CFR Part 63, Subpart EEEEE (National Emission Standard for Hazardous Air Pollutants for Iron and Steel Foundries) not applicable.

D.2.2~~3~~**3** 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)~~ **Sand Handling (EU-16 through EU-20, EU-22 through EU-24, EU-26, EU-27, EU-37) ***	100.00	51.28

Facility/Process	Process weight rate (tons/hr)	Allowable Emissions (lbs/hr)
Disa Pouring/Casting Line (EU-8)	42.40	43.06
Disa Cooling Line (EU-8A)	42.40	43.06
~~Casting Shakeout ("A" Shaker EU-16)~~ **Casting Shakeout ("A", "B", and "C" shakers EU-16)**	49.20	44.43
Casting Shakeout (~~Shake-out~~ **Didion shake-out** Unit EU-11)	45.80	43.76
Hunter 1 pouring/casting line	**46.00**	**43.80**
Hunter 2 pouring/casting line	**46.00**	**43.80**
Hunter 1 cooling line	**46.00**	**43.80**
Hunter 2 cooling line	**46.00**	**43.80**
Hunter 1 shake-out unit	**46.00**	**43.80**
Hunter 2 shake-out unit	**46.00**	**43.80**

*** Sand handling units EU-16 and EU-24 are uncontrolled.**

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~~**4** 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"**, "B", and "C"** Shaker**s** 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"**, "B", and "C"** Shaker**s** 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"**, "B", and "C"** Shaker**s** EU-16).

...

D.2.~~4~~**5** Preventive Maintenance Plan [326 IAC 2-7-5(12)]

...

Compliance Determination Requirements

D.2.~~5~~**6** Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

PM Testing

(a) **Dust collector DC-1 – upon initial start up of DC-1 and prior to the installation of Hunter 1 and Hunter 2 Lines**

In order to demonstrate compliance with Conditions D.2.1(b) and ~~D.2.2~~ **D.2.3**, the Permittee shall perform PM testing not later than 180 days after startup of Dust collector DC-1 (stack 003), controlling the following:

Disa casting machines (EU-8),
Didion 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 **if either Hunter 1 or Hunter 2 are not constructed**.

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

(b) Dust collector DC-1 – upon initial start up of either Hunter 1 or Hunter 2

In order to demonstrate compliance with Conditions D.2.1(b) and D.2.3, not later than 180 days after startup of the Hunter 1 pouring/casting line, Hunter 2 pouring/casting line, Hunter 1 cooling line, Hunter 2 cooling line, Hunter 1 shake-out unit, and Hunter 2 shake-out unit, the Permittee shall perform PM testing of Dust collector DC-1 (stack 003), controlling the following:
Hunter 1 pouring/casting line,
Hunter 2 pouring/casting line,
Hunter 1 cooling line,
Hunter 2 cooling line,
Hunter 1 shake-out unit,
Hunter 2 shake-out unit,
Disa casting machines (EU-8),
Didion 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),
vibratory conveyor (EU-37),
indoor new sand storage bin (EU-26), and
mag belt/bin top belt (EU-27),
utilizing methods as approved by the Commissioner.

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

(c) Dust collector DC-1 - after construction of either Hunter 1 or Hunter 2, or both, and fulfilling testing requirement (b)

In order to demonstrate compliance with Conditions D.2.1(b) and D.2.3, not later than five (5) years after the most recent valid compliance demonstration for Dust collector DC-1 (stack 003), the Permittee shall perform PM testing of Dust collector DC-1 (stack 003), controlling the following:
Hunter 1 pouring/casting line,
Hunter 2 pouring/casting line,
Hunter 1 cooling line,
Hunter 2 cooling line,
Hunter 1 shake-out unit,
Hunter 2 shake-out unit,

Disa casting machines (EU-8),
Didion 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),
vibratory conveyor (EU-37),
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 most recent valid compliance demonstration of DC-1.

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

PM10 and PM2.5 Testing

~~(b)~~**(d) Dust collector DC-1 – upon initial start up of DC-1 and prior to the installation of Hunter 1 and Hunter 2 Lines**

In order to demonstrate compliance with Conditions D.2.1(b) and ~~D.2.2~~ **D.2.3**, the Permittee shall perform PM10 and PM2.5 testing ~~Not~~ **not** later than 180 days after startup of Dust collector DC-1 (stack 003), controlling the following:

Disa casting machines (EU-8),
Didion 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 **if either Hunter 1 or Hunter 2 are not constructed**.

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.

(e) Dust collector DC-1 – upon initial start up of either Hunter 1 or Hunter 2

In order to demonstrate compliance with Conditions D.2.1(b) and D.2.3, not later than 180 days after startup of the Hunter 1 pouring/casting line, Hunter 2 pouring/casting line, Hunter 1 cooling line, Hunter 2 cooling line, Hunter 1 shake-out unit, and Hunter 2 shake-out unit, the Permittee shall perform PM10 and PM2.5 testing of Dust collector DC-1 (stack 003), controlling the following:

Hunter 1 pouring/casting line,
Hunter 2 pouring/casting line,
Hunter 1 cooling line,
Hunter 2 cooling line,

Hunter 1 shake-out unit,
Hunter 2 shake-out unit,
Disa casting machines (EU-8),
Didion 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),
vibratory conveyor (EU-37),
indoor new sand storage bin (EU-26), and
mag belt/bin top belt (EU-27),

utilizing methods as approved by the Commissioner.

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.

(f) Dust collector DC-1 - after construction of either Hunter 1 or Hunter 2, or both, and fulfilling testing requirement (e)

In order to demonstrate compliance with Conditions D.2.1(b) and D.2.3, not later than five (5) years after the most recent valid compliance demonstration for Dust collector DC-1 (stack 003), the Permittee shall perform PM10 and PM2.5 testing of Dust collector DC-1 (stack 003), controlling the following:

Hunter 1 pouring/casting line,
Hunter 2 pouring/casting line,
Hunter 1 cooling line,
Hunter 2 cooling line,
Hunter 1 shake-out unit,
Hunter 2 shake-out unit,
Disa casting machines (EU-8),
Didion 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),
vibratory conveyor (EU-37),
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 most recent valid compliance demonstration of DC-1.

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.

HAPs Testing

(g) In order to demonstrate compliance with Condition D.2.2, the Permittee shall perform one-time HAPs testing on the following:

Disa Pouring/Casting Line (EU-8)
Hunter 1 pouring/casting line,
Hunter 2 pouring/casting line,
Hunter 1 cooling line,
Hunter 2 cooling line,
Hunter 1 shake-out unit,
Hunter 2 shake-out unit,
Casting Shakeout (Didion shake-out Unit EU-11),
Casting Shakeout ("A", "B", and "C" shakers EU-16), and
Disa Cooling Line (EU-8A)
using methods as approved by the Commissioner.

VOC Testing

~~(c)~~**(h)** In order to demonstrate compliance with Condition ~~D.2.3(a)~~ **D.2.4(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"**, "B", and "C"** Shaker**s** EU-16) operation, using methods as approved by the Commissioner.

~~(d)~~**(i)** In order to demonstrate compliance with Condition ~~D.2.3(b)~~ **D.2.4(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~~ **Didion shake-out** Unit EU-11) operation, using methods as approved by the Commissioner.

~~(e)~~**(j)** 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~~**7** Particulate Control

(a) In order to comply with Conditions D.2.1 and ~~D.2.2~~ **D.2.3**, the dust collector DC-1 for particulate control shall be in operation at all times whenever any of the following:

Hunter 1 pouring/casting line,
Hunter 2 pouring/casting line,
Hunter 1 cooling line,
Hunter 2 cooling line,
Hunter 1 shake-out unit,
Hunter 2 shake-out unit,
Disa 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),
vibratory conveyor (EU-37),
~~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.

...

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

D.2.~~7~~**8** Visible Emissions Notations [40 CFR 64]

...

D.2.~~8~~**9** 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:

Hunter 1 pouring/casting line,
Hunter 2 pouring/casting line,
Hunter 1 cooling line,
Hunter 2 cooling line,
Hunter 1 shake-out unit,
Hunter 2 shake-out unit,
Disa 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),
vibratory conveyor (EU-37),
~~West outdoor sand storage bins (EU-24)~~,
indoor new sand storage bin (EU-26), and
mag belt/bin top belt (EU-27)

...

D.2.~~9~~**10** Broken or Failed Bag or Cartridge Detection [40 CFR 64]

...

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

D.2.~~10~~**11** Record Keeping Requirements

(a) To document the compliance status with Condition D.2.~~7~~**8**, 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~~**9**, the Permittee shall maintain daily records of the pressure drop of dust collector DC-1 as required by Condition D.2.~~8~~**9**. 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).

...

...

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Finishing Operations

~~(h)~~**(l)** 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)~~**(m)** 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.)

...

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Core Making

~~(j)~~**(n)** 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.)

...

Conclusion and Recommendation

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 057-34505-00002 and Significant Permit Modification No. 057-34576-00002. The staff recommend to the Commissioner that this Part 70 Significant Source and Significant Permit Modification be approved.

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

Appendix A: Emissions Calculations
Summary
2014 Modification
Company Name: ID Castings, LLC
Source Address: 1600 South 8th Street, Noblesville, Indiana 46060
Significant Source Modification No. : T057-34505-00002
Significant Permit Modification No. : T057-34576-00002
Reviewer: Sarah Street

Process Description / Emission Unit		Control Device	Maximum Sand Throughput (tons/hr)	Maximum Metal Throughput (tons/hr)	Unlimited Potential to Emit of Modification (tons/year)									
					Criteria Pollutants							Greenhouse Gas Pollutants	Hazardous Air Pollutants	
					PM	PM10	PM2.5	SO_2	NOx	VOC	CO	CO2e	Metallic HAPs	Organic HAPs
Raw Material Handling and Preparation	Sand Handling (EU-16 through EU-20, EU-22 through EU-24, EU-26, EU-27, EU-37) **	Dust Collector DC-1 *	100.00	n/a	1,576.80	24.13	24.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pouring, Cooling, and Shakeout	Hunter 1 pouring/casting line ***		42.00	4.00	49.06	36.09	36.09	0.35	0.18	2.45	210.24	2,453	0.09	15.14
	Hunter 2 pouring/casting line ***		42.00	4.00	49.06	36.09	36.09	0.35	0.18	2.45				
	Hunter 1 cooling line ***		42.00	4.00	24.53	24.53	24.53	0.00	0.00	0.00				
	Hunter 2 cooling line ***		42.00	4.00	24.53	24.53	24.53	0.00	0.00	0.00				
	Hunter 1 shake-out unit ***		42.00	4.00	56.06	39.24	39.24	0.00	0.00	21.02				
	Hunter 2 shake-out unit ***		42.00	4.00	56.06	39.24	39.24	0.00	0.00	21.02				
				Total	**1,836.10**	**223.85**	**223.85**	**0.70**	**0.35**	**46.95**	**210.24**	**2,453**	**0.09**	**15.14**

Total HAPs: 15.24

* Dust Collector DC-1 also controls the following emission units: the Disa pouring/casting machine (EU-8) and Didion shake-out unit (EU-11)
** Approved in 2014 for reconstruction
*** New emission units approved in 2014 for construction

Appendix A: Emissions Calculations
Summary
Unlimited PTE
Company Name: ID Castings, LLC
Source Address: 1600 South 8th Street, Noblesville, Indiana 46060
Significant Source Modification No. : T057-34505-00002
Significant Permit Modification No. : T057-34576-00002
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-16 through EU-20, EU-22 through EU-24, EU-26, EU-27, EU-37)	1,576.80	24.13	24.13	0.00	0.00	0.00	0.00	0	0.00	0.00
Pouring, Cooling, and Shakeout	Disa Pouring/Casting Line (EU-8)	41.70	30.68	30.68	0.30	0.15	2.08	478.30	5,580.12	0.21	34.45
	Hunter 1 pouring/casting line	49.06	36.09	36.09	0.35	0.18	2.45				
	Hunter 2 pouring/casting line	49.06	36.09	36.09	0.35	0.18	2.45				
	Disa Cooling Line (EU-8A)	20.85	20.85	20.85	0.00	0.00	0.00				
	Hunter 1 cooling line	24.53	24.53	24.53	0.00	0.00	0.00				
	Hunter 2 cooling line	24.53	24.53	24.53	0.00	0.00	0.00				
	Casting Shakeout ("A", "B", and "C" shakers EU-16)	142.96	100.07	100.07	0.00	0.00	53.61				
	Casting Shakeout (Didion shake-out Unit EU-11)	95.31	66.72	66.72	0.00	0.00	35.74				
	Hunter 1 shake-out unit	56.06	39.24	39.24	0.00	0.00	21.02				
	Hunter 2 shake-out unit	56.06	39.24	39.24	0.00	0.00	21.02				
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	**2,704.29**	**621.02**	**620.89**	**1.82**	**5.40**	**139.19**	**480.69**	**9,665**	**4.83**	**34.48**

Total HAPs: 39.31

Appendix A: Emissions Calculations
Summary
Limited Emissions
Company Name: ID Castings, LLC
Source Address: 1600 South 8th Street, Noblesville, Indiana 46060
Significant Source Modification No. : T057-34505-00002
Significant Permit Modification No. : T057-34576-00002
Reviewer: Sarah Street

			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	0.00	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	0.00	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	0.00	0.37	0.00
	Sand Handling (EU-16 through EU-20, EU-22 through EU-24, EU-26, EU-27, EU-37)	Dust Collector DC-1	11.38	11.38	11.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pouring, Cooling, and Shakeout	Disa Pouring/Casting Line (EU-8)					0.18	0.09	1.23	52.50	612.50	0.02	3.78
	Hunter 1 pouring/casting line					0.18	0.09	1.23				
	Hunter 2 pouring/casting line					0.18	0.09	1.23				
	Hunter 1 cooling line					0.00	0.00	0.00				
	Hunter 2 cooling line					0.00	0.00	0.00				
	Hunter 1 shake-out unit					0.00	0.00	10.50				
	Hunter 2 shake-out unit					0.00	0.00	10.50				
	Casting Shakeout (Didion shake-out Unit EU-11)					0.00	0.00	10.50				
	Casting Shakeout ("A", "B", and "C" shakers EU-16)	No control	28.00	0.00	0.00	0.00	0.00	10.50				
	Disa Cooling Line (EU-8A)	No control	0.00	0.00	0.00	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	0.00	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
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	**57.43**	**25.10**	**24.98**	**1.35**	**5.16**	**46.11**	**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

PSD Minor Limits

Limited Metal Melt Throughput (tons/yr)	Limited Melting Throughput (tons/hr)
17,500.00	1.998

		Emission Limits (lb/ton)				
Emission Unit ID(s)	Control Device	PM	PM10	PM2.5	CO	Organic HAPs
EIF Furnace EU-3A	No control	0.90	0.86	0.86	N/A	N/A
Melting Dept. - Charge Handling (EU-2)	No control	0.60	0.36	0.36	N/A	N/A
Melting Dept. - Magnesium Treatment (EU-6)	No control	0.09	0.09	0.09	N/A	N/A
Sand Handling (EU-16 through EU-20, EU-22 through EU-24, EU-26, EU-27, EU-37)	Dust Collector DC-1	1.30	1.30	1.30	N/A	N/A
Disa Pouring/Casting Line (EU-8)					6.0	0.4322
Hunter 1 pouring/casting line						
Hunter 2 pouring/casting line						
Hunter 1 cooling line						
Hunter 2 cooling line						
Hunter 1 shake-out unit						
Hunter 2 shake-out unit						
Casting Shakeout (Didion shake-out Unit EU-11)						
Casting Shakeout ("A", "B", and "C" shakers EU-16)	No control	3.2	2.24	2.24		
Disa Cooling Line (EU-8A)	No control	1.40	1.40	1.40		
No. 3 Cleaning Machine (EU-34)	Baghouse BH-2	0.17	0.02	0.02	N/A	N/A
Grinding (EU-32)	Baghouse BH-1	0.01	0.0045	0.0045	N/A	N/A
Finishing (EU-33)	No control	0.01	0.0045	0.0045	N/A	N/A
Shell Core Machines (EU-28)	No control	1.1	1.1	1.1	N/A	N/A

Appendix A: Emissions Calculations
Ductile Iron Foundries
Metal Melting

Company Name: ID Castings, LLC
Source Address: 1600 South 8th Street, Noblesville, Indiana 46060
Significant Source Modification No. : T057-34505-00002
Significant Permit Modification No. : T057-34576-00002
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%

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
Significant Source Modification No. : T057-34505-00002
Significant Permit Modification No. : T057-34576-00002
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-16 through EU-20, EU-22 through EU-24, EU-26, EU-27, EU-37)	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-16 through EU-20, EU-22 through EU-24, EU-26, EU-27, EU-37)	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-16 through EU-20, EU-22 through EU-24, EU-26, EU-27, EU-37)	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
Pouring, Cooling, and Shakeout
Company Name: ID Castings, LLC
Source Address: 1600 South 8th Street, Noblesville, Indiana 46060
Significant Source Modification No. : T057-34505-00002
Significant Permit Modification No. : T057-34576-00002
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)	Disa 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
		Hunter 1 pouring/casting line	42.00	4.00	2.80	2.06	2.06	0.02	0.01	0.14				
		Hunter 2 pouring/casting line	42.00	4.00	2.80	2.06	2.06	0.02	0.01	0.14				
Cooling	(SCC 3-04-003-25)	Disa Cooling Line (EU-8A)	39.00	3.40	1.40	1.40	1.40	0	0	0				
		Hunter 1 cooling line	42.00	4.00	1.40	1.40	1.40	0	0	0				
		Hunter 2 cooling line	42.00	4.00	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 (Didion shake-out Unit EU-11)	39.00	6.80	3.20	2.24	2.24	0	0	1.20				
		Hunter 1 shake-out unit	42.00	4.00	3.20	2.24	2.24	0	0	1.20				
		Hunter 2 shake-out unit	42.00	4.00	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	Disa Pouring/Casting Line (EU-8)	41.70	30.68	30.68	0.30	0.15	2.08	478.30	5,580.12	0.21	34.45
	Hunter 1 pouring/casting line	49.06	36.09	36.09	0.35	0.18	2.45				
	Hunter 2 pouring/casting line	49.06	36.09	36.09	0.35	0.18	2.45				
Cooling	Disa Cooling Line (EU-8A)	20.85	20.85	20.85	0.00	0.00	0.00				
	Hunter 1 cooling line	24.53	24.53	24.53	0.00	0.00	0.00				
	Hunter 2 cooling line	24.53	24.53	24.53	0.00	0.00	0.00				
Casting Shakeout	Casting Shakeout ("A", "B", and "C" shakers EU-16)	142.96	100.07	100.07	0.00	0.00	53.61				
	Casting Shakeout (Didion shake-out Unit EU-11)	95.31	66.72	66.72	0.00	0.00	35.74				
	Hunter 1 shake-out unit	56.06	39.24	39.24	0.00	0.00	21.02				
	Hunter 2 shake-out unit	56.06	39.24	39.24	0.00	0.00	21.02				

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
Disa Pouring/Casting Line (EU-8)	Dust Collector DC-1	99.90%	0.04	0.03	0.03	0.30	0.15	2.08	478.30	5,580.12	0.21	34.45
Hunter 1 pouring/casting line	Dust Collector DC-1	99.90%	0.05	0.04	0.04	0.35	0.18	2.45				
Hunter 2 pouring/casting line	Dust Collector DC-1	99.90%	0.05	0.04	0.04	0.35	0.18	2.45				
Disa Cooling Line (EU-8A)	No control	0.00%	20.85	20.85	20.85	0.00	0.00	0.00				
Hunter 1 cooling line	Dust Collector DC-1	99.90%	0.02	0.02	0.02	0.00	0.00	0.00				
Hunter 2 cooling line	Dust Collector DC-1	99.90%	0.02	0.02	0.02	0.00	0.00	0.00				
Casting Shakeout ("A", "B", and "C" shakers EU-16)	No control	0.00%	142.96	100.07	100.07	0.00	0.00	53.61				
Casting Shakeout (Didion shake-out Unit EU-11)	Dust Collector DC-1	99.90%	0.10	0.07	0.07	0.00	0.00	35.74				
Hunter 1 shake-out unit	Dust Collector DC-1	99.90%	0.06	0.04	0.04	0.00	0.00	21.02				
Hunter 2 shake-out unit	Dust Collector DC-1	99.90%	0.06	0.04	0.04	0.00	0.00	21.02				

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
Significant Source Modification No. : T057-34505-00002
Significant Permit Modification No. : T057-34576-00002
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

Appendix A: Emissions Calculations
Ductile Iron Foundries
Core Making
Company Name: ID Castings, LLC
Source Address: 1600 South 8th Street, Noblesville, Indiana 46060
Significant Source Modification No. : T057-34505-00002
Significant Permit Modification No. : T057-34576-00002
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**
Significant Source Modification No. : **T057-34505-00002**
Significant Permit Modification No. : **T057-34576-00002**

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	SO2 Emission factor = 0.10 x S
6.68	639.53	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
Significant Source Modification No. : T057-34505-00002
Significant Permit Modification No. : T057-34576-00002
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**
Significant Source Modification No. : **T057-34505-00002**
Significant Permit Modification No. : **T057-34576-00002**
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-16 through EU-20, EU-22 through EU-24, EU-26, EU-27, EU-37)	**Dust Collector DC-1**	100.00	360.00	0.36	**51.28**	**Y - with control**
Pouring, Cooling, and Shakeout	Disa Pouring/Casting Line (EU-8)	Dust Collector DC-1	42.40	9.52	0.01	**43.06**	Y - without control
	Hunter 1 pouring/casting line	Dust Collector DC-1	46.00	11.20	0.01	**43.80**	Y - without control
	Hunter 2 pouring/casting line	Dust Collector DC-1	46.00	11.20	0.01	**43.80**	Y - without control
	Disa Cooling Line (EU-8A)	No control	42.40	4.76	4.76	**43.06**	Y - without control
	Hunter 1 cooling line	Dust Collector DC-1	46.00	5.60	0.01	**43.80**	Y - without control
	Hunter 2 cooling line	Dust Collector DC-1	46.00	5.60	0.01	**43.80**	Y - without control
	Casting Shakeout ("A", "B", and "C" shakers EU-16)	No control	49.20	32.64	32.64	**44.43**	Y - without control
	Casting Shakeout (Didion shake-out Unit EU-11)	Dust Collector DC-1	45.80	21.76	0.02	**43.76**	Y - without control
	Hunter 1 shake-out unit	Dust Collector DC-1	46.00	12.80	0.01	**43.80**	Y - without control
	Hunter 2 shake-out unit	Dust Collector DC-1	46.00	12.80	0.01	**43.80**	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 S. 8th Street
Noblesville, Indiana 46060

DATE: September 19, 2014

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

SUBJECT: Final Decision
Title V – Significant Permit Modification
057-34576-00002

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:
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.

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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

September 19, 2014

TO: Hamilton East 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: 057-34576-00002

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	AWELLS 9/19/2014 ID Castings LLC 057-34576-00002 Final		
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**

AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING

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1		Brian Duffy ID Castings LLC 1600 S 8th Street, PO Box 1146 Noblesville IN 46060 (Source CAATS) confirmed delivery									
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		Hamilton County Board of Commissioners One Hamilton County Square, Suite 157 Noblesville IN 46064 *(Local Official)*									
5		Hamilton East Public Library - Fishers Branch 5 Municipal Drive Fishers In 46038 *(Library)*									
6		Glidden Fence Co. 17804 Spring Mill Rd Westfield IN 46074 *(Affected Party)*									
7		Environmental Field Services, Inc. 40 SR 32 W Westfield IN 46074 *(Affected Party)*									
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