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

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: May 22, 2013

RE: INTAT Precision, Inc. / 139-32540-00011

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

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER.dot12/03/07

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Mr. Brad Rist
INTAT Precision, Inc.
P.O. Box 488
Rushville, IN 46173

May 22, 2013

Re: 139-32540-00011
Significant Source Modification to
Part 70 Renewal No.: T139-25610-00011

Dear Mr. Rist:

INTAT Precision, Inc. was issued a Part 70 Operating Permit Renewal No. T139-25610-00011 on November 19, 2009 for a stationary a stationary gray and ductile iron foundry located at 2148 State Road 3 North, Rushville, Indiana 46173. An application to modify the source was received on November 21, 2012. Pursuant to the provisions of 326 IAC 2-7-12, a significant source modification to this permit is hereby approved as described in the attached Technical Support Document.

Pursuant to 326 IAC 2-7-10.5, the following emission unit units are approved for construction at the source:

One Ductile Iron Foundry Line, approved in 2013 for construction, identified as Plant 2, Line 4, consisting of the following:

(1) One (1) Induction Furnace, identified as EU-N1, with a nominal capacity of 10 tons of metal per hour, utilizing Baghouse DC-N1A for particulate control, and exhausting to Stack S-N1.

(2) One (1) Sand Handling System, identified as EU-N2A, and one (1) Return Sand Handling System, identified as EU-N2B, with a nominal capacity of 75 tons of sand per hour, utilizing Baghouse DC-N1B for particulate control, exhausting to Stack S-N1.

(3) One (1) Pouring Station, identified as EU-N3, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(4) One (1) Cooling Line, identified as EU-N4, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(5) One (1) Casting Shakeout System, identified as EU-N5, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(6) One (1) Bad Heat Shakeout System, identified as EU-N5A, with a nominal capacity of 10 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(7) One (1) Shot Blast Unit, identified as EU-N6, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control and exhausting to Stack S-N2.

The following construction conditions are applicable to the proposed modification:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the

potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).

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

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

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

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

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

7. Pursuant to 326 IAC 2-7-10.5(h)(2), this significant source modification authorizes the construction of the new emission unit(s), when the significant source modification has been issued.

Pursuant to 326 IAC 2-7-12, operation of the new emission unit(s) is not approved until the significant permit modification has been issued. Operating conditions are incorporated into the Part 70 operating permit as a significant permit modification in accordance with 326 IAC 2-7-10.5(m)(2) and 326 IAC 2-7-12 (Permit Modification).

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's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

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 Mehul Sura, of my staff, at 317-233-6868 or 1-800-451-6027, and ask for extension 3-6868.

Sincerely,

Iryn Calilung

Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

Attachments: Updated Permit, Technical Support Document (TSD) and TSD Appendices A, B and C

mns

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

Erin Surinak
ERM
11350 N. Merdian, Suite 320
Carmel, IN 46032

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Part 70 Significant Source Modification
OFFICE OF AIR QUALITY

INTAT Precision, Inc.
2148 State Road 3 North
Rushville, Indiana 46173

(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.

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.

Significant Source Modification No.: 139-32540-00011	
Issued by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: May 22, 2013

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Attachment A: NESHAP for Iron and Steel Foundries [40 CFR Part 63, Subpart EEEEE] [326 IAC 20-92]

SECTION A SOURCE SUMMARY

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

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

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

Source Address:	2148 State Road 3 North, Rushville, Indiana 46173
General Source Phone Number:	(317) 932-5323
SIC Code:	3321 (Gray and Ductile Iron Foundries)
County Location:	Rush
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Rules Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

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

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

(a) Core production facilities consisting of:

Three (3) Core Sand Bins and four (4) Isocure Cold Box Core Machines, identified as P4, P5, P6 and P7, each with a maximum capacity of processing 0.5 ton of core sand per hour, 8.0 pounds of resin per ton of core sand per hour, and 1.12 pounds of DMIPA catalyst per ton of core sand, utilizing a dust collector for particulate control, with P4, P5 and P6 constructed in 1988 and P7 constructed in 1994, and exhausting to stack No. 9.

Note: Plant 2 Ductile Iron Foundry Line 4 (Year 2013 modification) will also utilize the cores produced by these bins and machines.

(b) One (1) Ductile Iron Foundry Line, constructed in 1988, identified as Plant 1, consisting of the following:

(1) Melting and Finishing operations originally constructed in 1988 and modified in 2004, consisting of:

(A) One (1) Indoor Charge Handling System with a maximum capacity of 20 tons of metal per hour;

Note: The Power Control System at the plant limits the total maximum throughput of the Charge Handling System to 20 tons of metal per hour.

(B) One (1) Melting system, identified as P8, with a maximum capacity of 20 tons of metal per hour, consisting of three (3) Electric Induction Furnaces, identified as P1, P2 and P3, each with a maximum throughput capacity of 10 tons of metal per hour, utilizing two (2) baghouses for

particulate control, identified as DC-3A and DC-3B, exhausting to common stack No. 3;

Note: The maximum throughput of metal for the Melting system is limited to 20 tons per hour by the maximum throughput from the Indoor Charge Handling system of 20 tons of metal per hour.

(C) One (1) Holding system consisting of the following equipment:

(1) Two (2) Electric Holding Furnaces, identified as P9, each with a holding capacity of 50 tons and a total maximum throughput capacity of 100 tons of metal per hour;

(2) Two (2) natural gas-fired metal treatment Ladle Heaters each with a rated capacity of 1.0 MMBtu/hr, constructed in 2004; and

(3) Two (2) natural gas-fired pouring Ladle Heaters, identified as P10, each with a rated capacity of 0.4 MMBtu/hr, constructed in 2004.

(D) One (1) Inoculation system consisting of two (2) metal treatment Ladles replaced in 2004, identified as P11, each with a maximum throughput capacity of 10 tons of metal per hour, controlled by baghouses DC-3A and DC-3B for particulate control, and exhausting to a common stack No. 3; and

(E) One (1) Grinding process, identified as Grinders 3 and 4 constructed in 1988, and Grinders 5 through 9 constructed in 2009, with a total capacity of 12 tons of metal per hour, controlled by dust collectors exhausting inside the building.

(2) Casting Line 2, with a maximum capacity of 15 tons of metal per hour and 70 tons of sand per hour, constructed in 2004, consisting of the following equipment:

(A) One (1) Sand System consisting of units identified as P32B, P33B, P34B, P35B, P36B, P37B and P39B, with a total maximum capacity of 70 tons of sand per hour, controlled by baghouse BH6400, and exhausting to stack No. 6400;

(B) One (1) Pouring station, identified as P13B, with a maximum capacity of 15 tons of metal poured per hour, controlled by baghouse DC-3B, and exhausting to stack No. 3;

(C) One (1) Cooling line, identified as P14B, with a maximum capacity of 15 tons of metal per hour, controlled by baghouse BH6200, and exhausting to stack No. 6200;

(D) One (1) Shakeout unit, identified as P16B, with a maximum capacity of 15 tons of metal per hour, controlled by baghouse BH6200, and exhausting to stack No. 6200;

(E) One (1) Bad Heat Shakeout unit controlled by baghouse DC-5, and exhausting to stack No. 5;

(F) Casting Conveyors and Desprue operations, identified as P17B, P18B,

P19B, P20B, P21B and P22B, with a maximum capacity of 15 tons of metal per hour, controlled by baghouses DC-7 and DC-8B exhausting inside the building, and baghouse BH6200 exhausting to stack No. 6200; and

(G) One (1) Plant 1, Line 2 Shotblast process, consisting of three shot blast units, identified as P40, P41 and P42, each with a maximum capacity of 5.3 tons of metal per hour and a total maximum capacity of 9.0 tons of metal per hour, controlled by baghouse DC-8B, and exhausting inside the building.

(3) One (1) Shotblast unit, identified as Wheelabrator MeshBelt Blast, with a maximum capacity of 11.0 tons of metal per hour, controlled by baghouse DC-13, and exhausting internally.

(c) One (1) Ductile Iron Foundry Line, constructed in 1997, identified as Plant 2, consisting of the following:

(1) One (1) Indoor Charge Handling system, identified as 1000A, approved for modification in 2013, with a nominal capacity of 20 tons of metal per hour;

Note: This Indoor Charge Handling system (1000A) is common for the Ductile Iron Foundry Lines, identified as Plant 2 and Line 4.

(2) One (1) Melting, Ductile Iron Conversion Station and Pouring system, utilizing baghouse BH6010 for particulate control, exhausting to stack No. 6010, consisting of the following equipment:

(A) One (1) Ductile Iron Conversion Station, identified as 1150, approved for modification in 2013, with a nominal capacity of 25 tons of metal per hour.

Note: This Ductile Iron Conversion Station (1150) is common for the Ductile Iron Foundry Lines identified as Plant 2 and Line 4.

(B) Two (2) Electric Induction Furnaces identified as 1110, each with a nominal capacity of 10 tons of metal per hour;

Note: These electric induction furnaces (1110) are common for the Ductile Iron Foundry Lines, identified as Plant 2 and Line 4.

(C) One (1) Electric Holding Furnace, uncontrolled; and

(D) Two (2) natural gas-fired Ladle Heaters, identified as 6600 and 6610, each with a maximum heat input rate of 2 MMBtu per hour;

(E) One Pouring Station, identified as 2000, approved for modification in 2013, with a nominal capacity of 20 tons of metal per hour.

Note: Baghouse BH6010 is common control for Ductile Iron Conversion Station (1150), two (2) Electric Induction Furnaces (1110) and Pouring Station (2000).

(3) One (1) Mold Machine, identified as 2010, with a maximum capacity of 10 tons of

metal per hour and 70 tons of sand per hour, utilizing baghouse BH6010 for particulate control, exhausting to stack No. 6010;

(4) One (1) Casting Conveyor System and one (1) Cooling Conveyor System, identified as 2015 and 2020, respectively, modified in 2009, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing baghouse BH6020 and BH6030 for particulate control, and exhausting to stack No. 6020, 6030A and 6030B;

(5) One (1) Casting Shakeout System, identified as 3010, modified in 2009, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing baghouse BH6030 for particulate control, and exhausting to stack No. 6030A and 6030B;

(6) One (1) Casting Shakeout System, identified as 3010, permitted in 2009, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing baghouse BH6030 for particulate control, and exhausting to stack No. 6030A and 6030B;

(7) One (1) Sand and Waste Sand Handling System, identified as 4000, 4140 and 5000, with a maximum capacity of 70 tons of sand per hour, utilizing baghouse BH6020 and BH6040 for particulate control, and exhausting to stack No. 6020 and 6040;

(8) One (1) Shotblast unit, identified as Final Blast 3090, with a maximum capacity of 10 tons of metal per hour, utilizing baghouse BH6030, and exhausting to stack No. 6030A and 6030B; and

(9) One (1) Finishing operation consisting of trim presses, identified as 8000, with a maximum capacity of 5.5 tons of metal per hour, uncontrolled.

(d) One (1) Ductile Iron Foundry Line, approved in 2013 for construction, identified as Plant 2, Line 4, consisting of the following:

(1) One (1) electric Induction Furnace, identified as EU-N1, with a nominal capacity of 10 tons of metal per hour, utilizing Baghouse DC-N1A for particulate control, and exhausting to Stack S-N1.

(2) One (1) Sand Handling System, identified as EU-N2A, and one (1) Return Sand Handling System, identified as EU-N2B, with a nominal capacity of 75 tons of sand per hour, both system utilizing Baghouse DC-N1B for particulate control, exhausting to Stack S-N1.

(3) One (1) Pouring Station, identified as EU-N3, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control and mold vent ignition system for VOC control, and exhausting to Stack S-N2.

(4) One (1) Cooling Line, identified as EU-N4, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(5) One (1) Casting Shakeout System, identified as EU-N5, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(6) One (1) Bad Heat Shakeout System, identified as EU-N5A, with a nominal capacity of 10 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(7) One (1) Shot Blast Unit, identified as EU-N6, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control and exhausting to Stack S-N2.

Note: Baghouse DC-N2 is common control for the Pouring Station (EU-N3), Cooling Line (EU-N4), Casting Shakeout system (EU-N5), Bad Heat Shakeout system (EU-N5A) and Shot Blast unit (EU-N6).

(e) Six (6) Bench Grinders, modified in 2013, with a nominal capacity of 5.5 tons of metal per hour:
(1) Cells 1 and 2, controlled by fabric filter AAF;
(2) Cell 3, controlled by fabric filter DC#3;
(3) Cell 4, controlled by fabric filter DC#4;
(4) Cell 11, controlled by fabric filter DC#1; and
(5) Cell 12 controlled by Aercology #1;
all exhausting inside/outside the building.

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

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

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour:

(1) Two (2) natural gas-fired boilers, identified as P40 and P41, with a maximum heat capacity of 0.9 and 1.2 million Btu per hour, respectively; [326 IAC 6-2-4]

(b) Degreasing operations that do not exceed one hundred forty-five (145) gallons per twelve (12) months, except if subject to 326 IAC 20-6: maintenance parts cleaner using mineral spirits solvent that is 100% recycled, with a maximum throughput of 120 gallons per 12 months; [326 IAC 8-3-2]

(c) Other activities:

(1) Six (6) Scrap Bays, identified as P47 through P52, each with PM emissions of approximately 0.16 pound per hour; [326 IAC 6-3-2]

(3) Maintenance shop operations, identified as P58 and P59, each with PM emissions of approximately 0.1 pounds per hour; [326 IAC 6-3-2]

(4) Two (2) Collector Penthouses, identified as P53 and P54, each with PM emissions of approximately 0.16 pounds per hour; [326 IAC 6-3-2]

(5) One (1) Material Separator (baghouse fallout collection), with PM emissions approximately 0.6 pounds per hour; [326 IAC 6-3-2]

(6) One (1) Paint Booth, identified as CO5, used for machine part maintenance coating operations, with a maximum throughput rate of 120 metal units per hour, utilizing dry filters for particulate control, exhausting inside the building or through stack No. SCO5; [326 IAC 6-3-2]

A.4 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)]

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

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour:

(1) One (1) natural gas-fired heater to dry scrap metal in Plant 1, rated at 1.0 MMBtu per hour.

(2) One (1) natural gas-fired heater, identified as P50, located in Plant 1, rated at 2.5 MMBtu per hour.

(b) Combustion source flame safety purging on startup;

(c) Vessels storing the following: lubricating oils, hydraulic oils, machining oils, and machining fluids.

(d) Refractory storage not requiring air pollution control equipment;

(e) Application of oils, greases, lubricants, and nonvolatile materials as temporary protective coatings.

(f) Replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment;

(g) Paved and unpaved roads and parking lots with public access;

(h) Filter or coalescer media changeout.

(i) Two (2) Sand Towers for the gray and ductile iron foundry line, identified as P55 and P56, constructed in 1988 (emissions are included in sand handling calculations);

(k) Other activities:

(1) One (1) scrap yard; and

(2) Two (2) fixed roof resin storage tanks, each with a maximum storage capacity of 2,000 gallons.

A.5 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, T139-25610-00011, 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. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted 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) If required by specific condition(s) in Section D of this permit, 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.

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. 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).

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

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

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

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the

affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

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

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

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

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, 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 T139-25610-00011 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(40). 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(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

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

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

(3) Any change in emissions; and

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

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require 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 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.7 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.8 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.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)][40 CFR 64][326 IAC 3-8]

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

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

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

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

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

(b) 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.

(c) 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.10 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

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

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

C.11 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

(a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

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

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

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

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

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

(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

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

(1) initial inspection and evaluation;

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

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

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

(1) monitoring results;

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

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

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

(e) The Permittee shall record the reasonable response steps taken.

(II)

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

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

(2) Determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records,

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

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

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

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

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

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

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

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

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

(h) *CAM recordkeeping requirements.*

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

of this permit contains the Permittee's obligations with regard to the records required by this condition.

(2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements

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

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

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline

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

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

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

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

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

The statement must be submitted to:

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

The emission statement does require 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] [326 IAC 2-2][326 IAC 2-3]

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

(AA) All calibration and maintenance records.

(BB) All original strip chart recordings for continuous monitoring instrumentation.

(CC) Copies of all reports required by the Part 70 permit.

Records of required monitoring information include the following:

(AA) The date, place, as defined in this permit, and time of sampling or measurements.

(BB) The dates analyses were performed.

(CC) The company or entity that performed the analyses.

(DD) The analytical techniques or methods used.

(EE) The results of such analyses.

(FF) The operating conditions as existing at the time of sampling or measurement.

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

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

(c) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A), 326 IAC 2-2-8 (b)(6)(B), 326 IAC 2-3-2 (l)(6)(A), and/or 326 IAC 2-3-2 (l)(6)(B)) that a “project” (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

(1) Before beginning actual construction of the “project” (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, document and maintain the following records:

(A) A description of the project.

(B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.

(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:

(i) Baseline actual emissions;

(ii) Projected actual emissions;

(iii) Amount of emissions excluded under section

326 IAC 2-2-1(pp)(2)(A)(iii) and/or 326 IAC 2-3-1 (kk)(2)(A)(iii); and

(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

(d) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A) and/or 326 IAC 2-3-2 (l)(6)(A)) that a "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

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

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

C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [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.

(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) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the

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

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

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

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

(f) The report for project at an existing emissions unit shall be submitted no later than sixty (60) days after the end of the year and contain the following:

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

(2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.

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

(4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part 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

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

Stratospheric Ozone Protection

C.18 Compliance with 40 CFR 82 and 326 IAC 22-1

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

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) Core production facilities consisting of:

Three (3) Core Sand Bins and four (4) Isocure Cold Box Core Machines, identified as P4, P5, P6 and P7, each with a maximum capacity of processing 0.5 ton of core sand per hour, 8.0 pounds of resin per ton of core sand per hour, and 1.12 pounds of DMIPA catalyst per ton of core sand, utilizing a dust collector for particulate control, with P4, P5 and P6 constructed in 1988 and P7 constructed in 1994, and exhausting to stack No. 9.

Note: Plant 2 Ductile Iron Foundry Line 4 (Year 2013 modification) will also utilize the cores produced by these bins and machines.

(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 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the Core Sand Bins and Isocure Cold Box Core Machines shall not exceed 2.58 pounds per hour when operating at a process weight rate of 1,000 pounds of sand per hour.

The pound per hour limitation was 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.1.2 PSD Minor Limit [326 IAC 2-2]

In order to render 326 IAC 2-2 not applicable, total PM and PM_{10} emissions from the Core Sand Bins and Isocure Cold Box Core Machines (Stack 9), except the emissions associated with Plant 2, Line 4, shall each not exceed 0.82 pound per hour.

Compliance with this emission limit, in addition to the emission limits listed in condition D.2.2, limits PM and PM_{10} emissions from the Plant 1 Melting Operations and the Isocure Cold Box Core Machines, constructed in 1988, each to less than 100 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Section B – Preventive Maintenance Plan contains the Permittee's obligations with regard to the records required by this condition.

Compliance Determination Requirements

D.1.4 Particulate Control [326 IAC 2-7-6(6)]

(a) In order to comply with conditions D.1.1 and D.1.2, the baghouse for particulate control shall be in operation and control emissions from the Core Sand Bins and Isocure Cold

Box Core Machines at all times that the Core Sand Bins and Isocure Cold Box Core Machines are in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, 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 2-7-5(1)][326 IAC 2-7-6(1)]

D.1.5 Visible Emissions Notations

(a) Visible emission notations of the stack exhaust for the dust collector controlling the Core Sand Bins and Isocure Cold Box Core Machines 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 steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.6 Parametric Monitoring

The Permittee shall record the pressure drop across the dust collector used in conjunction with the Core Sand Bins and Isocure Cold Box Core Machines, at least once per day when the Core Sand Bins and Isocure Cold Box Core Machines is in operation. When for any one reading, the pressure drop across the dust collector is outside the normal range of 0.5 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.1.7 Broken or Failed Baghouse Detection

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a 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 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 baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.1.8 Record Keeping Requirements

(a) To document compliance with Condition D.1.5, the Permittee shall maintain daily records of visible emission notations of the Core Sand Bins and Isocure Cold Box Core Machines dust collector stack exhaust. 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 compliance with Condition D.1.6, the Permittee shall maintain once per day records of the pressure drop. 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 obligations with regard to the records required by this condition.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(b) One (1) Ductile Iron Foundry Line, constructed in 1988, identified as Plant 1, consisting of the following:

(1) Melting and Finishing operations originally constructed in 1988 and modified in 2004, consisting of:

(A) One (1) Indoor Charge Handling System with a maximum capacity of 20 tons of metal per hour;

Note: The Power Control System at the plant limits the total maximum throughput of the Charge Handling system to 20 tons of metal per hour.

(B) One (1) Melting system, identified as P8, with a maximum capacity of 20 tons of metal per hour, consisting of three (3) Electric Induction Furnaces, identified as P1, P2 and P3, each with a maximum throughput capacity of 10 tons of metal per hour, utilizing two (2) baghouses for particulate control, identified as DC-3A and DC-3B, exhausting to common stack No. 3;

Note: The maximum throughput of metal for the Melting system is limited to 20 tons per hour by the maximum throughput from the Indoor Charge Handling system of 20 tons of metal per hour.

(C) One (1) Holding system consisting of the following equipment:

(1) Two (2) Electric Holding Furnaces, identified as P9, each with a holding capacity of 50 tons and a total maximum throughput capacity of 100 tons of metal per hour;

(2) Two (2) natural gas-fired Metal Treatment Ladle Heaters each with a rated capacity of 1.0 MMBtu/hr, constructed in 2004; and

(3) Two (2) natural gas-fired Pouring Ladle Heaters, identified as P10, each with a rated capacity of 0.4 MMBtu/hr, constructed in 2004.

(D) One (1) Inoculation system consisting of two (2) metal treatment ladles replaced in 2004, identified as P11, each with a maximum throughput capacity of 10 tons of metal per hour, controlled by baghouses DC-3A and DC-3B for particulate control, and exhausting to a common stack No. 3; and

(E) One (1) Grinding process, identified as Grinders 3 and 4 constructed in 1988, and Grinders 5 through 9 constructed in 2009, with a total capacity of 12 tons of metal per hour, controlled by dust collectors exhausting inside the building.

(2) Casting Line 2, with a maximum capacity of 15 tons of metal per hour and 70 tons of sand per hour, constructed in 2004, consisting of the following equipment:

(A) One (1) Sand System consisting of units identified as P32B, P33B, P34B, P35B, P36B, P37B and P39B, with a total maximum capacity of 70 tons of sand per hour, controlled by baghouse BH6400, and exhausting to stack No. 6400;

(B) One (1) Pouring station, identified as P13B, with a maximum capacity of 15 tons of metal poured per hour, controlled by baghouse DC-3B, and exhausting to stack No. 3;

(C) One (1) Cooling line, identified as P14B, with a maximum capacity of 15 tons of metal per hour, controlled by baghouse BH6200, and exhausting to stack No. 6200;

(D) One (1) Shakeout unit, identified as P16B, with a maximum capacity of 15 tons of metal per hour, controlled by baghouse BH6200, and exhausting to stack No. 6200;

(E) One (1) Bad Heat Shakeout unit controlled by baghouse DC-5, and exhausting to stack No. 5;

(F) Casting Conveyors and Desprue operations, identified as P17B, P18B, P19B, P20B, P21B and P22B, with a maximum capacity of 15 tons of metal per hour, controlled by baghouses DC-7 and DC-8B exhausting inside the building, and baghouse BH6200 exhausting to stack No. 6200; and

(G) One (1) Plant 1, Line 2 Shotblast process, consisting of three shot blast units, identified as P40, P41 and P42, each with a maximum capacity of 5.3 tons of metal per hour and a total maximum capacity of 9.0 tons of metal per hour, controlled by baghouse DC-8B, and exhausting inside the building.

(3) One (1) Shotblast unit, identified as Wheelabrator MeshBelt Blast, with a maximum capacity of 11.0 tons of metal per hour, controlled by baghouse DC-13, and exhausting internally.

(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 BACT Limit for PM_{10} [326 IAC 2-2-3]

Pursuant to 326 IAC 2-2-3:

(a) Opacity for stack No. DC-3A, DC-3B, BH6200, BH6400, and DC-5 shall not exceed ten percent (10%) for more than three (3) consecutive six (6) minute averaging periods.

(b) The Ladle Heaters are exclusively natural gas fired and are therefore considered to meet the requirements for BACT.

(c) The Permittee shall comply with the following BACT required emission limits for PM_{10} from the Plant 1, Casting Line 2 processes (PM_{10} limits include both filterable and condensable).

Stack No.	Process	Filterable PM_{10} Emission Limitation	Total PM_{10} Emission Limitation (lb/ton)

		(gr/dscf)	(lb/hr)	(Filterable & Condensable)
DC-3A	Melting (P8) & Inoculation (P11)	0.003	1.7	0.633 lb/ton metal
DC-3B	Melting (P8), Inoculation (P11) & Pouring (P13B),	0.003	1.7	
BH6400	Sand Handling (P32B-P37B, P39B)	0.003	1.13	0.02 lb/ton sand
BH6200	Cooling (P14B), Shakeout (P16B), & Casting Conveyors & Desprue operations (P17B-P22B)	0.003	2.85	1.045 lb/ton metal
DC-8B (exhausts inside)	Shotblast (P40-P42) & Casting Conveyors & Desprue operations (P17B-P22B)	0.003	1.03	0.085 lb/ton metal
DC-7 (exhausts inside)	Casting Conveyors & Desprue operations (P17B-P22B)	0.003	0.55	0.085 lb/ton metal
DC-5	Bad Heat Shakeout	0.003	0.45	0.03 lb/ton metal

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

(a) The throughput of metal charged and melted by P8 and P9 shall be less than 79,000 tons per year with compliance determined at the end of each month.

(b) Emissions of PM and PM_{10} shall be limited as follows:

Process	PM/ PM_{10} Emission Limitation (lb/ton material)
Charge Handling Operations (P1,P2, and P3)	0.24
Melting (P8)	0.20
Holding Furnace (P9)	0.10

(c) Emissions of PM and PM_{10} from the grinding process shall not exceed the following:

Process	PM/ PM_{10} Emission Limitation (lb/hour)
Grinders 3-5	0.53
Grinder 6	0.28
Grinder 7	0.28
Grinder 8	0.53
Grinder 9	0.18

Compliance with the emission limits for the Grinders in conjunction with the emission limits and the throughput limits for the Melting (P8) and Holding Furnace (P9) and the PM and PM_{10} limits listed in Condition D.1.2 limits PM and PM_{10} emissions from the Plant 1 Operations and Isocure Cold Box Core Machines constructed in 1988 to less than 100 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to the Charge Handling, Melting and Finishing operations.

D.2.3 PSD Minor Limits for PM and PM_{10} [326 IAC 2-2]

PM and PM_{10} emissions from the Wheelabrator MeshBelt Blast unit constructed in 2001 shall be

limited as follows:

(a) The PM emission rate shall not exceed 5.7 pounds per hour.

(b) The PM_{10} emission shall not exceed 3.4 pounds per hour.

Compliance with these emission limits will limit PM and PM_{10} emissions from the Wheelabrator MeshBelt Blast to less than 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to the modification to construct this unit in 2001.

D.2.4 PSD Minor Limits [326 IAC 2-2]

(a) In order to render PSD not applicable for PM the following limits shall apply:

Stack No.	Process	PM Emission Limitation (lb/ton material)	Throughput Limit per 12 consecutive month period)
DC-3A / DC-3B	Melting (P8), Inoculation (P11), & Pouring (P13B)	0.17 lbs/ton metal poured	79,000 tons metal poured
BH6400	Sand Handling (P32B-P37B, P39B)	0.016 lbs/ton sand	368,667 tons sand processed
BH6200	Cooling (P14B), Shakeout (P16B), & Casting Conveyors & Desprue operations (P17B-P22B)	0.19 lbs/ton metal poured	79,000 tons metal poured
DC-8B	Shot Blast Units (P40-P42), Casting Conveyors & Desprue Operations (P17B-P22B)	0.11 lbs/ton metal poured	79,000 tons metal poured
DC-7	Casting Conveyors & Desprue Operations (P17B-P22B)	0.037 lbs/ton metal poured	79,000 tons metal poured
Dust Collectors	Grinders 3-9	0.20 lb/ton metal poured	79,000 tons metal

(b) CO emissions from the Pouring station (P13B), Cooling line (P14B), Shakeout (P16B) and Bad Heat Shakeout operations combined shall not exceed 2.5 pounds of CO per ton of metal throughput.

(c) The throughput of metal to each of the Pouring station (P13B), Cooling line (P14B), Shakeout (P16B) and Bad Heat Shakeout operations shall not exceed 79,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the CO emission limit and the metal throughput limit will limit CO emissions from the units installed in 2004, including the Ladle Heaters, to less than 100 tons per year.

Therefore the requirements of 326 IAC 2-2 (PSD) do not apply to the modification in 2004.

D.2.5 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rates from the Plant 1, Line 2 Gray and Ductile Iron Foundry line shall be limited as follows:

Unit	Stack ID	Process Weight Rate (ton per hour)	Allowable Emissions (pounds per hour)
Charge Handling (P1, P2, P3)	N/A	20.0	30.51
Melting (P8), Holding Furnaces (P9), and Inoculation (P11)	DC-3A, DC-3B	20.0	30.51
Sand Handling (P32B - P37B & P39B)	BH6400	70.0	47.76
Pouring (P13B)*	DC-3B	85.0	49.67
Cooling (P14B)*	BH6200	85.0	49.67
Shakeout (P16B)*	BH6200	85.0	49.67
Bad Heat Shakeout*	DC-5	85.0	49.67
Casting Conveyors & Desprue (P17B – P22B)	BH6200 DC-8B, DC-7	15.0	25.16
Shot Blast units (P40, P41 & P42)	DC-8B	9.0	17.87
Grinder 3	--	1.25	4.76
Grinder 4	--	1.25	4.76
Grinder 5	--	1.25	4.76
Grinder 6	--	1.25	4.76
Grinder 7	--	1.25	4.76
Grinder 8	--	3.75	9.96
Grinder 9	--	1.25	4.76
Wheelabrator MeshBelt Blast	DC-13	11.0	20.44

* Includes metal and sand throughput.

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

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

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

or

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

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

D.2.6 PSD BACT for Volatile Organic Compounds (VOC) [326 IAC 2-2-3][326 IAC 8-1-6]

Pursuant to 326 IAC 2-2-3 (PSD), and 326 IAC 8-1-6 (BACT) (established in year 2004 through SSM No. 139-17898-00011), the following conditions shall apply to the Pouring station (P13B), Cooling line (P14B), Shakeout (P16B) and Bad Heat Shakeout processes of Plant 1, Casting Line 2:

(a) Material Substitution and Lower-Emitting Processes/Practices shall be used to limit VOC emissions.

(b) VOC emissions shall not exceed 1.2 pounds per ton of metal throughput to the Pouring station (P13B), Cooling line (P14B), and Shakeout operations (P16B) and Bad Heat Shakeout operations combined.

(c) The throughput of metal to the Pouring, Cooling and Shakeout operations (P13B, P14B, and P16B) and Bad Heat Shakeout operations shall not exceed 79,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(d) The installed Advanced Oxidation (AO) system shall be used with a minimum VOC reduction efficiency of 20%.

D.2.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Section B – Preventive Maintenance Plan contains the Permittee's obligations with regard to the records required by this condition.

Compliance Determination Requirements

D.2.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Conditions D.2.1(c), D.2.2(b), D.2.3, D.2.4(b) and D.2.5 the Permittee shall perform PM and PM_{10} testing for the following facilities utilizing methods as approved by the Commissioner.

(1) Baghouses DC-3A & DC-3B controlling the Melting (P8), Inoculation (P11), & Pouring (P13B) operations.

(2) Baghouse BH6400 controlling the Sand Handling (P32B-P37B, P39B) system.

(3) (A) <u>Before the replacement of baghouse BH6200, approved for construction in 2012:</u>

Baghouse BH6200 controlling the Cooling (P14B), Shakeout (P16B), & Casting Conveyors & Desprue (P17B-P22B) operations.

(B) <u>After the 2012 construction and operation of baghouse BH6200, approved in 2012:</u>

Within sixty (60) days of reaching maximum capacity but no later than one hundred and eighty (180) days of the startup of the baghouse, the Permittee shall perform PM and PM10 testing, utilizing methods approved by the commissioner. These tests shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

(4) Baghouse DC-8B controlling the Shot Blast Units (P40-P42), Casting Conveyors & Desprue (P17B-P22B) operations.

(5) Baghouse DC-7 controlling the Casting Conveyors & Desprue operations.

(b) In order to demonstrate compliance with Conditions D.2.4(b) and D.2.6(b), the Permittee shall perform CO and VOC testing for the Pouring station (P13B), Cooling line (P14B), and Shakeout (P16B) operations utilizing methods as approved by the Commissioner.

(c) The tests required in (a) and (b) above shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM_{10} includes filterable and condensable PM10. Testing shall be conducted in accordance with Section C – Performance Testing.

D.2.9 Particulate Control [326 IAC 2-7-6(6)]

(a) In order to comply with conditions D.2.1, D.2.2, D.2.3, D.2.4, and D.2.5 the baghouses for particulate control shall be in operation and control emissions from the Melting, Inoculation, Pouring, Cooling, Shakeout, Casting Conveyors & Desprue, Shotblasting, and Grinding processes at all times that these facilities are in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, 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 2-7-5(1)][326 IAC 2-7-6(1)]

D.2.10 Visible Emissions Notations

(a) Visible emission notations of the Charge Handling operation and the stack exhaust from stack No. 3, 6200, 6400, and 5 for the Melting, Inoculation, Pouring, Cooling, Shakeout, Casting Conveyors & Desprue, Shotblasting operations 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 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.2.11 Parametric Monitoring

The Permittee shall record the pressure drop across each of the baghouses BH6200, BH6400, DC-3A, DC-3B, DC-7, DC-8B, DC-5, and DC-13 used in conjunction with the Melting, Inoculation, Pouring, Cooling, Shakeout, Casting Conveyors & Desprue, Shotblasting, Bad Heat Shakeout, and Wheelabrator MeshBelt Blast processes, at least once per day when the Melting, Inoculation, Pouring, Cooling, Shakeout, Casting Conveyors & Desprue, Shotblasting, Bad Heat Shakeout, and Wheelabrator MeshBelt Blast processes are in operation. When for any one reading, the pressure drop across any of the baghouses is outside the normal range of 0.5 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions or Exceedances. 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.2.12 Broken or Failed Baghouse Detection

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

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

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

D.2.13 Parametric Monitoring of Advanced Oxidation (AO) System

(a) The Permittee shall monitor and record the ultra-sonic power of the AO system or equivalent system used in conjunction with the Pouring (P13B), Cooling (P14B), Shakeout (P16B) and Bad Heat Shakeout processes, at least once per day when the Pouring (P13B), Cooling (P14B), Shakeout (P16B) and Bad Heat Shakeout processes are in operation. When for any one reading, the ultra-sonic power is less than 1100 W or a minimum established during the latest stack test for Sensors A and B, or the ultra-sonic power is less than 800 W or a minimum established during the latest stack test for Sensor C, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. An ultra-sonic power reading that is below the above mentioned minimum 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.

(b) The Permittee shall monitor and record the ozone generator plasma voltage of the AO system or equivalent system used in conjunction with the Pouring (P13B), Cooling (P14B), Shakeout (P16B) and Bad Heat Shakeout processes, at least once per day when the Pouring (P13B), Cooling (P14B), Shakeout (P16B) and Bad Heat Shakeout processes are in operation. When for any one reading, the ozone generator plasma voltage is less than 2400 V or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. An ozone generator plasma voltage reading that is below the above mentioned minimum 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.

(c) The Permittee shall monitor and record the hydrogen peroxide concentration of the AO system or equivalent system used in conjunction with the Pouring (P13B), Cooling (P14B), Shakeout (P16B) and Bad Heat Shakeout processes, at least once per day when the Pouring (P13B), Cooling (P14B), Shakeout (P16B) and Bad Heat Shakeout processes are in operation. When for any one reading, the hydrogen peroxide reading is less than 1,000 ppm, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A peroxide concentration reading that is below the above mentioned minimum 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 instruments used for determining the ultra-sonic power, the ozone generator plasma voltage and the hydrogen peroxide concentration 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.

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

D.2.14 Record Keeping Requirements

(a) To document compliance with Conditions D.2.4, and D.2.6(c), the Permittee shall maintain records of the tons of metal poured on Casting Line 2 operations per month.

(b) To document compliance with Condition D.2.4, the Permittee shall maintain records of the tons of mold sand processed on Casting Line 2 operations per month.

(c) To document compliance with Condition D.2.4(a), the Permittee shall maintain records of the tons of metal throughput to the Grinders 3-9 per month.

(d) To document compliance with Condition D.2.10, the Permittee shall maintain records of visible emission notations of the stack exhausts from stack No. 3, 6200, 6400, 5 and 8A once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(e) To document compliance with Condition D.2.11, the Permittee shall maintain once per day records of the pressure drop. 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).

(f) To document compliance with Condition D.2.13, the Permittee shall maintain records of the ultra-sonic power, the ozone generator plasma voltage, and the hydrogen peroxide usage of the AO system.

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

D.2.15 Reporting Requirements

A quarterly summary of the information to document the compliance status with Conditions D.2.4(a) and (c), and D.2.6(c) shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(c) One (1) Ductile Iron Foundry Line, constructed in 1997, identified as Plant 2, consisting of the following:

(1) One (1) Indoor Charge Handling system, identified as 1000A, approved for modification in 2013, with a nominal capacity of 20 tons of metal per hour;

Note: This Indoor Charge Handling system (1000A) is common to the Ductile Iron Foundry Lines, identified as Plant 2 and Line 4.

(2) One (1) Melting, Ductile Iron Conversion Station and Pouring system utilizing baghouse BH6010 for particulate control, exhausting to stack No. 6010, consisting of the following equipment:

(A) One (1) Ductile Iron Conversion Station identified as 1150, approved for modification in 2013, with a nominal capacity of 25 tons of metal per hour.

Note: This Ductile Iron Conversion Station (1150) is common for the Ductile Iron Foundry Lines, identified as Plant 2 and Line 4.

(B) Two (2) Electric Induction Furnaces identified as 1110, each with a nominal capacity of 10 tons of metal per hour;

Note: These electric induction furnaces (1110) are common to the Ductile Iron Foundry Lines identified as Plant 2 and Line 4.

(C) One (1) Electric Holding Furnace, uncontrolled; and

(D) Two (2) natural gas-fired Ladle Heaters, identified as 6600 and 6610, each with a maximum heat input rate of 2 MMBtu per hour;

(E) One Pouring Station, identified as 2000, approved for modification in 2013, with a nominal capacity of 20 tons of metal per hour.

Note: Baghouse BH6010 is common control for Ductile Iron Conversion Station (1150), two (2) Electric Induction Furnaces (1110) and Pouring Station (2000).

(3) One (1) Mold machine, identified as 2010, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing baghouse BH6010 for particulate control, exhausting to stack No. 6010;

(4) One (1) Casting Conveyor system and one (1) Cooling Conveyor system, identified as 2015 and 2020, respectively, modified in 2009, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing baghouse BH6020 and BH6030 for particulate control, and exhausting to stack No. 6020, 6030A and 6030B;

(5) One (1) Casting Shakeout system, identified as 3010, modified in 2009, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing baghouse BH6030 for particulate control, and exhausting to stack No. 6030A and 6030B;

(6) One (1) Casting Shakeout system, identified as 3010, permitted in 2009, with a

maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing baghouse BH6030 for particulate control, and exhausting to stack No. 6030A and 6030B;

(7) One (1) Sand and Waste Sand Handling system, identified as 4000, 4140 and 5000, with a maximum capacity of 70 tons of sand per hour, utilizing baghouse BH6020 and BH6040 for particulate control, and exhausting to stack No. 6020 and 6040;

(8) One (1) Shot Blast unit, identified as Final Blast 3090, with a maximum capacity of 10 tons of metal per hour, utilizing baghouse BH6030, and exhausting to stack No. 6030A and 6030B; and

(9) One (1) Finishing operation consisting of trim presses, identified as 8000, with a maximum capacity of 5.5 tons of metal per hour, uncontrolled.

(e) Six (6) Bench Grinders, modified in 2013, with a nominal capacity of 5.5 tons of metal per hour:
(1) Cells 1 and 2, controlled by fabric filter AAF;
(2) Cell 3, controlled by fabric filter DC#3;
(3) Cell 4, controlled by fabric filter DC#4;
(4) Cell 11, controlled by fabric filter DC#1; and
(5) Cell 12 controlled by Aercology #1;
all exhausting inside/outside the building.

(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 Limit [326 IAC 2-2]

In order to render 326 IAC not applicable, the Permittee shall comply with the following:

(a) The Charge Handling operation (1000A) shall comply with the following limits:

(i) Emissions of PM shall not exceed 0.12 pound per hour.

(ii) Emissions of PM_{10} shall each not exceed 0.12 pound per hour.

(b) Emissions of PM and PM_{10} and the throughput of metal and sand for the Plant 2 Ductile Iron Foundry Line, constructed in 1997, shall be limited as follows:

Process	Control Device ID	PM/ PM_{10} Emission Limitation (lb/ton material)	Throughput Limit of Material (tons per 12 consecutive month period)
Melting, Ductile Iron Conversion Station and Pouring System (1110, 1150 & 2000)	baghouse BH6010	0.50	61,500 (metal)
Holding Furnace	NA	0.10	61,500 (metal)
Casting Conveyor and Cooling Conveyor Systems (2015 and 2020)	baghouse BH6020, baghouse BH6030	1.45 (for control device BH6030)	61,500 (metal)

Process	Control Device ID	PM/ PM_{10} Emission Limitation (lb/ton material)	Throughput Limit of Material (tons per 12 consecutive month period)
Casting Shakeout System (3010)	baghouse BH6030		
Final Blast (3090) Shotblast unit	baghouse BH6030		
Sand and Waste Sand Handling System (4000, 4140, and 5000)	baghouse BH6020, baghouse BH6040	0.11 (for control device BH6020)	430,500 (mold sand)
		0.05 (for control device BH6040)	
Six (6) Bench Grinders	fabric filters AAF, DC#3, DC#4, DC#1 and Aercology #1	0.06	48,180 (metal)

Compliance with these limits, in conjunction with the limited PTE of Plant 2 Ductile Iron Foundry Line limits the PM and PM_{10} emissions from the Plant 2 Ductile Iron Foundry Line constructed in 1997 to each less than 100 tons per year. Any emissions from the Electric Holding Furnace are accounted for in the emissions from melting in the Electric Induction Furnaces.

(c) Emissions of VOC and the throughput of metal for the Plant 2 Ductile Iron Foundry Line, constructed in 1997, shall be limited as follows:

(1) VOC emissions from the Melting (1110), Inoculation (1150), Pouring (2000), the Casting conveyor & Cooling Conveyor system (2015 and 2020), and the Casting Shakeout system (3010) combined shall not exceed 0.8 pound of VOC per ton of metal throughput.

(2) The throughput of metal to each of the Melting (1110), Inoculation (1150), Pouring (2000), the Casting conveyor & Cooling Conveyor system (2015 and 2020), and the Casting Shakeout system (3010) shall not exceed 61,500 tons per twelve (12) consecutive month period.

The metal throughput limit and the VOC emission limits yield VOC emissions from the Plant 2 Ductile Iron Foundry Line constructed in 1997 less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 (New Facilities, General Reduction Requirements) do not apply.

(d) Emissions of CO and the throughput of metal for the Plant 2 Ductile Iron Foundry Line, constructed in 1997, shall be limited as follows:

(1) CO emissions from the Pouring (2000), the Casting conveyor & Cooling Conveyor system (2015 and 2020), and the Casting Shakeout system (3010) combined shall not exceed 3.2 pounds of CO per ton of metal throughput;

(2) The throughput of metal to each of the Pouring (2000), the Casting conveyor & Cooling Conveyor system (2015 and 2020), and the Casting Shakeout system

(3010) shall not exceed 61,500 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the CO emission limit and the metal throughput limit will limit CO emissions from the Plant 2 Ductile Iron Foundry Line, constructed in 1997, including the Ladle Heaters, to less than 100 tons per year.

Therefore the requirements of 326 IAC 2-2 (PSD) do not apply to the modification in 1997.

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rates from the Plant 2, Ductile Iron Foundry Line shall be limited as follows:

Unit	Control Device ID	Process Weight Rate (ton per hour)	Allowable Emissions (pounds per hour)
Charge Handling (1000A)	NA	20	30.51
Melting, and Pouring (1110 and 2000)	baghouse BH6010	20	30.51
Ductile Iron Conversion Station (1150)	baghouse BH6010	25	35.4
Holding Furnace	Uncontrolled	10.0	19.18
Casting Conveyor and Cooling Conveyor (2015 and 2020)*	baghouse BH6020, baghouse BH6030	80.0	49.06
Casting Shakeout (3010)*	baghouse BH6030	80.0	49.06
Final Blast (3090)	baghouse BH6030	10.0	19.18
Sand & Waste Sand Handling (4000, 4140, and 5000)	baghouse BH6020, baghouse BH6040	70.0	47.77
Six (6) Bench Grinders	fabric filters AAF, DC#3, DC#4, DC#1 and Aercology #1	5.50	12.85

* Includes metal and sand throughput.

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

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

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

or

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

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

D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

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

(a) In order to demonstrate compliance with Conditions D.3.1(b), and D.3.2, the Permittee shall perform PM, and PM_{10} for the following facilities utilizing methods as approved by the Commissioner:

(1) the baghouse controlling the Melting, Ductile Iron Conversion Station and Pouring operations (1110, 1150, and 2000) exhausting to stack No. 6010;

(2) the baghouses controlling the Casting Conveyor and Cooling Conveyor system (2015 and 2020) exhausting to stack No. 6020, 6030A and 6030B;

(3) the baghouse controlling the Shakeout operation (3010) exhausting to stack No. 6030A and 6030B;

(4) the baghouses controlling the Sand and Waste Sand Handling system (4000, 4140, and 5000) exhausting to stack No. 6020 and 6040 (PM and PM_{10} testing only); and

(5) fabric filter AAF controlling Cells 1 and 2, exhausting to the room.

The test specified in paragraph (1) above shall be performed no later than 180 days after initial startup of Plant 2, Line 4.

These tests shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. PM_{10} includes filterable and condensable PM_{10}. Testing shall be conducted in accordance with Section C - Performance Testing.

(b) In order to demonstrate compliance with Condition D.3.1(c), the Permittee shall perform VOC testing for the Melting (1110), Inoculation (1150), Pouring (2000), the Casting Conveyor and Cooling Conveyor system (2015 and 2020), and the Casting Shakeout system (3010) utilizing 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. Testing shall be conducted in accordance with Section C - Performance Testing.

(c) In order to demonstrate compliance with Condition D.3.1(d), the Permittee shall perform CO testing for the Pouring (2000), the Casting Conveyor and Cooling Conveyor system (2015 and 2020), and the Casting Shakeout system (3010) utilizing 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. Testing shall be conducted in accordance with Section C - Performance Testing.

D.3.5 Particulate Control [326 IAC 2-7-6(6)]

(a) In order to comply with Conditions D.3.1(b) and D.3.2, the baghouses and fabric filters for particulate and metallic HAP control shall be in operation and control emissions from the

Melting, Inoculation, Pouring, Cooling, Shakeout, Sand Handling, Waste Sand Handling, and Grinding processes and the Final Blast Shot Blast machines at all times that these facilities are in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, 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 2-7-5(1)][326 IAC 2-7-6(1)]

D.3.6 Visible Emissions Notations [40 CFR 64]

(a) Visible emission notations of the Charge Handling operation and the stack exhausts for the Melting, Inoculation, Pouring, Cooling, Shakeout, Sand Handling, Waste Sand Handling, Grinding processes (when venting outside) and the Final Blast Shot Blast machines shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

The above monitoring condition satisfy the Compliance Assurance Monitoring (CAM) for 1110, 2000 and EU1150.

(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 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 [40 CFR 64]

The Permittee shall record the pressure drop across each of the baghouses used in conjunction with the Melting, Inoculation, Pouring, Cooling, Shakeout, Sand Handling, Waste Sand Handling, and Grinding processes and the Final Blast Shot Blast machines, at least once per day when the Melting, Inoculation, Pouring, Cooling, Shakeout, Sand Handling, Waste Sand Handling, and Grinding processes and the Final Blast Shot Blast machines are in operation. When for any one reading, the pressure drop across any of the baghouses is outside the normal range of 0.5 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. 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.

The above monitoring condition satisfy the Compliance Assurance Monitoring (CAM) for 1110, 2000 and EU1150.

D.3.8 Broken or Failed Bag Detection

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a 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 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 baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.3.9 Record Keeping Requirements

(a) To document compliance with Conditions D.3.1(b), D.3.1(c), and D.3.1(d), the Permittee shall maintain records of the monthly metal throughput to the Melting, Inoculation and Pouring operations (1110, 1150, and 2000), the Holding Furnace, Casting Conveyor and Cooling Conveyor system (2015 and 2020), the Casting Shakeout system (3010), the Final Blast (3090), and the Grinding (8000) units.

(b) To document compliance with Condition D.3.1(b), the Permittee shall maintain records of the monthly sand throughput to the Sand & Waste Sand Handling System (4000, 4140, and 5000).

(c) To document compliance with Condition D.3.6, the Permittee shall maintain records of visible emission notations of the Charge Handling operation and the stack exhausts for the Melting, Inoculation, Pouring, Cooling, Shakeout, Sand Handling, Waste Sand Handling, and Grinding processes and the Final Blast Shot Blast machines taken once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(d) To document compliance with Condition D.3.7, the Permittee shall maintain once per day records of the pressure drop. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

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

D.3.10 Reporting Requirements

A quarterly summary of the information to document the compliance status with Conditions D.3.1(b), D.3.1(c), and D.3.1(d) shall be submitted using the reporting forms located at the end of

this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Insignificant Activities:

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units (Btu) per hour;

Two (2) boilers, identified as P40 and P41, with a maximum heat capacity of 0.9 and 1.2 million British units per hour, respectively, each combusting natural gas; [326 IAC 6-2-4]

(b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 (Maintenance parts cleaner using mineral spirits solvent that is 100% recycled, with a maximum throughput of 120 gallons per 12 months); [326 IAC 8-3-2]

(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 Particulate Matter (PM) [326 IAC 6-2]

Pursuant to 326 IAC 6-2-4(a) (Particulate Emission Limitations for Sources of Indirect Heating), for Q less than 10 MMBtu per hour, the pounds of PM emitted per million Btu heat input shall not exceed 0.6 pound per MMBtu. Therefore, PM emissions from each of the boilers, identified as P40 and P41, shall not exceed 0.6 pound per MMBtu heat input.

D.4.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

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

(a) Equip the degreaser with a cover.

(b) Equip the degreaser with a device for draining cleaned parts.

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

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

(e) Provide a permanent, conspicuous label that lists the operating requirements in subdivisions (3), (4), (6), and (7).

(f) Store waste solvent only in closed containers.

(g) Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.

SECTION D.5 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(d) One (1) Ductile Iron Foundry Line, approved in 2013 for construction, identified as Plant 2, Line 4, consisting of the following:

(1) One (1) electric Induction Furnace, identified as EU-N1, with a nominal capacity of 10 tons of metal per hour, utilizing Baghouse DC-N1A for particulate control, and exhausting to Stack S-N1.

(2) One (1) Sand Handling System, identified as EU-N2A, and one (1) Return Sand Handling System, identified as EU-N2B, with a nominal capacity of 75 tons of sand per hour, both system utilizing Baghouse DC-N1B for particulate control, exhausting to Stack S-N1.

(3) One (1) Pouring Station, identified as EU-N3, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control and mold vent ignition system for VOC control, and exhausting to Stack S-N2.

(4) One (1) Cooling Line, identified as EU-N4, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(5) One (1) Casting Shakeout System, identified as EU-N5, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(6) One (1) Bad Heat Shakeout System, identified as EU-N5A, with a nominal capacity of 10 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(7) One (1) Shot Blast Unit, identified as EU-N6, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control and exhausting to Stack S-N2.

Note: Baghouse DC-N2 is common control for the Pouring Station (EU-N3), Cooling Line (EU-N4), Casting Shakeout system (EU-N5), Bad Heat Shakeout system (EU-N5A) and Shot Blast unit (EU-N6).

(e) Six (6) Bench Grinders, modified in 2013, with a nominal capacity of 5.5 tons of metal per hour:

(1) Cells 1 and 2, controlled by fabric filter AAF;
(2) Cell 3, controlled by fabric filter DC#3;
(3) Cell 4, controlled by fabric filter DC#4;
(4) Cell 11, controlled by fabric filter DC#1; and
(5) Cell 12 controlled by Aercology #1;
all exhausting inside/outside the building.

(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.5.1 PSD Minor Limit [326 IAC 2-2]

In order to render 326 IAC 2-2 not applicable to the 2013 modification (approved under SSM 139-32540-00011) of the existing PSD major source, the emissions shall be limited as follows:

(a) The PM emissions shall be less than 25 tons per twelve consecutive month period, with compliance determined at the end of each month.

(b) The PM10 emissions shall be less than 15 tons per twelve consecutive month period, with compliance determined at the end of each month.

(c) The PM2.5 emissions shall be less than 10 tons per twelve consecutive month period, with compliance determined at the end of each month.

(d) The Lead emissions shall be less than 0.6 tons per twelve consecutive month period, with compliance determined at the end of each month.

(e) The CO emissions shall be less than 100 tons per twelve consecutive month period, with compliance determined at the end of each month.

(f) The VOC emissions shall be less than 40 tons per twelve consecutive month period, with compliance determined at the end of each month.

D.5.2 General Reduction Requirements for New Facilities [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6, the combined VOC emissions from the EU-N3, EU-N4 and EU-N5 shall not exceed 0.8 pounds per ton of iron and the VOC emissions from EU-3 shall be controlled by a mold vent off gas ignition system.

D.5.3 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the facilities listed below shall be limited as specified when operating at the respective process weight rate:

Emission Unit/Activity (Line 4)	Emission Unit ID	Process Weight Rate (tons/hr)	Allowable Particulate Emission Rate (326 IAC 6-3-2) (lb/hr)
Induction Furnace	EU-N1	10	19.2
Sand Handling and Return Sand Handling	EU-N2A and EU-N2B	75	74.0
Pouring	EU-N3	15	25.2
Cooling	EU-N4	15	25.2
Casting Shakeout	EU-N5	15	25.2
Bad Heat Shakeout	EU-N5A	10	19.2
Shot Blast Unit	EU-N6	15	25.2

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

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

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

or

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

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

D.5.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.5.5 Emission Calculations [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition D.5.1, the Permittee shall determine the emissions for each month as below:

Note: The Plant 2 Indoor Charge Handling System, Plant 2 Induction Furnace (1110), Plant 2 Ductile Iron Conversion process (1150), included in the equations below are listed Section D.3.

The Core production facilities included in the equations below are listed Section D.1.

(a) PM2.5

$PM_{2.5}$ emissions (tons/month)	=	$\{(EF2.5_{Charge} * H_{M4}) + (EF2.5_{M4} * P_{M4}) + (EF2.5_{M2} * P_{M3}) + (EF2.5_{DIC} * P_{DIC4}) + (EF2.5_{PCSS4} * P_{PCSS4}) + (EF2.5_{Sand4} * P_{Sand4}) + (EF2.5_{GRD} * P_{GRD4}) + (EF2.5_{Core} * P_{M4})\}$ / 2000 lbs/ton
Where		
$EF2.5_{Charge}$	=	PM2.5 emission factor for Plant 2 Indoor Charge Handling System. 0.072 lb/hr shall be used. It is assumed that PM2.5 emissions from Plant 2 Indoor Charge Handling System are 60% of the PM10 emissions from Plant 2 Indoor Charge Handling System. The PM10 emission rate from Plant 2 Indoor Charge Handling System is 0.12 lb/hr, based on PM10 limit specified in Condition D.3.1(a) of existing the permit for this operation. The 60% of 0.12 lb/hr is 0.072 lb/hr.
H_{M4}	=	monthly hours during which the Plant 2 Indoor Charge Handling System operated to feed metals at line 4.
$EF2.5_{M4}$	=	PM2.5 emission factor lb/ton metal for Line 4 Induction Furnace (EU-N1) established during the most recent stack test. Until the test, 0.03 lb/ton emission factor shall be used.
P_{M4}	=	monthly tons of metal melted in Line 4 Induction Furnace (EU-N1)
$EF2.5_{M2}$	=	PM2.5 emission factor lb/ton metal for Plant 2 Induction Furnace (1110) established during the most recent stack test performed for the Induction Furnace (1110). Until the test, 0.03 lb/ton metal emission factor shall be used.
P_{M3}	=	monthly tons of metal melted on the Plant 2 Induction Furnace (1110) and poured at Line 4.
$EF2.5_{DIC}$	=	$PM_{2.5}$ emission factor lb/ton metal for the Plant 2 Ductile Iron Conversion process (1150) established during the most recent stack test. Until the test, 0.03 lb/ton metal emission factor shall be used.
P_{DIC4}	=	monthly tons of metal ductile iron poured at Line 4.
$EF2.5_{PCSS4}$	=	PM2.5 emission factor lb/ton metal for Line 4 Pouring, Cooling, Shakeout and Shotblast (EU-N3, EU-N4, EU-N5, EU-N5A and EU-N6) established during most recent stack test. Until the test, 0.13 lb/ton metal emission factor shall be used.

P_{PCSS4}	=	monthly tons of metal poured at Line 4.
$EF2.5_{Sand4}$	=	$PM_{2.5}$ emission factor (lb/ton sand) for Line 4 Sand Handling and Waste Sand Handling (EU-N2A and EU-N2B) established during the most recent stack test. Until the test, 0.014 (lb/ton sand) emission factor shall be used.
P_{Sand4}	=	monthly throughput (tons of sand) for Sand Handling and Return Sand Handling on line 4.
$EF2.5_{GRD4}$	=	PM2.5 emission factor lb/ton metal for Cells 1 and 2 of the Bench Grinders established during the most recent stack test. Until the test, 0.02 lb/ton metal emission factor shall be used.
P_{GRD4}	=	monthly throughput (ton metal) for Grinding Operations for Six (6) Bench Grinders
$EF2.5_{Core}$	=	PM2.5 emission factor for Core production facilities. 0.014 lb/ton metal emission factor shall be used.

(b) PM10

PM10 emissions (tons/month)	=	$\{(EF10_{Charge} * H_{M4}) + (EF10_{M4} * P_{M4}) + (EF10_{M2} * P_{M3}) + (EF10_{DIC} * P_{DIC4}) + (EF10_{PCSS4} * P_{PCSS4}) + (EF10_{Sand4} * P_{Sand4}) + (EF10_{GRD} * P_{GRD4}) + (EF10_{Core} * P_{M4})\} / 2000$ lbs/ton
Where		
$EF10_{Charge}$	=	PM10 emission factor for Plant 2 Indoor Charge Handling System. 0.12 lb/hr shall be used. Since the Plant 2 Indoor Charge Handling System is common to both the Plant 2 and Line 4, the same lb/hr emission rate is used.
H_{M4}	=	monthly hours during which the Plant 2 Indoor Charge Handling System operated to feed metals at line 4.
$EF10_{M4}$	=	PM10 emission factor lb/ton metal for Induction Furnace (EU-N1) established during the most recent stack test. Until the test, 0.03 lb/ton emission factor shall be used.
P_{M4}	=	monthly tons of metal melted in Induction Furnace (EU-N1)
$EF10_{M2}$	=	PM10 emission factor lb/ton metal for Induction Furnace (1110) established during the most recent stack test performed for the Induction Furnace (1110). Until the test, 0.03 lb/ton metal emission factor shall be used.
P_{M3}	=	monthly tons of metal melted on the Induction Furnace (1110) and poured on Line 4.
$EF10_{DIC}$	=	PM10 emission factor lb/ton metal for the Plant 2 Ductile Iron Conversion process (1150) established during the most recent stack test. Until the test, 0.03 lb/ton metal emission factor shall be used.
P_{DIC4}	=	monthly tons of metal ductile iron poured on line 4.
$EF10_{PCSS4}$	=	PM10 emission factor lb/ton metal for Line 4 Pouring, Cooling, Shakeout and Shotblast (EU-N3, EU-N4, EU-N5 and EU-N6) established during most recent stack test. Until the test, 0.13 lb/ton metal emission factor shall be used.
P_{PCSS4}	=	monthly tons of metal poured on line 4.
$EF10_{Sand4}$	=	PM10 emission factor (lb/ton sand) for Line 4 Sand Handling and Waste Sand Handling (EU-N2A and EU-N2B) established during the most recent stack test Until the test, 0.014 (lb/ton sand) emission factor shall be used.
P_{Sand4}	=	monthly throughput (tons of sand) for Sand Handling and Return Sand Handling on line 4.
$EF10_{GRD4}$	=	PM10 emission factor lb/ton metal for Cells 1 and 2 established during the most recent stack test. Until the test, 0.02 lb/ton metal emission factor shall be used.
P_{GRD4}	=	monthly throughput (ton metal) for Grinding Operations for Six (6) Bench Grinders

$EF10_{Core}$	=	PM10 emission factor for Core production facilities. 0.014 lb/ton metal emission factor shall be used.

(c) PM

PM emissions (tons/month)	=	$\{(EFPM_{Charge} * H_{M4}) + (EFPM_{M4} * P_{M4}) + (EFPM_{M2} * P_{M3}) + (EFPM_{DIC} * P_{DIC4}) + (EFPM_{PCSS4} * P_{PCSS4}) + (EFPM_{Sand4} * P_{Sand4}) + (EFPM_{GRD} * P_{GRD4}) + (EFPM_{Core} * P_{M4})\} / 2000$ lbs/ton
Where		
$EFPM_{Charge}$	=	PM emission factor for Plant 2 Indoor Charge Handling System. 0.12 lb/hr shall be used. Since the Plant 2 Indoor Charge Handling System is common to both the Plant 2 and Line 4, the same lb/hr emission rate is used.
H_{M4}	=	monthly hours during which the Plant 2 Indoor Charge Handling System operated to feed metals at line 4.
$EFPM_{M4}$	=	PM emission factor lb/ton metal for Induction Furnace (EU-N1) established during the most recent stack test. Until the test, 0.03 lb/ton emission factor shall be used.
P_{M4}	=	monthly tons of metal melted in Line 4 Induction Furnace (EU-N1)
$EFPM_{M2}$	=	PM emission factor lb/ton metal for Plant 2 Induction Furnace (1110) established during the most recent stack test performed for the Induction Furnace (1110). Until the test, 0.03 lb/ton metal emission factor shall be used.
P_{M3}	=	monthly tons of metal melted on the Induction Furnace (1110) and poured on Line 4.
$EFPM_{DIC}$	=	PM emission factor lb/ton metal for the Plant 2 Ductile Iron Conversion process (1150) established during the most recent stack test. Until the test, 0.03 lb/ton metal emission factor shall be used.
P_{DIC4}	=	monthly tons of metal ductile iron poured on line 4.
$EFPM_{PCSS4}$	=	PM emission factor lb/ton metal for Line 4 Pouring, Cooling, Shakeout and Shotblast (EU-N3, EU-N4, EU-N5, EU-N5A and EU-N6) established during most recent stack test. Until the test, 0.13 lb/ton metal emission factor shall be used.
P_{PCSS4}	=	monthly tons of metal poured on line 4.
$EFPM_{Sand4}$	=	PM emission factor (lb/ton sand) for Line 4 Sand Handling and Waste Sand Handling (EU-N2A and EU-N2B) established during the most recent stack test Until the test, 0.014 (lb/ton sand) emission factor shall be used.
P_{Sand4}	=	monthly throughput (tons of sand) for Sand Handling and Waste Sand Handling on line 4.
$EFPM_{GRD4}$	=	PM emission factor lb/ton metal for Cells 1 and 2 established during the most recent stack test. Until the test, 0.02 lb/ton metal emission factor shall be used.
P_{GRD4}	=	monthly throughput (ton metal) for Grinding Operations for Six (6) Bench Grinders
$EFPM_{Core}$	=	PM2.5 emission factor for Core production facilities. 0.014 lb/ton metal emission factor shall be used.

(d) Lead

Lead emissions (tons/month)	=	$\{(EFLead_{M4} * P_{M4}) + (EFLead_{M2} * P_{M3}) + (EFLead_{PCSS4} * P_{PCSS4})\} * 8760$ hrs/yr / 2000 lbs/ton
Where		
$EFLead_{M4}$	=	Lead emission factor lb/ton metal for Line 4 Induction Furnace (EU-N1) established during the most recent stack test.

		Until the test, 0.003 lb/ton emission factor shall be used.
P_{M4}	=	monthly tons of metal melted in Line 4 Induction Furnace (EU-N1)
$EFLead_{M2}$	=	Lead emission factor lb/ton metal for Plant 2 Induction Furnace (1110) established during the most recent stack test performed for the Induction Furnace (1110). Until the test, 0.003 lb/ton metal emission factor shall be used.
P_{M3}	=	monthly tons of metal melted on the Induction Furnace (1110) and poured on Line 4.
$EFLead_{PCSS4}$	=	Lead emission factor lb/ton metal for Line 4 Pouring, Cooling, Shakeout and Shotblast (EU-N3, EU-N4, EU-N5, EU-N5A and EU-N6). 0.0002 lb/ton metal emission factor shall be used.
P_{PCSS4}	=	monthly tons of metal poured on Line 4.

(e) VOC

VOC emissions (tons/month)	=	$\{(EFVOC_{PCSS} + EFVOC_{Core}) * P_M\}$ / 2000 lbs/ton
Where		
$EFVOC_{PCSS}$	=	VOC emission factor lb/ton metal for Line 4 Pouring, Cooling, Shakeout and Shotblast (EU-N3, EU-N4, EU-N5, EU-N5A and EU-N6) established during most recent stack test. Until the test, 0.8 lb/ton metal emission factor shall be used.
$EFVOC_{Core}$	=	VOC emission factor lb/ton metal for Core production facilities. 1.72 lb/ton of core emission factor shall be used.
P_M	=	monthly tons of metal poured on Line 4.

(f) CO

CO emissions (tons/month)	=	$(EFCO_{PCSS4} * P_{PCSS4})$ / 2000 lbs/ton
Where		
$EFCO_{PCSS4}$	=	CO emission factor lb/ton metal for Line 4 Pouring, Cooling, Shakeout and Shotblast (EU-N3, EU-N4, EU-N5, EU-N5A and EU-N6) established during most recent stack test. Until the test, 2.5 lb/ton metal emission factor shall be used.
P_{PCSS4}	=	monthly tons of metal poured on Line 4.

D.5.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) In order to show compliance with Conditions D.5.1 and D.5.5, the Permittee shall perform the following testing, no later than 180 days after the initial startup of Line 4:

(i) PM, PM10, PM2.5 and Lead testing for the baghouse DC-N1A (Stack S-N1) controlling the Line 4 Induction Furnace EU-N1.

(ii) PM, PM10, PM2.5 and Lead testing for the baghouse controlling the Plant 2 Induction Furnace (1110) exhausting to stack No. 6010.

(iii) PM, $PM_{10,}$ and PM2.5 testing for the baghouse DC-N1B (Stack S-N1) controlling the Line 4 Sand Handling and Return Sand Handling System (EU-N2A and EU-N2B).

(iv) PM, PM10 and PM2.5 testing for the baghouse DC-N2 (Stack S-N2) controlling the following Line 4 operations: Pouring and Cooling (EU-N3 and EU-N4), Casting Shakeout (EU-N5) Bad Heat Shakeout (EU-N5A) and Shot Blast Unit (EU-N6).

(v) CO testing for the Stack S-N2 for the Line 4 Pouring, Cooling and Casting Shakeout (EU-N3 and EU-N4, EU-N5 and EU-N5A).

(vi) PM, PM10 and PM2.5 testing for the baghouse controlling the Plant 2 Ductile Iron Conversion Station (1150) exhausting to stack No. 6010.

PM10 and PM2.5 includes filterable and condensable PM.

(b) In order to show compliance with Conditions D.5.1, D.5.2 and D.5.5(e), the Permittee shall perform VOC testing for the Pouring Station (EU-N3), Cooling Line (EU-N4) and Casting Shakeout System (EU-N5 and EU-N5A), no later than 180 days after the initial startup of Line 4.

The Permittte shall utilize test methods as approved by the Commissioner and the testing shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.5.7 Particulate Control [326 IAC 2-7-6(6)]

(a) In order to comply with Conditions D.5.1(a) through (d), and D.5.3, the baghouse DC-N1A for particulate and Lead control shall be in operation and control emissions from Induction Furnace EU-N1 at all times the EU-N1 is in operation.

(b) In order to comply with Conditions D.5.1(a) through (d), and D.5.3, the baghouse DC-N1B for particulate control shall be in operation and control emissions from Sand Handling and Waste Sand Handling System (EU-N2A and EU-N2B) at all times that the Sand Handling and Waste Sand Handling System (EU-N2A and EU-N2B) are in operation.

(c) In order to comply with Conditions D.5.1(a) through (d), and D.5.3, the baghouse DC-N2 for particulate control shall be in operation and control emissions from Pouring and Cooling (EU-N3 and EU-N4), Shakeout (EU-N5 and EU-N5A) and Shot Blast Unit (EU-N6) at all times that these emissions units are in operation.

(d) In order to comply with Conditions D.5.1(a) through (d), and D.5.3, the Permittee shall install and operate continuous Bag leak detection systems (BLDSs) for the Baghouse DC-N1A and DC-N2.

The BLDS shall meet the following requirements:

(i) The BLDSs must be certified by the manufacturer to be capable of detecting particulate matter emissions.

(ii) The BLDS sensor must provide output of relative particulate matter loading.

(iii) The BLDS must be equipped with an alarm system that will alarm when an increase in relative particulate loading is detected over a preset level.

(iv) The BLDS shall be installed and operated in a manner consistent with available written guidance from the U.S. Environmental Protection Agency or, in the

absence of such written guidance, the manufacturer's written specifications and recommendations for installation, operation, and adjustment of the system.

(v) The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time.

(vi) In no event shall the sensitivity be increased by more than 100 percent or decreased by more than 50 percent over a 365 day period unless such djustment follows a complete baghouse inspection, which demonstrates the baghouse is in good operating condition.

(vii) The bag detector must be installed downstream of the baghouses.

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

D.5.8 Mold Vent Ignition

In order to comply with Conditions D.5.1 and D.5.2, the Permittee shall comply with the following mold vent off gas ignition requirements for EU-N3:

(a) The Permittee shall operate the mold vent off gas ignition system for EU-N3 according to the mold vent ignition operation and maintenance plan approved by IDEM, OAQ.

(b) The Permittee shall prepare and submit the mold vent ignition operation and maintenance plan to the IDEM, OAQ for approval.

The operation and maintenance plan must include procedures for igniting gases from mold vents in pouring areas and pouring stations that use a sand mold system. The plan must contain the elements below:

Procedures for providing an ignition source to mold vents of sand mold systems in each pouring area and pouring station unless the Permittee determine the mold vent gases either are not ignitable, ignite automatically, or cannot be ignited due to accessibility or safety issues. The Permittee shall document and maintain records of this determination. The determination of ignitability, accessibility, and safety may encompass multiple casting patterns provided the castings utilize similar sand-to-metal ratios, binder formulations, and coating materials. The determination of ignitability must be based on observations of the mold vents within 5 minutes of pouring, and the flame must be present for at least 15 seconds for the mold vent to be considered ignited. For the purpose of this determination:

(i) Mold vents that ignite more than 75 percent of the time without the presence of an auxiliary ignition source are considered to ignite automatically; and

(ii) Mold vents that do not ignite automatically and cannot be ignited in the presence of an auxiliary ignition source more than 25 percent of the time are considered to be not ignitable.

(C) The Permittee shall maintain a current copy of the mold vent ignition operation and maintenance plan onsite approved by IDEM, OAQ and make available for inspection upon request.

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

D.5.9 Visible Emissions Notations

(a) Visible emission notations of the emission units associated with Baghouse DC-N1B 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.5.10 Parametric Monitoring [40 CFR 64]

(a) The Permittee shall record the pressure drop across the baghouse DC-N1A (used in conjunction with EU-N1), baghouse DC-N1B (used in conjunction with EU-N2A and EU-N2B), baghouse DC-N2 (used in conjunction with EU-N3, EU-N4, EU-N5, EU-N5A and EU-N6) at least once per day when one or more of the associated emission unit with these baghouses is in operation. When for any one reading, the pressure drop across any of the baghouses is outside the normal range of 1 and 10 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

(b) An inspection shall be performed each calendar quarter of the Baghouse DC-N1A and DC-N2. All defective bags shall be replaced.

The above monitoring conditions satisfy the Compliance Assurance Monitoring (CAM) for EU-N1, EU-N3, EU-N4, EU-N5, EU-N5A and EU-N6.

D.5.11 Broken or Failed Bag Detection

The Permittee shall comply with the following for Baghouse DC-N1B and in the event of a BLDS alarm for Baghouse DC-N1A and DC-N2:

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a 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 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 baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.5.12 Record Keeping Requirements

(a) To document the compliance status with Conditions D.5.1, the Permittee shall maintain monthly records of the following:

(i) tons of metal poured at Line 4
(ii) tons of cores produced at INTAT Precision, Inc. and used on Line 4
(iii) tons of metal which is melted in the Induction Furnace (1110) and poured on Line 4
(iv) tons of metal inoculated at Plant 2 Ductile Iron Conversion station (1150) and poured on line 4
(v) tons of metal melted in Induction Furnace (EU-N1)
(vi) tons of sand throughput at Sand Handling and Waste Sand Handling (EU-N2A and EU-N2B) on Line 4
(vii) tons of metal (only those metals which are produced at Line 4) throughput for Grinding Operations at Six (6) Bench Grinders
(viii) hours during which the Plant 2 Indoor Charge Handling System operated for Line 4
(ix) PM, PM10, PM2.5, Lead, VOC and CO emissions determined using the equations specified in Condition D.5.5

(b) To document the compliance status with Condition D.5.8, the Permittee shall maintain a current copy of the mold vent ignition operation and maintenance plan onsite approved by IDEM, OAQ and make available for inspection upon request.

(c) To document the compliance status with Condition D.5.8, the Permittee shall maintain records of visible emission notations of the stack exhaust of the emission units associated with baghouse DC-N1B once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(d) To document the compliance status with Condition D.5.9(a), the Permittee shall maintain once per day records of the pressure drop for the Baghouse DC-N1A, DC-N1B and DC-N2. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

(e) To document the compliance status with Condition D.5.9(b), the Permittee shall maintain records of the results of the inspections required under Condition 5.9(b).

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

D.5.13 Reporting Requirements

A quarterly summary of the information to document the compliance status with Conditions D.5.1 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee’s obligation with regard to the reporting required by this condition The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(35).

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(b) One (1) Ductile Iron Foundry Line, constructed in 1988, identified as Plant 1, consisting of the following:

(1) Melting operations originally constructed in 1988 and modified in 2004, consisting of:

(B) One (1) Melting system, identified as P8, with a maximum capacity of 20 tons of metal per hour, consisting of three (3) Electric Induction Furnaces, identified as P1, P2 and P3, each with a maximum throughput capacity of 10 tons of metal per hour, utilizing two (2) baghouses for particulate control, identified as DC-3A and DC-3B, exhausting to common stack No. 3;

Note: The maximum throughput of metal for the Melting system is limited to 20 tons per hour by the maximum throughput from the Indoor Charge Handling system of 20 tons of metal per hour.

(C) One (1) Holding system consisting of the following equipment:

(1) Two (2) Electric Holding Furnaces, identified as P9, each with a holding capacity of 50 tons and a total maximum throughput capacity of 100 tons of metal per hour;

(2) Two (2) natural gas-fired Metal Treatment Ladle Heaters each with a rated capacity of 1.0 MMBtu/hr, constructed in 2004; and

(3) Two (2) natural gas-fired Pouring Ladle Heaters, identified as P10, each with a rated capacity of 0.4 MMBtu/hr, constructed in 2004.

(c) Plant 1, Casting Line 2, with a maximum capacity of 15 tons of metal per hour and 70 tons of sand per hour, constructed in 2004, consisting of the following equipment:

(1) One (1) Pouring station, identified as P13B, with a maximum capacity of 15 tons of metal poured per hour, controlled by baghouse DC-3B, and exhausting to stack No. 3.

(2) One (1) Cooling line, identified as P14B, with a maximum capacity of 15 tons of metal per hour, controlled by baghouse BH6200, and exhausting to stack No. 6200.

(c) One (1) Ductile Iron Foundry Line, constructed in 1997, identified as Plant 2, consisting of the following:

(2) One (1) Melting and Pouring system, utilizing baghouse BH6010 for particulate control, exhausting to stack No. 6010, consisting of the following equipment:

(B) Two (2) Electric Induction Furnaces, identified as 1110, each with a nominal capacity of 10 tons of metal per hour;

Note: These electric induction furnaces (1110) are common for the Ductile Iron Foundry Lines identified as Plant 2 and Line 4.

(C) One (1) Electric Holding Furnace, uncontrolled; and

(D) Two (2) natural gas-fired Ladle Heaters, identified as 6600 and 6610, each

with a maximum heat input rate of 2 MMBtu per hour;

Note: Baghouse BH6010 is common control for Ductile Iron Conversion Station (1150), two (2) Electric Induction Furnaces (1110), Pouring Station (2000).

(3) One (1) Mold machine, identified as 2010, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing baghouse BH6010 for particulate control, exhausting to stack No. 6010; and

(4) One (1) Casting Conveyor system and one (1) Cooling Conveyor system, identified as 2015 and 2020, respectively, modified in 2009, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing baghouse BH6020 and BH6030 for particulate control, and exhausting to stack No. 6020, 6030A and 6030B.

(d) One Ductile Iron Foundry Line, approved in 2013 for construction, identified as Plant 2, Line 4, consisting of the following:

(1) One (1) Electric Melt Furnace, identified as EU-N1, with a nominal capacity of 10 tons of metal per hour, utilizing Baghouse DC-N1A for particulate control, and exhausting to Stack S-N1.

(2) One (1) Sand Handling System, identified as EU-N2A, and one (1) Return Sand Handling System, identified as EU-N2B, with a nominal capacity of 75 tons of sand per hour, utilizing Baghouse DC-N1B for particulate control, exhausting to Stack S-N1.

(3) One (1) Pouring Station, identified as EU-N3, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control and mold vent ignition system for VOC control, and exhausting to Stack S-N2.

(4) One (1) Cooling Line, identified as EU-N4, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(5) One (1) Casting Shakeout System, identified as EU-N5, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(6) One (1) Bad Heat Shakeout System, identified as EU-N5A, with a nominal capacity of 10 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

Note: Baghouse DC-N2 is common control for the Pouring Station (EU-N3), Cooling Line (EU-N4), Casting Shakeout system (EU-N5), Bad Heat Shakeout system (EU-N5A) and Shot Blast unit (EU-N6).

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

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

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

(a) Pursuant to 40 CFR 63.7760, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the above listed facilities and the fugitive emissions from the foundry

operations, as specified in Table 1 of 40 CFR 63, Subpart EEEEE in accordance with schedule in 40 CFR 63 Subpart EEEEE.

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

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

E.1.2 National Emissions Standards for Hazardous Air Pollutants for Iron and Steel Foundries: Requirements [40 CFR Part 63, Subpart EEEEE] [326 IAC 20-92]

Pursuant to CFR Part 63, Subpart EEEEE, the Permittee shall comply with the applicable provisions of 40 CFR Part 63, Subpart EEEEE (included as Attachment A), which are incorporated by reference as 326 IAC 20-92, for the above listed facilities and the fugitive emissions from the foundry operations, as specified as follows:

(1) 40 CFR 63.7680
(2) 40 CFR 63.7681
(3) 40 CFR 63.7682
(4) 40 CFR 63.7683(a)
(5) 40 CFR 63.7683(b)
(6) 40 CFR 63.7683(f)
(7) 40 CFR 63.7690(a)(1)(i)
(8) 40 CFR 63.7690(a)(5)(i)
(9) 40 CFR 63.7690(a)(7)
(10) 40 CFR 63.7700(a)
(11) 40 CFR 63.7700(b)
(12) 40 CFR 63.7710(a)
(13) 40 CFR 63.7710(b)(1)
(14) 40 CFR 63.7710(b)(3)
(15) 40 CFR 63.7710(b)(4)
(16) 40 CFR 63.7710(b)(5)
(17) 40 CFR 63.7710(b)(6)
(18) 40 CFR 63.7720
(19) 40 CFR 63.7730(a)
(20) 40 CFR 63.7730(b)
(21) 40 CFR 63.7731
(22) 40 CFR 63.7732(a)
(23) 40 CFR 63.7732(b)(1)
(24) 40 CFR 63.7732(b)(2)
(25) 40 CFR 63.7732(b)(4)
(26) 40 CFR 63.7732(c)(1)
(27) 40 CFR 63.7732(c)(2)
(28) 40 CFR 63.7732(c)(4)
(29) 40 CFR 63.7732(d)
(30) 40 CFR 63.7732(h)
(31) 40 CFR 63.7733(a)
(32) 40 CFR 63.7733(e)
(33) 40 CFR 63.7733(f)
(34) 40 CFR 63.7734(a)(1)(i)
(35) 40 CFR 63.7734(a)(5)(i)
(36) 40 CFR 63.7734(a)(7)
(37) 40 CFR 63.7734(b)(1)

(38) 40 CFR 63.7735(a)
(39) 40 CFR 63.7736(c)
(40) 40 CFR 63.7736(d)
(41) 40 CFR 63.7740(b)
(42) 40 CFR 63.7741(b)
(43) 40 CFR 63.7742
(44) 40 CFR 63.7743(a)(1)(i)
(45) 40 CFR 63.7743(a)(5)(i)
(46) 40 CFR 63.7743(a)(7)
(47) 40 CFR 63.7743(a)(12)
(48) 40 CFR 63.7743(c)
(49) 40 CFR 63.7744(a)
(50) 40 CFR 63.7745
(51) 40 CFR 63.7746
(52) 40 CFR 63.7750(a)
(53) 40 CFR 63.7750(b)
(54) 40 CFR 63.7750(d)
(55) 40 CFR 63.7750(e)
(56) 40 CFR 63.7751
(57) 40 CFR 63.7752(a)
(58) 40 CFR 63.7752(c)
(59) 40 CFR 63.7753
(60) 40 CFR 63.7760
(61) 40 CFR 63.7761
(62) 40 CFR 63.7765
(63) Table 1

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

OFFICE OF AIR QUALITY
PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: INTAT Precision, Inc.
Source Address: 2148 State Road 3 North, Rushville, Indiana 46173
Part 70 Permit No.: T139-25610-00011

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: INTAT Precision, Inc.
Source Address: 2148 State Road 3 North, Rushville, Indiana 46173
Part 70 Permit No.: T139-25610-00011

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

☐ This is an emergency as defined in 326 IAC 2-7-1(12) • The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) daytime business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and • The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

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

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

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

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

Form Completed by:_____

Title / Position: _____

Date:_____

Phone: _____

A certification is not required for this report.

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

Part 70 Quarterly Report

Source Name: INTAT Precision, Inc.
Source Address: 2148 State Road 3 North, Rushville, Indiana 46173
Part 70 Permit No.: T139-25610-00011
Facility: Plant 1 Melting Operations constructed in 1988
Parameter: PM and PM_{10} emissions
Limit: The throughput of metal to each of the Melting (P8) and Holding Furnace (P9) shall not exceed 79,000 tons per twelve (12) consecutive month period.

QUARTER: YEAR:

Month	Facility ID	Column 1	Column 2	Column 1 + Column 2
		Metal Throughput This Month (tons)	Metal Throughput for Previous 11 Months (tons)	12 Month Total Metal Throughput (tons)
Month 1	P8			
	P9			
Month 2	P8			
	P9			
Month 3	P8			
	P9			

☐ No deviation occurred in this quarter.

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

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

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: INTAT Precision Inc.
Source Address: State Road 3 North, Rushville, Indiana 46173
Part 70 Permit No.: T139-25610-00011
Facility: Casting Line 2 constructed in 2004
Parameter: PM and PM_{10} emissions
Limit: The throughput of sand to the Sand Handling (P32B- P37B, P39B) shall not exceed 368,667 tons per twelve (12) consecutive month period.

QUARTER: YEAR:

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

☐ No deviation occurred in this quarter.

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

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

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: INTAT Precision Inc.
Source Address: State Road 3 North, Rushville, Indiana 46173
Part 70 Permit No.: T139-25610-00011
Facility: Plant 2, ductile iron foundry line constructed in 1997
Parameter: PM and PM_{10} emissions and VOC and CO emissions
Limit: The throughput of Metal melted shall not exceed 61,500 tons per twelve (12) consecutive month period.

QUARTER: YEAR:

Month	Facility ID	Column 1 Metal Throughput This Month (tons)	Column 2 Metal Throughput for Previous 11 Months (tons)	Column 1 + Column 2 12 Month Total Metal Throughput (tons)
Month 1	Melting (1110)			
Month 2	Melting (1110)			
Month 3	Melting (1110)			

☐ No deviation occurred in this quarter.

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

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

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: INTAT Precision Inc.
Source Address: State Road 3 North, Rushville, Indiana 46173
Part 70 Permit No.: T139-25610-00011
Facility: Plant 2, ductile iron foundry line constructed in 1997
Parameter: PM and PM_{10} emissions
Limit: The throughput of sand to the Sand & Waste Sand Handling operation (4000, 4140, and 5000) shall not exceed 430,500 tons per twelve (12) consecutive month period.

QUARTER: YEAR:

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

☐ No deviation occurred in this quarter.

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

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

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name:	INTAT Precision Inc.
Source Address:	State Road 3 North, Rushville, Indiana 46173
Part 70 Permit No.:	T139-25610-00011
Part 70 Permit Condition No:	D.5.1
Parameter:	PM, PM10, PM2.5, Lead, CO and VOC emissions determined using Condition D.5.5
Limits:	Limits specified in Condition D.5.1

QUARTER : YEAR:

Month	Pollutant	Column 1 Emissions this Month (tons/year)	Column 2 Emissions Previous 11 Months (tons/year)	Column 1 + Column 2 Emissions for 12 Month Total (tons/year)
Month 1	PM			
	PM10			
	PM2.5			
	Lead			
	CO			
	VOC			
Month 2	PM			
	PM10			
	PM2.5			
	Lead			
	CO			
	VOC			
Month 3	PM			
	PM10			
	PM2.5			
	Lead			
	CO			
	VOC			

☐ 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: INTAT Precision, Inc.
Source Address: 2148 State Road 3 North, Rushville, Indiana 46173
Part 70 Permit No.: T139-25610-00011

Months: _____ to _____ Year: _____

Page 1 of 2

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

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

Form Completed by:_____

Title / Position: _____

Date:_____

Phone: _____

Attach a signed certification to complete this report.

Attachment A

NESHAP 40 CFR Part 63, Subpart EEEEE

INTAT Precision, Inc.
2148 State Road 3 North
Rushville, Indiana 46173

Part 70 Operating Permit Renewal No.: T139-25610-00011

What this Subpart Covers

§ 63.7680 What is the purpose of this subpart?

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

§ 63.7681 Am I subject to this subpart?

You are subject to this subpart if you own or operate an iron and steel foundry that is (or is part of) a major source of hazardous air pollutant (HAP) emissions. Your iron and steel foundry is a major source of HAP for purposes of this subpart if it emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year or if it is located at a facility that emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year as defined in §63.2.

[69 FR 21923, Apr. 22, 2004, as amended at 73 FR 7218, Feb. 7, 2008]

§ 63.7682 What parts of my foundry does this subpart cover?

(a) The affected source is each new or existing iron and steel foundry.

(b) This subpart covers emissions from metal melting furnaces, scrap preheaters, pouring areas, pouring stations, automated conveyor and pallet cooling lines, automated shakeout lines, and mold and core making lines. This subpart also covers fugitive emissions from foundry operations.

(c) An affected source is existing if you commenced construction or reconstruction of the affected source before December 23, 2002.

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

§ 63.7683 When do I have to comply with this subpart?

(a) Except as specified in paragraph (b) of this section, if you have an existing affected source, you must comply with each emissions limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you no later than April 23, 2007. Major source status for existing affected sources must be determined no later than April 23, 2007.

(b) If you have an existing affected source, you must comply with the work practice standards in §63.7700(b) or (c), as applicable, no later than April 22, 2005.

(c) If you have a new affected source for which the initial startup date is on or before April 22, 2004, you must comply with each emissions limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you by April 22, 2004.

(d) If you have a new affected source for which the initial startup date is after April 22, 2004, you must comply with each emissions limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you upon initial startup.

(e) If your iron and steel foundry is an area source that becomes a major source of HAP, you must meet the requirements of §63.6(c)(5).

(f) You must meet the notification and schedule requirements in §63.7750. Note that several of these notifications must be submitted before the compliance date for your affected source.

Emissions Limitations

§ 63.7690 What emissions limitations must I meet?

(a) You must meet the emissions limits or standards in paragraphs (a)(1) through (11) of this section that apply to you. When alternative emissions limitations are provided for a given emissions source, you are not restricted in the selection of which applicable alternative emissions limitation is used to demonstrate compliance.

(1) For each electric arc metal melting furnace, electric induction metal melting furnace, or scrap preheater at an existing iron and steel foundry, you must not discharge emissions through a conveyance to the atmosphere that exceed either the limit for particulate matter (PM) in paragraph (a)(1)(i) of this section or, alternatively the limit for total metal HAP in paragraph (a)(1)(ii) of this section:

(i) 0.005 grains of PM per dry standard cubic foot (gr/dscf), or

(ii) 0.0004 gr/dscf of total metal HAP.

(2) For each cupola metal melting furnace at an existing iron and steel foundry, you must not discharge emissions through a conveyance to the atmosphere that exceed either the limit for PM in paragraph (a)(2)(i) or (ii) of this section or, alternatively the limit for total metal HAP in paragraph (a)(2)(iii) or (iv) of this section:

(i) 0.006 gr/dscf of PM; or

(ii) 0.10 pound of PM per ton (lb/ton) of metal charged, or

(iii) 0.0005 gr/dscf of total metal HAP; or

(iv) 0.008 pound of total metal HAP per ton (lb/ton) of metal charged.

(3) For each cupola metal melting furnace or electric arc metal melting furnace at a new iron and steel foundry, you must not discharge emissions through a conveyance to the atmosphere that exceed either the limit for PM in paragraph (a)(3)(i) of this section or, alternatively the limit for total metal HAP in paragraph (a)(3)(ii) of this section:

(i) 0.002 gr/dscf of PM, or

(ii) 0.0002 gr/dscf of total metal HAP.

(4) For each electric induction metal melting furnace or scrap preheater at a new iron and steel foundry, you must not discharge emissions through a conveyance to the atmosphere that exceed either the limit for PM in paragraph (a)(4)(i) of this section or, alternatively the limit for total metal HAP in paragraph (a)(4)(ii) of this section:

(i) 0.001 gr/dscf of PM, or

(ii) 0.00008 gr/dscf of total metal HAP.

(5) For each pouring station at an existing iron and steel foundry, you must not discharge emissions through a conveyance to the atmosphere that exceed either the limit for PM in paragraph (a)(5)(i) of this section or, alternatively the limit for total metal HAP in paragraph (a)(5)(ii) of this section:

(i) 0.010 gr/dscf of PM, or

(ii) 0.0008 gr/dscf of total metal HAP.

(6) For each pouring area or pouring station at a new iron and steel foundry, you must not discharge emissions through a conveyance to the atmosphere that exceed either the limit for PM in paragraph (a)(6)(i) of this section or, alternatively the limit for total metal HAP in paragraph (a)(6)(ii) of this section:

(i) 0.002 gr/dscf of PM, or

(ii) 0.0002 gr/dscf of total metal HAP.

(7) For each building or structure housing any iron and steel foundry emissions source at the iron and steel foundry, you must not discharge any fugitive emissions to the atmosphere from foundry operations that exhibit opacity greater than 20 percent (6-minute average), except for one 6-minute average per hour that does not exceed 27 percent opacity.

(8) For each cupola metal melting furnace at a new or existing iron and steel foundry, you must not discharge emissions of volatile organic hazardous air pollutants (VOHAP) through a conveyance to the atmosphere that exceed 20 parts per million by volume (ppmv) corrected to 10 percent oxygen.

(9) As an alternative to the work practice standard in §63.7700(e) for a scrap preheater at an existing iron and steel foundry or in §63.7700(f) for a scrap preheater at a new iron and steel foundry, you must not discharge emissions of VOHAP through a conveyance to the atmosphere that exceed 20 ppmv.

(10) For one or more automated conveyor and pallet cooling lines that use a sand mold system or automated shakeout lines that use a sand mold system at a new iron and steel foundry, you must not discharge emissions of VOHAP through a conveyance to the atmosphere that exceed a flow-weighted average of 20 ppmv.

(11) For each triethylamine (TEA) cold box mold or core making line at a new or existing iron and steel foundry, you must meet either the emissions limit in paragraph (a)(11)(i) of this section or, alternatively the emissions standard in paragraph (a)(11)(ii) of this section:

(i) You must not discharge emissions of TEA through a conveyance to the atmosphere that exceed 1 ppmv, as determined according to the performance test procedures in §63.7732(g); or

(ii) You must reduce emissions of TEA from each TEA cold box mold or core making line by at least 99 percent, as determined according to the performance test procedures in §63.7732(g).

(b) You must meet each operating limit in paragraphs (b)(1) through (5) of this section that applies to you.

(1) You must install, operate, and maintain a capture and collection system for all emissions sources subject to an emissions limit for VOHAP or TEA in paragraphs (a)(8) through (11) of this section.

(i) Each capture and collection system must meet accepted engineering standards, such as those published by the American Conference of Governmental Industrial Hygienists.

(ii) You must operate each capture system at or above the lowest value or settings established as operating limits in your operation and maintenance plan.

(2) You must operate each wet scrubber applied to emissions from a metal melting furnace, scrap preheater, pouring area, or pouring station subject to an emissions limit for PM or total metal HAP in paragraphs (a)(1) through (6) of this section such that the 3-hour average pressure drop and scrubber water flow rate does not fall below the minimum levels established during the initial or subsequent performance test.

(3) You must operate each combustion device applied to emissions from a cupola metal melting furnace subject to the emissions limit for VOHAP in paragraph (a)(8) of this section, such that the 15-minute average combustion zone temperature does not fall below 1,300 degrees Fahrenheit (°F). Periods when the cupola is off blast and for 15 minutes after going on blast from an off blast condition are not included in the 15-minute average.

(4) You must operate each combustion device applied to emissions from a scrap preheater subject to the emissions limit for VOHAP in paragraph (a)(9) of this section or from a TEA cold box mold or core making line subject to the emissions limit for TEA in paragraph (a)(11) of this section, such that the 3-hour average combustion zone temperature does not fall below the minimum level established during the initial or subsequent performance test.

(5) You must operate each wet acid scrubber applied to emissions from a TEA cold box mold or core making line subject to the emissions limit for TEA in paragraph (a)(11) of this section such that:

(i) The 3-hour average scrubbing liquid flow rate does not fall below the minimum level established during the initial or subsequent performance test; and

(ii) The 3-hour average pH of the scrubber blowdown, as measured by a continuous parameter monitoring system (CPMS), does not exceed 4.5 or the pH of the scrubber blowdown, as measured once every 8 hours during process operations, does not exceed 4.5.

(c) If you use a control device other than a baghouse, wet scrubber, wet acid scrubber, or combustion device, you must prepare and submit a monitoring plan containing the information listed in paragraphs (c)(1) through (5) of this section. The monitoring plan is subject to approval by the Administrator.

(1) A description of the device;

(2) Test results collected in accordance with §63.7732 verifying the performance of the device for reducing emissions of PM, total metal HAP, VOHAP, or TEA to the levels required by this subpart;

(3) A copy of the operation and maintenance plan required by §63.7710(b);

(4) A list of appropriate operating parameters that will be monitored to maintain continuous compliance with the applicable emissions limitation(s); and

(5) Operating parameter limits based on monitoring data collected during the performance test.

[69 FR 21923, Apr. 22, 2004, as amended at 73 FR 7218, Feb. 7, 2008]

Work Practice Standards

§ 63.7700 What work practice standards must I meet?

(a) For each segregated scrap storage area, bin or pile, you must either comply with the certification requirements in paragraph (b) of this section, or prepare and implement a plan for the selection and inspection of scrap according to the requirements in paragraph (c) of this section. You may have certain scrap subject to paragraph (b) of this section and other scrap subject to paragraph (c) of this section at your facility provided the scrap remains segregated until charge make-up.

(b) You must prepare and operate at all times according to a written certification that the foundry purchases and uses only metal ingots, pig iron, slitter, or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, post-consumer oil filters, oily turnings, lead components, mercury switches, plastics, or free organic liquids. For the purpose of this paragraph (b), “free organic liquids” is defined as material that fails the paint filter test by EPA Method 9095A, “Paint Filter Liquids Test” (Revision 1, December 1996), as published in EPA Publication SW–846 “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods” (incorporated by reference—see §63.14). Any post-consumer engine blocks, post-consumer oil filters, or oily turnings that are processed and/or cleaned to the extent practicable such that the materials do not include lead components, mercury switches, chlorinated plastics, or free organic liquids can be included in this certification.

(c) You must prepare and operate at all times according to a written plan for the selection and inspection of iron and steel scrap to minimize, to the extent practicable, the amount of organics and HAP metals in the charge materials used by the iron and steel foundry. This scrap selection and inspection plan is subject to approval by the Administrator. You must keep a copy of the plan onsite and readily available to all plant personnel with materials acquisition or inspection duties. You must provide a copy of the material specifications to each of your scrap vendors. Each plan must include the information specified in paragraphs (c)(1) through (3) of this section.

(1) A materials acquisition program to limit organic contaminants according to the requirements in paragraph (c)(1)(i) or (ii) of this section, as applicable.

(i) For scrap charged to a scrap preheater, electric arc metal melting furnace, or electric induction metal melting furnace, specifications for scrap materials to be depleted (to the extent practicable) of the presence of used oil filters, chlorinated plastic parts, organic liquids, and a program to ensure the scrap materials are drained of free liquids; or

(ii) For scrap charged to a cupola metal melting furnace, specifications for scrap materials to be depleted (to the extent practicable) of the presence of chlorinated plastic, and a program to ensure the scrap materials are drained of free liquids.

(2) A materials acquisition program specifying that the scrap supplier remove accessible mercury switches from the trunks and hoods of any automotive bodies contained in the scrap and remove accessible lead components such as batteries and wheel weights. You must either obtain and maintain onsite a copy of the procedures used by the scrap supplier for either removing accessible mercury switches or for purchasing automobile bodies that have had mercury switches removed, as applicable, or document your attempts to obtain a copy of these procedures from the scrap suppliers servicing your area.

(3) Procedures for visual inspection of a representative portion, but not less than 10 percent, of all incoming scrap shipments to ensure the materials meet the specifications.

(i) The inspection procedures must identify the location(s) where inspections are to be performed for each type of shipment. Inspections may be performed at the scrap supplier's facility. The selected location(s) must provide a reasonable vantage point, considering worker safety, for visual inspection.

(ii) The inspection procedures must include recordkeeping requirements that document each visual inspection and the results.

(iii) The inspection procedures must include provisions for rejecting or returning entire or partial scrap shipments that do not meet specifications and limiting purchases from vendors whose shipments fail to meet specifications for more than three inspections in one calendar year.

(iv) If the inspections are performed at the scrap supplier's facility, the inspection procedures must include an explanation of how the periodic inspections ensure that not less than 10 percent of scrap purchased from each supplier is subject to inspection.

(d) For each furan warm box mold or core making line in a new or existing iron and steel foundry, you must use a binder chemical formulation that does not contain methanol as a specific ingredient of the catalyst formulation as determined by the Material Safety Data Sheet. This requirement does not apply to the resin portion of the binder system.

(e) For each scrap preheater at an existing iron and steel foundry, you must meet either the requirement in paragraph (e)(1) or (2) of this section. As an alternative to the requirement in paragraph (e)(1) or (2) of this section, you must meet the VOHAP emissions limit in §63.7690(a)(9).

(1) You must operate and maintain a gas-fired preheater where the flame directly contacts the scrap charged; or

(2) You must charge only material that is subject to and in compliance with the scrap certification requirement in paragraph (b) of this section.

(f) For each scrap preheater at a new iron and steel foundry, you must charge only material that is subject to and in compliance with the scrap certification requirement in paragraph (b) of this section. As an alternative to this requirement, you must meet the VOHAP emissions limit in §63.7690(a)(9).

[69 FR 21923, Apr. 22, 2004, as amended at 70 FR 29404, May 20, 2005; 73 FR 7218, Feb. 7, 2008]

Operation and Maintenance Requirements

§ 63.7710 What are my operation and maintenance requirements?

(a) As required by §63.6(e)(1)(i), you must always operate and maintain your iron and steel foundry, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.

(b) You must prepare and operate at all times according to a written operation and maintenance plan for each capture and collection system and control device for an emissions source subject to a PM, metal HAP, TEA, or VOHAP emissions limit in §63.7690(a). Your operation and maintenance plan also must include procedures for igniting gases from mold vents in pouring areas and pouring stations that use a sand mold system. This operation and maintenance plan is subject to

approval by the Administrator. Each plan must contain the elements described in paragraphs (b)(1) through (6) of this section.

(1) Monthly inspections of the equipment that is important to the performance of the total capture system (*i.e.,* pressure sensors, dampers, and damper switches). This inspection must include observations of the physical appearance of the equipment (*e.g.,* presence of holes in the ductwork or hoods, flow constrictions caused by dents or accumulated dust in the ductwork, and fan erosion). The operation and maintenance plan must also include requirements to repair the defect or deficiency as soon as practicable.

(2) Operating limits for each capture system for an emissions source subject to an emissions limit or standard for VOHAP or TEA in §63.7690(a)(8) through (11). You must establish the operating according to the requirements in paragraphs (b)(2)(i) through (iii) of this section.

(i) Select operating limit parameters appropriate for the capture system design that are representative and reliable indicators of the performance of the capture system. At a minimum, you must use appropriate operating limit parameters that indicate the level of the ventilation draft and damper position settings for the capture system when operating to collect emissions, including revised settings for seasonal variations. Appropriate operating limit parameters for ventilation draft include, but are not limited to: volumetric flow rate through each separately ducted hood, total volumetric flow rate at the inlet to the control device to which the capture system is vented, fan motor amperage, or static pressure. Any parameter for damper position setting may be used that indicates the duct damper position related to the fully open setting.

(ii) For each operating limit parameter selected in paragraph (b)(2)(i) of this section, designate the value or setting for the parameter at which the capture system operates during the process operation. If your operation allows for more than one process to be operating simultaneously, designate the value or setting for the parameter at which the capture system operates during each possible configuration that you may operate (*i.e.,* the operating limits with one furnace melting, two melting, as applicable to your plant).

(iii) Include documentation in your plan to support your selection of the operating limits established for your capture system. This documentation must include a description of the capture system design, a description of the capture system operating during production, a description of each selected operating limit parameter, a rationale for why you chose the parameter, a description of the method used to monitor the parameter according to the requirements of §63.7740(a), and the data used to set the value or setting for the parameter for each of your process configurations.

(3) Preventative maintenance plan for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

(4) A site-specific monitoring plan for each bag leak detection system. For each bag leak detection system that operates on the triboelectric effect, the monitoring plan must be consistent with the recommendations contained in the U.S. Environmental Protection Agency guidance document “Fabric Filter Bag Leak Detection Guidance” (EPA–454/R–98–015). This baghouse monitoring plan is subject to approval by the Administrator. The owner or operator shall operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan must address all of the items identified in paragraphs (b)(4)(i) through (v) of this section.

(i) Installation of the bag leak detection system.

(ii) Initial and periodic adjustment of the bag leak detection system including how the alarm set-point will be established.

(iii) Operation of the bag leak detection system including quality assurance procedures.

(iv) How the bag leak detection system will be maintained including a routine maintenance schedule and spare parts inventory list.

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

(5) Corrective action plan for each baghouse. The plan must include the requirement that, in the event a bag leak detection system alarm is triggered, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Corrective actions taken may include, but are not limited to:

(i) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.

(ii) Sealing off defective bags or filter media.

(iii) Replacing defective bags or filter media or otherwise repairing the control device.

(iv) Sealing off a defective baghouse compartment.

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

(vi) Making process changes.

(vii) Shutting down the process producing the PM emissions.

(6) Procedures for providing an ignition source to mold vents of sand mold systems in each pouring area and pouring station unless you determine the mold vent gases either are not ignitable, ignite automatically, or cannot be ignited due to accessibility or safety issues. You must document and maintain records of this determination. The determination of ignitability, accessibility, and safety may encompass multiple casting patterns provided the castings utilize similar sand-to-metal ratios, binder formulations, and coating materials. The determination of ignitability must be based on observations of the mold vents within 5 minutes of pouring, and the flame must be present for at least 15 seconds for the mold vent to be considered ignited. For the purpose of this determination:

(i) Mold vents that ignite more than 75 percent of the time without the presence of an auxiliary ignition source are considered to ignite automatically; and

(ii) Mold vents that do not ignite automatically and cannot be ignited in the presence of an auxiliary ignition source more than 25 percent of the time are considered to be not ignitable.

[69 FR 21923, Apr. 22, 2004, as amended at 73 FR 7218, Feb. 7, 2008]

General Compliance Requirements

§ 63.7720 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, or malfunction.

(b) During the period between the compliance date specified for your iron and steel foundry in §63.7683 and the date when applicable operating limits have been established during the initial performance test, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

(c) You must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3). The startup, shutdown, and malfunction plan also must specify what constitutes a shutdown of a cupola and how to determine that operating conditions are normal following startup of a cupola.

[69 FR 21923, Apr. 22, 2004, as amended at 71 FR 20468, Apr. 20, 2006]

Initial Compliance Requirements

§ 63.7730 By what date must I conduct performance tests or other initial compliance demonstrations?

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

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

(c) If you commenced construction or reconstruction between December 23, 2002 and April 22, 2004, you must demonstrate initial compliance with either the proposed emissions limit or the promulgated emissions limit no later than October 19, 2004 or no later than 180 calendar days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(d) If you commenced construction or reconstruction between December 23, 2002 and April 22, 2004, and you chose to comply with the proposed emissions limit when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emissions limit by October 19, 2007 or after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

§ 63.7731 When must I conduct subsequent performance tests?

(a) You must conduct subsequent performance tests to demonstrate compliance with all applicable PM or total metal HAP, VOHAP, and TEA emissions limitations in §63.7690 for your iron and steel foundry no less frequently than every 5 years and each time you elect to change an operating limit or to comply with a different alternative emissions limit, if applicable. The requirement to conduct performance tests every 5 years does not apply to an emissions source for which a continuous emissions monitoring system (CEMS) is used to demonstrate continuous compliance.

(b) You must conduct subsequent performance tests to demonstrate compliance with the opacity limit in §63.7690(a)(7) for your iron and steel foundry no less frequently than once every 6 months.

[69 FR 21923, Apr. 22, 2004, as amended at 73 FR 7219, Feb. 7, 2008]

§ 63.7732 What test methods and other procedures must I use to demonstrate initial compliance with the emissions limitations?

(a) You must conduct each performance test that applies to your iron and steel foundry based on your selected compliance alternative, if applicable, according to the requirements in §63.7(e)(1) and the conditions specified in paragraphs (b) through (i) of this section.

(b) To determine compliance with the applicable emissions limit for PM in §63.7690(a)(1) through (6) for a metal melting furnace, scrap preheater, pouring station, or pouring area, follow the test methods and procedures in paragraphs (b)(1) through (6) of this section.

(1) Determine the concentration of PM according to the test methods in 40 CFR part 60, appendix A that are specified in paragraphs (b)(1)(i) through (v) of this section.

(i) Method 1 or 1A to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.

(ii) Method 2, 2A, 2C, 2D, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 5, 5B, 5D, 5F, or 5I, as applicable, to determine the PM concentration. The PM concentration is determined using only the front-half (probe rinse and filter) of the PM catch.

(2) Collect a minimum sample volume of 60 dscf of gas during each PM sampling run. A minimum of three valid test runs are needed to comprise a performance test.

(3) For cupola metal melting furnaces, sample only during times when the cupola is on blast.

(4) For electric arc and electric induction metal melting furnaces, sample only during normal production conditions, which may include, but are not limited to the following cycles: Charging, melting, alloying, refining, slagging, and tapping.

(5) For scrap preheaters, sample only during normal production conditions, which may include, but are not limited to the following cycles: Charging, heating, and discharging.

(6) Determine the total mass of metal charged to the furnace or scrap preheater. For a cupola metal melting furnace at an existing iron and steel foundry that is subject to the PM emissions limit in §63.7690(a)(ii), calculate the PM emissions rate in pounds of PM per ton (lb/ton) of metal charged using Equation 1 of this section:

$$EF_{PM} = C_{PM} \times \left(\frac{Q}{M_{charge}}\right) \times \left(\frac{t_{test}}{7{,}000}\right) \qquad \text{(Eq.1)}$$

Where:

EFPM= Mass emissions rate of PM, pounds of PM per ton (lb/ton) of metal charged;

CPM= Concentration of PM measured during performance test run, gr/dscf;

Q = Volumetric flow rate of exhaust gas, dry standard cubic feet per minute (dscfm);

Mcharge= Mass of metal charged during performance test run, tons;

ttest= Duration of performance test run, minutes; and

7,000 = Unit conversion factor, grains per pound (gr/lb).

(c) To determine compliance with the applicable emissions limit for total metal HAP in §63.7690(a)(1) through (6) for a metal melting furnace, scrap preheater, pouring station, or pouring area, follow the test methods and procedures in paragraphs (c)(1) through (6) of this section.

(1) Determine the concentration of total metal HAP according to the test methods in 40 CFR part 60, appendix A that are specified in paragraphs (c)(1)(i) through (v) of this section.

(i) Method 1 or 1A to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.

(ii) Method 2, 2A, 2C, 2D, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 29 to determine the total metal HAP concentration.

(2) A minimum of three valid test runs are needed to comprise a performance test.

(3) For cupola metal melting furnaces, sample only during times when the cupola is on blast.

(4) For electric arc and electric induction metal melting furnaces, sample only during normal production conditions, which may include, but are not limited to the following cycles: Charging, melting, alloying, refining, slagging, and tapping.

(5) For scrap preheaters, sample only during normal production conditions, which may include, but are not limited to the following cycles: Charging, heating, and discharging.

(6) Determine the total mass of metal charged to the furnace or scrap preheater during each performance test run and calculate the total metal HAP emissions rate (pounds of total metal HAP per ton (lb/ton) of metal charged) using Equation 2 of this section:

$$EF_{TMHAP} = C_{TMHAP} \times \left(\frac{Q}{M_{charge}}\right) \times \left(\frac{t_{test}}{7{,}000}\right) \qquad \text{(Eq. 2)}$$

Where:

EFTMHAP= Emissions rate of total metal HAP, pounds of total metal HAP per ton (lb/ton) of metal charged;

CTMHAP= Concentration of total metal HAP measured during performance test run, gr/dscf;

Q = Volumetric flow rate of exhaust gas, dscfm;

Mcharge= Mass of metal charged during performance test run, tons;

ttest= Duration of performance test run, minutes; and

7,000 = Unit conversion factor, gr/lb.

(d) To determine compliance with the opacity limit in §63.7690(a)(7) for fugitive emissions from buildings or structures housing any iron and steel foundry emissions source at the iron and steel foundry, follow the procedures in paragraphs (d)(1) and (2) of this section.

(1) Using a certified observer, conduct each opacity test according to the requirements in EPA Method 9 (40 CFR part 60, appendix A) and §63.6(h)(5). The certified observer may identify a limited number of openings or vents that appear to have the highest opacities and perform opacity observations on the identified openings or vents in lieu of performing observations for each opening or vent from the building or structure. Alternatively, a single opacity observation for the entire building or structure may be performed, if the fugitive release points afford such an observation.

(2) During testing intervals when PM performance tests, if applicable, are being conducted, conduct the opacity test such the opacity observations are recorded during the PM performance tests.

(e) To determine compliance with the applicable VOHAP emissions limit in §63.7690(a)(8) for a cupola metal melting furnace or in §63.7690(a)(9) for a scrap preheater, follow the test methods and procedures in paragraphs (e)(1) through (4) of this section.

(1) Determine the VOHAP concentration for each test run according to the test methods in 40 CFR part 60, appendix A that are specified in paragraphs (b)(1)(i) through (v) of this section.

(i) Method 1 or 1A to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.

(ii) Method 2, 2A, 2C, 2D, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 18 to determine the VOHAP concentration. Alternatively, you may use Method 25 to determine the concentration of total gaseous nonmethane organics (TGNMO) or Method 25A to determine the concentration of total organic compounds (TOC), using hexane as the calibration gas.

(2) Determine the average VOHAP, TGNMO, or TOC concentration using a minimum of three valid test runs. Each test run must include a minimum of 60 continuous operating minutes.

(3) For a cupola metal melting furnace, correct the measured concentration of VOHAP, TGNMO, or TOC for oxygen content in the gas stream using Equation 3 of this section:

$$EF_{IMHAP} = C_{IMHAP} \times \left(\frac{Q}{M_{charge}}\right) \times \left(\frac{t_{test}}{7{,}000}\right) \qquad \text{(Eq. 2)}$$

Where:

CVOHAP= Concentration of VOHAP in ppmv as measured by Method 18 in 40 CFR part 60, appendix A or the concentration of TGNMO or TOC in ppmv as hexane as measured by Method 25 or 25A in 40 CFR part 60, appendix A; and

%O2= Oxygen concentration in gas stream, percent by volume (dry basis).

(4) For a cupola metal melting furnace, measure the combustion zone temperature of the combustion device with the CPMS required in §63.7740(d) during each sampling run in 15-minute intervals. Determine and record the 15-minute average of the three runs.

(f) Follow the applicable procedures in paragraphs (f)(1) through (3) of this section to determine compliance with the VOHAP emissions limit in §63.7690(a)(10) for automated pallet cooling lines or automated shakeout lines.

(1) Follow these procedures to demonstrate compliance by direct measurement of total hydrocarbons (a surrogate for VOHAP) using a volatile organic compound (VOC) CEMS.

(i) Using the VOC CEMS required in §63.7740(g), measure and record the concentration of total hydrocarbons (as hexane) for 180 continuous operating minutes. You must measure emissions at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.

(ii) Reduce the monitoring data to hourly averages as specified in §63.8(g)(2).

(iii) Compute and record the 3-hour average of the monitoring data.

(2) As an alternative to the procedures in paragraph (f)(1) of this section, you may demonstrate compliance with the VOHAP emissions limit in §63.7690(a)(10) by establishing a site-specific TOC emissions limit that is correlated to the VOHAP emissions limit according to the procedures in paragraph (f)(2)(i) through (ix) of this section.

(i) Determine the VOHAP concentration for each test run according to the test methods in 40 CFR part 60, appendix A that are specified in paragraph (f)(2)(ii) through (vi) of this section.

(ii) Method 1 or 1A to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.

(iii) Method 2, 2A, 2C, 2D, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iv) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(v) Method 4 to determine the moisture content of the stack gas.

(vi) Method 18 to determine the VOHAP concentration. Alternatively, you may use Method 25 to determine the concentration of TGNMO using hexane as the calibration gas.

(vii) Using the CEMS required in §63.7740(g), measure and record the concentration of total hydrocarbons (as hexane) during each of the Method 18 (or Method 25) sampling runs. You must measure emissions at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.

(viii) Calculate the average VOHAP (or TGNMO) concentration for the source test as the arithmetic average of the concentrations measured for the individual test runs, and determine the average concentration of total hydrocarbon (as hexane) as measured by the CEMS during all test runs.

(ix) Calculate the site-specific VOC emissions limit using Equation 4 of this section:

$$VOC_{limit} = 20 \times \frac{C_{VOHAP,avg}}{C_{CEM}} \qquad \text{(Eq. 4)}$$

Where:

CVOHAP,avg= Average concentration of VOHAP for the source test in ppmv as measured by Method 18 in 40 CFR part 60, appendix A or the average concentration of TGNMO for the source test in ppmv as hexane as measured by Method 25 in 40 CFR part 60, appendix A; and

CCEM= Average concentration of total hydrocarbons in ppmv as hexane as measured using the CEMS during the source test.

(3) For two or more exhaust streams from one or more automated conveyor and pallet cooling lines or automated shakeout lines, compute the flow-weighted average concentration of VOHAP emissions for each combination of exhaust streams using Equation 5 of this section:

$$C_w = \frac{\sum_{i=1}^{n} C_i Q_i}{\sum_{i=1}^{n} Q_i} \qquad \text{(Eq. 5)}$$

Where:

Cw= Flow-weighted concentration of VOHAP or VOC, ppmv (as hexane);

Ci= Concentration of VOHAP or VOC from exhaust stream “i”, ppmv (as hexane);

n = Number of exhaust streams sampled; and

Qi= Volumetric flow rate of effluent gas from exhaust stream “i,”, dscfm.

(g) To determine compliance with the emissions limit or standard in §63.7690(a)(11) for a TEA cold box mold or core making line, follow the test methods in 40 CFR part 60, appendix A, specified in paragraphs (g)(1) through (4) of this section.

(1) Determine the TEA concentration for each test run according to the test methods in 40 CFR part 60, appendix A that are specified in paragraphs (g)(1)(i) through (v) of this section.

(i) Method 1 or 1A to select sampling port locations and the number of traverse points in each stack or duct. If you elect to meet the 99 percent reduction standard, sampling sites must be located both at the inlet to the control device and at the outlet of the control device prior to any releases to the atmosphere. If you elect to meet the concentration limit, the sampling

site must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.

(ii) Method 2, 2A, 2C, 2D, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 18 to determine the TEA concentration. Alternatively, you may use NIOSH Method 2010 (incorporated by reference—see §63.14) to determine the TEA concentration provided the performance requirements outlined in section 13.1 of EPA Method 18 are satisfied. The sampling option and time must be sufficiently long such that either the TEA concentration in the field sample is at least 5 times the limit of detection for the analytical method or the test results calculated using the laboratory's reported analytical detection limit for the specific field samples are less than1/5of the applicable emissions limit. When using Method 18, the adsorbent tube approach, as described in section 8.2.4 of Method 18, may be required to achieve the necessary analytical detection limits. The sampling time must be at least 1 hour in all cases.

(2) If you use a wet acid scrubber, conduct the test as soon as practicable after adding fresh acid solution and the system has reached normal operating conditions.

(3) If you use a wet acid scrubber that is subject to the operating limit in §63.7690(b)(5)(ii) for pH level, determine the pH of the scrubber blowdown using the procedures in paragraph (g)(3)(i) or (ii) of this section.

(i) Measure the pH of the scrubber blowdown with the CPMS required in §63.7740(f)(2) during each TEA sampling run in intervals of no more than 15 minutes. Determine and record the 3-hour average; or

(ii) Measure and record the pH level using the probe and meter required in §63.7740(f)(2) once each sampling run. Determine and record the average pH level for the three runs.

(4) If you are subject to the 99 percent reduction standard, calculate the mass emissions reduction using Equation 6 of this section:

$$\%\,\text{reduction} = \frac{E_i - E_o}{E_i} \times 100\% \qquad \text{(Eq. 6)}$$

Where:

Ei= Mass emissions rate of TEA at control device inlet, kilograms per hour (kg/hr); and

Eo= Mass emissions rate of TEA at control device outlet, kg/hr.

(h) To determine compliance with the PM or total metal HAP emissions limits in §63.7690(a)(1) through (6) when one or more regulated emissions sources are combined with either another regulated emissions source subject to a different emissions limit or other non-regulated emissions sources, you may demonstrate compliance using one of the procedures in paragraphs (h)(1) through (3) of this section.

(1) Meet the most stringent applicable emissions limit for the regulated emissions sources included in the combined emissions stream for the combined emissions stream.

(2) Use the procedures in paragraphs (h)(2)(i) through (iii) of this section.

(i) Determine the volumetric flow rate of the individual regulated streams for which emissions limits apply.

(ii) Calculate the flow-weighted average emissions limit, considering only the regulated streams, using Equation 5 of this section, except Cwis the flow-weighted average emissions limit for PM or total metal HAP in the exhaust stream, gr/dscf; and Ciis the concentration of PM or total metal HAP in exhaust stream “i”, gr/dscf.

(iii) Meet the calculated flow-weighted average emissions limit for the regulated emissions sources included in the combined emissions stream for the combined emissions stream.

(3) Use the procedures in paragraphs (h)(3)(i) through (iii) of this section.

(i) Determine the PM or total metal HAP concentration of each of the regulated streams prior to the combination with other exhaust streams or control device.

(ii) Measure the flow rate and PM or total metal HAP concentration of the combined exhaust stream both before and after the control device and calculate the mass removal efficiency of the control device using Equation 6 of this section, except Eiis the mass emissions rate of PM or total metal HAP at the control device inlet, lb/hr and Eois the mass emissions rate of PM or total metal HAP at the control device outlet, lb/hr.

(iii) Meet the applicable emissions limit based on the calculated PM or total metal HAP concentration for the regulated emissions sources using Equation 7 of this section:

$$C_{released} = C_i \times \left(1 - \frac{\%\,reduction}{100}\right) \qquad (Eq.\ 7)$$

Where:

Creleased= Calculated concentration of PM (or total metal HAP) predicted to be released to the atmosphere from the regulated emissions source, gr/dscf; and

Ci= Concentration of PM (or total metal HAP) in the uncontrolled regulated exhaust stream, gr/dscf.

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

[69 FR 21923, Apr. 22, 2004, as amended at 73 FR 7219, Feb. 7, 2008]

§ 63.7733 What procedures must I use to establish operating limits?

(a) For each capture system subject to operating limits in §63.7690(b)(1)(ii), you must establish site-specific operating limits in your operation and maintenance plan according to the procedures in paragraphs (a)(1) through (3) of this section.

(1) Concurrent with applicable emissions and opacity tests, measure and record values for each of the operating limit parameters in your capture system operation and maintenance plan according to the monitoring requirements in §63.7740(a).

(2) For any dampers that are manually set and remain at the same position at all times the capture system is operating, the damper position must be visually checked and recorded at the beginning and end of each run.

(3) Review and record the monitoring data. Identify and explain any times the capture system operated outside the applicable operating limits.

(b) For each wet scrubber subject to the operating limits in §63.7690(b)(2) for pressure drop and scrubber water flow rate, you must establish site-specific operating limits according to the procedures specified in paragraphs (b)(1) and (2) of this section.

(1) Using the CPMS required in §63.7740(c), measure and record the pressure drop and scrubber water flow rate in intervals of no more than 15 minutes during each PM test run.

(2) Compute and record the average pressure drop and average scrubber water flow rate for each valid sampling run in which the applicable emissions limit is met.

(c) For each combustion device applied to emissions from a scrap preheater or TEA cold box mold or core making line subject to the operating limit in §63.7690(b)(4) for combustion zone temperature, you must establish a site-specific operating limit according to the procedures specified in paragraphs (c)(1) and (2) of this section.

(1) Using the CPMS required in §63.7740(e), measure and record the combustion zone temperature during each sampling run in intervals of no more than 15 minutes.

(2) Compute and record the average combustion zone temperature for each valid sampling run in which the applicable emissions limit is met.

(d) For each acid wet scrubber subject to the operating limit in §63.7690(b)(5), you must establish a site-specific operating limit for scrubbing liquid flow rate according to the procedures specified in paragraphs (d)(1) and (2) of this section.

(1) Using the CPMS required in §63.7740(f), measure and record the scrubbing liquid flow rate during each TEA sampling run in intervals of no more than 15 minutes.

(2) Compute and record the average scrubbing liquid flow rate for each valid sampling run in which the applicable emissions limit is met.

(e) You may change the operating limits for a capture system, wet scrubber, acid wet scrubber, or combustion device if you meet the requirements in paragraphs (e)(1) through (3) of this section.

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

(2) Conduct a performance test to demonstrate compliance with the applicable emissions limitation in §63.7690.

(3) Establish revised operating limits according to the applicable procedures in paragraphs (a) through (d) of this section.

(f) You may use a previous performance test (conducted since December 22, 2002) to establish an operating limit provided the test meets the requirements of this subpart.

[69 FR 21923, Apr. 22, 2004, as amended at 73 FR 7221, Feb. 7, 2008]

§ 63.7734 How do I demonstrate initial compliance with the emissions limitations that apply to me?

(a) You have demonstrated initial compliance with the emissions limits in §63.7690(a) by meeting the applicable conditions in paragraphs (a)(1) through (11) of this section. When alternative emissions limitations are provided for a given emissions source, you are not restricted in the selection of which applicable alternative emissions limitation is used to demonstrate compliance.

(1) For each electric arc metal melting furnace, electric induction metal melting furnace, or scrap preheater at an existing iron and steel foundry,

(i) The average PM concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(b), did not exceed 0.005 gr/dscf; or

(ii) The average total metal HAP concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(c), did not exceed 0.0004 gr/dscf.

(2) For each cupola metal melting furnace at an existing iron and steel foundry,

(i) The average PM concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(b), did not exceed 0.006 gr/dscf; or

(ii) The average total metal HAP concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(c), did not exceed 0.0005 gr/dscf; or

(iii) The average PM mass emissions rate, determined according to the performance test procedures in §63.7732(b), did not exceed 0.10 pound of PM per ton (lb/ton) of metal charged; or

(iv) The average total metal HAP mass emissions rate, determined according to the performance test procedures in §63.7732(c), did not exceed 0.008 pound of total metal HAP per ton (lb/ton) of metal charged.

(3) For each cupola metal melting furnace or electric arc metal melting furnace at a new iron and steel foundry,

(i) The average PM concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(b), did not exceed 0.002 gr/dscf; or

(ii) The average total metal HAP concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(c), did not exceed 0.0002 gr/dscf.

(4) For each electric induction metal melting furnace or scrap preheater at a new iron and steel foundry,

(i) The average PM concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(b), did not exceed 0.001 gr/dscf; or

(ii) The average total metal HAP concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(c), did not exceed 0.00008 gr/dscf.

(5) For each pouring station at an existing iron and steel foundry,

(i) The average PM concentration in the exhaust stream, measured according to the performance test procedures in §63.7732(b), did not exceed 0.010 gr/dscf; or

(ii) The average total metal HAP concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(c), did not exceed 0.0008 gr/dscf.

(6) For each pouring area or pouring station at a new iron and steel foundry,

(i) The average PM concentration in the exhaust stream, measured according to the performance test procedures in §63.7732(b), did not exceed 0.002 gr/dscf; or

(ii) The average total metal HAP concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(c), did not exceed 0.0002 gr/dscf.

(7) For each building or structure housing any iron and steel foundry emissions source at the iron and steel foundry, the opacity of fugitive emissions from foundry operations discharged to the atmosphere, determined according to the performance test procedures in §63.7732(d), did not exceed 20 percent (6-minute average), except for one 6-minute average per hour that did not exceed 27 percent opacity.

(8) For each cupola metal melting furnace at a new or existing iron and steel foundry, the average VOHAP concentration, determined according to the performance test procedures in §63.7732(e), did not exceed 20 ppmv corrected to 10 percent oxygen.

(9) For each scrap preheater at an existing iron and steel foundry that does not meet the work practice standards in §63.7700(e)(1) or (2) and for each scrap preheater at a new iron and steel foundry that does not meet the work practice

standard in §63.7700(f), the average VOHAP concentration determined according to the performance test procedures in §63.7732(e), did not exceed 20 ppmv.

(10) For one or more automated conveyor and pallet cooling lines that use a sand mold system or automated shakeout lines that use a sand mold system at a new foundry,

(i) You have reduced the data from the CEMS to 3-hour averages according to the performance test procedures in §63.7732(f)(1) or (2); and

(ii) The 3-hour flow-weighted average VOHAP concentration, measured according to the performance test procedures in §63.7332(f)(1) or (2), did not exceed 20 ppmv.

(11) For each TEA cold box mold or core making line in a new or existing iron and steel foundry, the average TEA concentration, determined according to the performance test procedures in §63.7732(g), did not exceed 1 ppmv or was reduced by 99 percent.

(b) You have demonstrated initial compliance with the operating limits in §63.7690(b) if:

(1) For each capture system subject to the operating limit in §63.7690(b)(1)(ii),

(i) You have established appropriate site-specific operating limits in your operation and maintenance plan according to the requirements in §63.7710(b); and

(ii) You have a record of the operating parameter data measured during the performance test in accordance with §63.7733(a); and

(2) For each wet scrubber subject to the operating limits in §63.7690(b)(2) for pressure drop and scrubber water flow rate, you have established appropriate site-specific operating limits and have a record of the pressure drop and scrubber water flow rate measured during the performance test in accordance with §63.7733(b).

(3) For each combustion device subject to the operating limit in §63.7690(b)(3) for combustion zone temperature, you have a record of the combustion zone temperature measured during the performance test in accordance with §63.7732(e)(4).

(4) For each combustion device subject to the operating limit in §63.7690(b)(4) for combustion zone temperature, you have established appropriate site-specific operating limits and have a record of the combustion zone temperature measured during the performance test in accordance with §63.7733(c).

(5) For each acid wet scrubber subject to the operating limits in §63.7690(b)(5) for scrubbing liquid flow rate and scrubber blowdown pH,

(i) You have established appropriate site-specific operating limits for the scrubbing liquid flow rate and have a record of the scrubbing liquid flow rate measured during the performance test in accordance with §63.7733(d); and

(ii) You have a record of the pH of the scrubbing liquid blowdown measured during the performance test in accordance with §63.7732(g)(3).

[69 FR 21923, Apr. 22, 2004, as amended at 73 FR 7221, Feb. 7, 2008]

§ 63.7735 How do I demonstrate initial compliance with the work practice standards that apply to me?

(a) For each iron and steel foundry subject to the certification requirement in §63.7700(b), you have demonstrated initial compliance if you have certified in your notification of compliance status that: “At all times, your foundry will purchase and use only metal ingots, pig iron, slitter, or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, post-consumer oil filters, oily turnings, lead components, mercury switches, plastics, or free organic liquids.”

(b) For each iron and steel foundry subject to the requirements in §63.7700(c) for a scrap inspection and selection plan, you have demonstrated initial compliance if you have certified in your notification of compliance status that:

(1) You have submitted a written plan to the Administrator for approval according to the requirements in §63.7700(c); and

(2) You will operate at all times according to the plan requirements.

(c) For each furan warm box mold or core making line in a new or existing foundry subject to the work practice standard in §63.7700(d), you have demonstrated initial compliance if you have certified in your notification of compliance status that:

(1) You will meet the no methanol requirement for the catalyst portion of each binder chemical formulation; and

(2) You have records documenting your certification of compliance, such as a material safety data sheet (provided that it contains appropriate information), a certified product data sheet, or a manufacturer's hazardous air pollutant data sheet, onsite and available for inspection.

(d) For each scrap preheater at an existing iron and steel foundry subject to the work practice standard in §63.7700(e)(1) or (2), you have demonstrated initial compliance if you have certified in your notification of compliance status that:

(1) You have installed a gas-fired preheater where the flame directly contacts the scrap charged, you will operate and maintain each gas-fired scrap preheater such that the flame directly contacts the scrap charged, and you have records documenting your certification of compliance that are onsite and available for inspection; or

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

(e) For each scrap preheater at a new iron and steel foundry subject to the work practice standard in §63.7700(f), you have demonstrated initial compliance if you have certified in your notification of compliance status that you will charge only material that is subject to and in compliance with the scrap certification requirements in §63.7700(b) and you have records documenting your certification of compliance that are onsite and available for inspection.

[69 FR 21923, Apr. 22, 2004, as amended at 70 FR 29404, May 20, 2005]

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

(a) For each capture system subject to an operating limit in §63.7690(b), you have demonstrated initial compliance if you have met the conditions in paragraphs (a)(1) and (2) of this section.

(1) You have certified in your notification of compliance status that:

(i) You have submitted the capture system operation and maintenance plan to the Administrator for approval according to the requirements of §63.7710(b); and

(ii) You will inspect, operate, and maintain each capture system according to the procedures in the plan.

(2) You have certified in your performance test report that the system operated during the test at the operating limits established in your operation and maintenance plan.

(b) For each control device subject to an operating limit in §63.7690(b), you have demonstrated initial compliance if you have certified in your notification of compliance status that:

(1) You have submitted the control device operation and maintenance plan to the Administrator for approval according to the requirements of §63.7710(b); and

(2) You will inspect, operate, and maintain each control device according to the procedures in the plan.

(c) For each bag leak detection system, you have demonstrated initial compliance if you have certified in your notification of compliance status that:

(1) You have submitted the bag leak detection system monitoring information to the Administrator within the written O&M plan for approval according to the requirements of §63.7710(b);

(2) You will inspect, operate, and maintain each bag leak detection system according to the procedures in the plan; and

(3) You will follow the corrective action procedures for bag leak detection system alarms according to the requirements in the plan.

(d) For each pouring area and pouring station in a new or existing foundry, you have demonstrated initial compliance if you have certified in your notification of compliance status report that:

(1) You have submitted the mold vent ignition plan to the Administrator for approval according to the requirements in §63.7710(b); and

(2) You will follow the procedures for igniting mold vent gases according to the requirements in the plan.

[69 FR 21923, Apr. 22, 2004, as amended at 73 FR 7221, Feb. 7, 2008]

Continuous Compliance Requirements

§ 63.7740 What are my monitoring requirements?

(a) For each capture system subject to an operating limit in §63.7690(b)(1), you must install, operate, and maintain a CPMS according to the requirements in §63.7741(a) and the requirements in paragraphs (a)(1) and (2) of this section.

(1) If you use a flow measurement device to monitor the operating limit parameter, you must at all times monitor the hourly average rate (*e.g.,* the hourly average actual volumetric flow rate through each separately ducted hood or the average hourly total volumetric flow rate at the inlet to the control device).

(2) Dampers that are manually set and remain in the same position are exempt from the requirement to install and operate a CPMS. If dampers are not manually set and remain in the same position, you must make a visual check at least once every 24 hours to verify that each damper for the capture system is in the same position as during the initial performance test.

(b) For each negative pressure baghouse or positive pressure baghouse equipped with a stack that is applied to meet any PM or total metal HAP emissions limitation in this subpart, you must at all times monitor the relative change in PM loadings using a bag leak detection system according to the requirements in §63.7741(b).

(c) For each baghouse, regardless of type, that is applied to meet any PM or total metal HAP emissions limitation in this subpart, you must conduct inspections at their specified frequencies according to the requirements specified in paragraphs (c)(1) through (8) of this section.

(1) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual.

(2) Confirm that dust is being removed from hoppers through weekly visual inspections or other means of ensuring the proper functioning of removal mechanisms.

(3) Check the compressed air supply for pulse-jet baghouses each day.

(4) Monitor cleaning cycles to ensure proper operation using an appropriate methodology.

(5) Check bag cleaning mechanisms for proper functioning through monthly visual inspections or equivalent means.

(6) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or bent) or lying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices.

(7) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks.

(8) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.

(d) For each wet scrubber subject to the operating limits in §63.7690(b)(2), you must at all times monitor the 3-hour average pressure drop and scrubber water flow rate using CPMS according to the requirements in §63.7741(c).

(e) For each combustion device subject to the operating limit in §63.7690(b)(3), you must at all times monitor the 15-minute average combustion zone temperature using a CPMS according to the requirements of §63.7741(d).

(f) For each combustion device subject to the operating limit in §63.7690(b)(4), you must at all times monitor the 3-hour average combustion zone temperature using CPMS according to the requirements in §63.7741(d).

(g) For each wet acid scrubber subject to the operating limits in §63.7690(b)(5),

(1) You must at all times monitor the 3-hour average scrubbing liquid flow rate using CPMS according to the requirements of §63.7741(e)(1); and

(2) You must at all times monitor the 3-hour average pH of the scrubber blowdown using CPMS according to the requirements in §63.7741(e)(2) or measure and record the pH of the scrubber blowdown once per production cycle using a pH probe and meter according to the requirements in §63.7741(e)(3).

(h) For one or more automated conveyor and pallet cooling lines and automated shakeout lines at a new iron and steel foundry subject to the VOHAP emissions limit in §63.7690(a)(10), you must at all times monitor the 3-hour average VOHAP concentration using a CEMS according to the requirements of §63.7741(g).

[69 FR 21923, Apr. 22, 2004, as amended at 73 FR 7221, Feb. 7, 2008]

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

(a) For each capture system subject to an operating limit in §63.7690(b)(1), you must install, operate, and maintain each CPMS according to the requirements in paragraphs (a)(1) through (3) of this section.

(1) If you use a flow measurement device to monitor an operating limit parameter for a capture system, you must meet the requirements in paragraphs (a)(1)(i) through (iv) of this section.

(i) Locate the flow sensor and other necessary equipment such as straightening vanes in a position that provides a representative flow and that reduces swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(ii) Use a flow sensor with a minimum measurement sensitivity of 2 percent of the flow rate.

(iii) Conduct a flow sensor calibration check at least semiannually.

(iv) At least monthly, visually inspect all components, including all electrical and mechanical connections, for proper functioning.

(2) If you use a pressure measurement device to monitor the operating limit parameter for a capture system, you must meet the requirements in paragraphs (a)(2)(i) through (vi) of this section.

(i) Locate the pressure sensor(s) in or as close as possible to a position that provides a representative measurement of the pressure and that minimizes or eliminates pulsating pressure, vibration, and internal and external corrosion.

(ii) Use a gauge with a minimum measurement sensitivity of 0.5 inch of water or a transducer with a minimum measurement sensitivity of 1 percent of the pressure range.

(iii) Check the pressure tap for pluggage daily. If a “non-clogging” pressure tap is used, check for pluggage monthly.

(iv) Using a manometer or equivalent device such as a magnahelic or other pressure indicating transmitter, check gauge and transducer calibration quarterly.

(v) Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range, or install a new pressure sensor.

(vi) At least monthly, visually inspect all components, including all electrical and mechanical connections, for proper functioning.

(3) Record the results of each inspection, calibration, and validation check.

(b) For each negative pressure baghouse or positive pressure baghouse equipped with a stack that is applied to meet any PM or total metal HAP emissions limitation in this subpart, you must install, operate, and maintain a bag leak detection system according to the requirements in paragraphs (b)(1) through (7) of this section.

(1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(2) The bag leak detection system sensor must provide output of relative particulate matter loadings and the owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (*e.g.,* using a strip chart recorder or a data logger).

(3) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over the alarm set point established in the operation and maintenance plan, and the alarm must be located such that it can be heard by the appropriate plant personnel.

(4) The initial adjustment of the system must, at minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time (if applicable).

(5) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set point, or alarm delay time without approval from the Administrator. Except, once per quarter, you may adjust the sensitivity of the bag leak detection system to account for seasonable effects including temperature and humidity according to the procedures in the operation and maintenance plan required by §63.7710(b).

(6) For negative pressure, induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detector sensor must be installed downstream of the baghouse and upstream of any wet scrubber.

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

(c) For each wet scrubber subject to the operating limits in §63.7690(b)(2), you must install and maintain CPMS to measure and record the pressure drop and scrubber water flow rate according to the requirements in paragraphs (c)(1) and (2) of this section.

(1) For each CPMS for pressure drop you must:

(i) Locate the pressure sensor in or as close as possible to a position that provides a representative measurement of the pressure drop and that minimizes or eliminates pulsating pressure, vibration, and internal and external corrosion.

(ii) Use a gauge with a minimum measurement sensitivity of 0.5 inch of water or a transducer with a minimum measurement sensitivity of 1 percent of the pressure range.

(iii) Check the pressure tap for pluggage daily. If a “non-clogging” pressure tap is used, check for pluggage monthly.

(iv) Using a manometer or equivalent device such as a magnahelic or other pressure indicating transmitter, check gauge and transducer calibration quarterly.

(v) Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range, or install a new pressure sensor.

(vi) At least monthly, visually inspect all components, including all electrical and mechanical connections, for proper functioning.

(2) For each CPMS for scrubber liquid flow rate, you must:

(i) Locate the flow sensor and other necessary equipment in a position that provides a representative flow and that reduces swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(ii) Use a flow sensor with a minimum measurement sensitivity of 2 percent of the flow rate.

(iii) Conduct a flow sensor calibration check at least semiannually according to the manufacturer's instructions.

(iv) At least monthly, visually inspect all components, including all electrical and mechanical connections, for proper functioning.

(d) For each combustion device subject to the operating limit in §63.7690(b)(3) or (4), you must install and maintain a CPMS to measure and record the combustion zone temperature according to the requirements in paragraphs (d)(1) through (8) of this section.

(1) Locate the temperature sensor in a position that provides a representative temperature.

(2) For a noncryogenic temperature range, use a temperature sensor with a minimum tolerance of 2.2 °C or 0.75 percent of the temperature value, whichever is larger.

(3) For a cryogenic temperature range, use a temperature sensor with a minimum tolerance of 2.2 °C or 2 percent of the temperature value, whichever is larger.

(4) Shield the temperature sensor system from electromagnetic interference and chemical contaminants.

(5) If you use a chart recorder, it must have a sensitivity in the minor division of at least 20 °F.

(6) Perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owners manual. Following the electronic calibration, conduct a temperature sensor validation check, in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 16.7 °C of the process temperature sensor's reading.

(7) Conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range, or install a new temperature sensor.

(8) At least monthly, visually inspect all components, including all electrical and mechanical connections, for proper functioning.

(e) For each wet acid scrubber subject to the operating limits in §63.7690(b)(5), you must:

(1) Install and maintain CPMS to measure and record the scrubbing liquid flow rate according to the requirements in paragraph (c)(2) of this section; and

(2) Install and maintain CPMS to measure and record the pH of the scrubber blowdown according to the requirements in paragraph (e)(2)(i) through (iv) of this section.

(i) Locate the pH sensor in a position that provides a representative measurement of the pH and that minimizes or eliminates internal and external corrosion.

(ii) Use a gauge with a minimum measurement sensitivity of 0.1 pH or a transducer with a minimum measurement sensitivity of 5 percent of the pH range.

(iii) Check gauge calibration quarterly and transducer calibration monthly using a manual pH gauge.

(iv) At least monthly, visually inspect all components, including all electrical and mechanical connections, for proper functioning.

(3) As an alternative to the CPMS required in paragraph (e)(2) of this section, you may use a pH probe to extract a sample for analysis by a pH meter that meets the requirements in paragraphs (e)(3)(i) through (iii) of this section.

(i) The pH meter must have a range of at least 1 to 5 or more;

(ii) The pH meter must have an accuracy of ±0.1; and

(iii) The pH meter must have a resolution of at least 0.1 pH.

(f) You must operate each CPMS used to meet the requirements of this subpart according to the requirements specified in paragraphs (f)(1) through (3) of this section.

(1) Each CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of three of the required four data points to constitute a valid hour of data.

(2) Each CPMS must have valid hourly data for 100 percent of every averaging period.

(3) Each CPMS must determine and record the hourly average of all recorded readings and the 3-hour average of all recorded readings.

(g) For each automated conveyor and pallet cooling line and automated shakeout line at a new iron and steel foundry subject to the VOHAP emissions limit in §63.7690(a)(10), you must install, operate, and maintain a CEMS to measure and record the concentration of VOHAP emissions according to the requirements in paragraphs (g)(1) through (3) of this section.

(1) You must install, operate, and maintain each CEMS according to Performance Specification 8 in 40 CFR part 60, appendix B.

(2) You must conduct a performance evaluation of each CEMS according to the requirements of §63.8 and Performance Specification 8 in 40 CFR part 60, appendix B.

(3) You must operate each CEMS according to the requirements specified in paragraph (g)(3)(i) through (iv) of this section.

(i) As specified in §63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(ii) You must reduce CEMS data as specified in §63.8(g)(2).

(iii) Each CEMS must determine and record the 3-hour average emissions using all the hourly averages collected for periods during which the CEMS is not out-of-control.

(iv) Record the results of each inspection, calibration, and validation check.

[69 FR 21923, Apr. 22, 2004, as amended at 73 FR 7221, Feb. 7, 2008]

§ 63.7742 How do I monitor and collect data to demonstrate continuous compliance?

(a) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) any time a source of emissions is operating.

(b) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emissions or operating levels or to fulfill a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance.

(c) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

§ 63.7743 How do I demonstrate continuous compliance with the emissions limitations that apply to me?

(a) You must demonstrate continuous compliance by meeting the applicable conditions in paragraphs (a)(1) through (12) of this section. When alternative emissions limitations are provided for a given emissions source, you must comply with the alternative emissions limitation most recently selected as your compliance alternative.

(1) For each electric arc metal melting furnace, electric induction metal melting furnace, or scrap preheater at an existing iron and steel foundry,

(i) Maintaining the average PM concentration in the exhaust stream at or below 0.005 gr/dscf; or

(ii) Maintaining the average total metal HAP concentration in the exhaust stream at or below 0.0004 gr/dscf.

(2) For each cupola metal melting furnace at an existing iron and steel foundry,

(i) Maintaining the average PM concentration in the exhaust stream at or below 0.006 gr/dscf; or

(ii) Maintaining the average total metal HAP concentration in the exhaust stream at or below 0.0005 gr/dscf; or

(iii) Maintaining the average PM mass emissions rate at or below 0.10 pound of PM per ton (lb/ton) of metal charged; or

(iv) Maintaining the average total metal HAP mass emissions rate at or below 0.008 pound of total metal HAP per ton (lb/ton) of metal charged.

(3) For each cupola metal melting furnace or electric arc metal melting furnace at new iron and steel foundry, (i) Maintaining the average PM concentration in the exhaust stream at or below 0.002 gr/dscf; or

(ii) Maintaining the average total metal HAP concentration in the exhaust stream at or below 0.0002 gr/dscf.

(4) For each electric induction metal melting furnace or scrap preheater at a new iron and steel foundry,

(i) Maintaining the average PM concentration in the exhaust stream at or below 0.001 gr/dscf; or

(ii) Maintaining the average total metal HAP concentration in the exhaust stream at or below 0.00008 gr/dscf.

(5) For each pouring station at an existing iron and steel foundry,

(i) Maintaining the average PM concentration in the exhaust stream at or below 0.010 gr/dscf; or

(ii) Maintaining the average total metal HAP concentration in the exhaust stream at or below 0.0008 gr/dscf.

(6) For each pouring area or pouring station at a new iron and steel foundry,

(i) Maintaining the average PM concentration in the exhaust stream at or below 0.002 gr/dscf; or

(ii) Maintaining the average total metal HAP concentration in the exhaust stream at or below 0.0002 gr/dscf.

(7) For each building or structure housing any iron and steel foundry emissions source at the iron and steel foundry, maintaining the opacity of any fugitive emissions from foundry operations discharged to the atmosphere at or below 20 percent opacity (6-minute average), except for one 6-minute average per hour that does not exceed 27 percent opacity.

(8) For each cupola metal melting furnace at a new or existing iron and steel foundry, maintaining the average VOHAP concentration in the exhaust stream at or below 20 ppmv corrected to 10 percent oxygen.

(9) For each scrap preheater at an existing new iron and steel foundry that does not comply with the work practice standard in §63.7700(e)(1) or (2) and for each scrap preheater at a new iron and steel foundry that does not comply with the work practice standard in §63.7700(f), maintaining the average VOHAP concentration in the exhaust stream at or below 20 ppmv.

(10) For one or more automated conveyor and pallet cooling lines or automated shakeout lines that use a sand mold system at a new iron and steel foundry,

(i) Maintaining the 3-hour flow-weighted average VOHAP concentration in the exhaust stream at or below 20 ppmv;

(ii) Inspecting and maintaining each CEMS according to the requirements of §63.7741(g) and recording all information needed to document conformance with these requirements; and

(iii) Collecting and reducing monitoring data for according to the requirements of §63.7741(g) and recording all information needed to document conformance with these requirements.

(11) For each TEA cold box mold or core making line at a new or existing iron and steel foundry, maintaining a 99 percent reduction in the VOHAP concentration in the exhaust stream or maintaining the average VOHAP concentration in the exhaust stream at or below 1 ppmv.

(12) Conducting subsequent performance tests at least every 5 years for each emissions source subject to an emissions limit for PM, total metal HAP, VOHAP, or TEA in §63.7690(a) and subsequent performance tests at least every 6 months for each building or structure subject to the opacity limit in §63.7690(a)(7).

(b) You must demonstrate continuous compliance for each capture system subject to an operating limit in §63.7690(b)(1) by meeting the requirements in paragraphs (b)(1) and (2) of this section.

(1) Operating the capture system at or above the lowest values or settings established for the operating limits in your operation and maintenance plan; and

(2) Monitoring the capture system according to the requirements in §63.7740(a) and collecting, reducing, and recording the monitoring data for each of the operating limit parameters according to the applicable requirements in this subpart.

(c) For each baghouse,

(1) Inspecting and maintaining each baghouse according to the requirements of §63.7740(c)(1) through (8) and recording all information needed to document conformance with these requirements; and

(2) If the baghouse is equipped with a bag leak detection system, maintaining records of the times the bag leak detection system sounded, and for each valid alarm, the time you initiated corrective action, the corrective action taken, and the date on which corrective action was completed.

(d) For each wet scrubber that is subject to the operating limits in §63.7690(b)(2), you must demonstrate continuous compliance by:

(1) Maintaining the 3-hour average pressure drop and 3-hour average scrubber water flow rate at levels no lower than those established during the initial or subsequent performance test;

(2) Inspecting and maintaining each CPMS according to the requirements of §63.7741(c) and recording all information needed to document conformance with these requirements; and

(3) Collecting and reducing monitoring data for pressure drop and scrubber water flow rate according to the requirements of §63.7741(f) and recording all information needed to document conformance with these requirements.

(e) For each combustion device that is subject to the operating limit in §63.7690(b)(3), you must demonstrate continuous compliance by:

(1) Maintaining the 15-minute average combustion zone temperature at a level no lower than 1,300 °F;

(2) Inspecting and maintaining each CPMS according to the requirements of §63.7741(d) and recording all information needed to document conformance with these requirements; and

(3) Collecting and reducing monitoring data for combustion zone temperature according to the requirements of §63.7741(f) and recording all information needed to document conformance with these requirements.

(f) For each combustion device that is subject to the operating limit in §63.7690(b)(4), you must demonstrate continuous compliance by:

(1) Maintaining the 3-hour average combustion zone temperature at a level no lower that established during the initial or subsequent performance test;

(2) Inspecting and maintaining each CPMS according to the requirements of §63.7741(d) and recording all information needed to document conformance with these requirements; and

(3) Collecting and reducing monitoring data for combustion zone temperature according to the requirements of §63.7741(f) and recording all information needed to document conformance with these requirements.

(g) For each acid wet scrubber subject to the operating limits in §63.7690(b)(5), you must demonstrate continuous compliance by:

(1) Maintaining the 3-hour average scrubbing liquid flow rate at a level no lower than the level established during the initial or subsequent performance test;

(2) Maintaining the 3-hour average pH of the scrubber blowdown at a level no higher than 4.5 (if measured by a CPMS) or maintaining the pH level of the scrubber blowdown during each production shift no higher than 4.5;

(3) Inspecting and maintaining each CPMS according to the requirements of §63.7741(e) and recording all information needed to document conformance with these requirements; and

(4) Collecting and reducing monitoring data for scrubbing liquid flow rate and scrubber blowdown pH according to the requirements of §63.7741(f) and recording all information needed to document conformance with these requirements. If the pH level of the scrubber blowdown is measured by a probe and meter, you must demonstrate continuous compliance by maintaining records that document the date, time, and results of each sample taken for each production shift.

[69 FR 21923, Apr. 22, 2004, as amended at 73 FR 7222, Feb. 7, 2008]

§ 63.7744 How do I demonstrate continuous compliance with the work practice standards that apply to me?

(a) You must maintain records that document continuous compliance with the certification requirements in §63.7700(b) or with the procedures in your scrap selection and inspection plan required in §63.7700(c). Your records documenting compliance with the scrap selection and inspection plan must include a copy (kept onsite) of the procedures used by the scrap supplier for either removing accessible mercury switches or for purchasing automobile bodies that have had mercury switches removed, as applicable.

(b) You must keep records of the chemical composition of all catalyst binder formulations applied in each furan warm box mold or core making line at a new or existing iron and steel foundry to demonstrate continuous compliance with the requirements in §63.7700(d).

(c) For a scrap preheater at an existing iron and steel foundry, you must operate and maintain each gas-fired preheater such that the flame directly contacts the scrap charged to demonstrate continuous compliance with the requirement §63.7700(e)(1). If you choose to meet the work practice standard in §63.7700(e)(2), you must keep records to document that the scrap preheater charges only material that is subject to and in compliance with the scrap certification requirements in §63.7700(b).

(d) For a scrap preheater at a new iron and steel foundry, you must keep records to document that each scrap preheater charges only material that is subject to and in compliance with the scrap certification requirements in §63.7700(b) to demonstrate continuous compliance with the requirement in §63.7700(f).

§ 63.7745 How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?

(a) For each capture system and control device for an emissions source subject to an emissions limit in §63.7690(a), you must demonstrate continuous compliance with the operation and maintenance requirements of §63.7710 by:

(1) Making monthly inspections of capture systems and initiating corrective action according to §63.7710(b)(1) and recording all information needed to document conformance with these requirements;

(2) Performing preventative maintenance for each control device according to the preventive maintenance plan required by §63.7710(b)(3) and recording all information needed to document conformance with these requirements;

(3) Operating and maintaining each bag leak detection system according to the site-specific monitoring plan required by §63.7710(b)(4) and recording all information needed to demonstrate conformance with these requirements;

(4) Initiating and completing corrective action for a bag leak detection system alarm according to the corrective action plan required by §63.7710(b)(5) and recording all information needed to document conformance with these requirements; and

(5) Igniting gases from mold vents according to the procedures in the plan required by §63.7710(b)(6). (Any instance where you fail to follow the procedures is a deviation that must be included in your semiannual compliance report.)

(b) You must maintain a current copy of the operation and maintenance plans required by §63.7710(b) onsite and available for inspection upon request. You must keep the plans for the life of the iron and steel foundry or until the iron and steel foundry is no longer subject to the requirements of this subpart.

§ 63.7746 What other requirements must I meet to demonstrate continuous compliance?

(a) *Deviations.* You must report each instance in which you did not meet each emissions limitation in §63.7690 (including each operating limit) that applies to you. This requirement includes periods of startup, shutdown, and malfunction. You also must report each instance in which you did not meet each work practice standard in §63.7700 and each operation and maintenance requirement of §63.7710 that applies to you. These instances are deviations from the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart. These deviations must be reported according to the requirements of §63.7751.

(b) *Startups, shutdowns, and malfunctions.* (1) Consistent with the requirements of §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with §63.6(e)(1).

(2) The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations according to the provisions in §63.6(e).

[69 FR 21923, Apr. 22, 2004, as amended at 71 FR 20468, Apr. 20, 2006]

§ 63.7747 How do I apply for alternative monitoring requirements for a continuous emissions monitoring system?

(a) You may request an alternative monitoring method to demonstrate compliance with the VOHAP emissions limits in §63.7690(a)(10) for automated pallet cooling lines or automated shakeout lines at a new iron and steel foundry according to the procedures in this section.

(b) You can request approval to use an alternative monitoring method in the notification of construction or reconstruction for new sources, or at any time.

(c) You must submit a monitoring plan that includes a description of the control technique or pollution prevention technique, a description of the continuous monitoring system or method including appropriate operating parameters that will be monitored, test results demonstrating compliance with the emissions limit, operating limit(s) (if applicable) determined according to the test results, and the frequency of measuring and recording to establish continuous compliance. If applicable, you must also include operation and maintenance requirements for the monitors.

(d) The monitoring plan is subject to approval by the Administrator. Use of the alternative monitoring method must not begin until approval is granted by the Administrator.

Notifications, Reports, and Records

§ 63.7750 What notifications must I submit and when?

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

(b) As specified in §63.9(b)(2), if you start up your iron and steel foundry before April 22, 2004, you must submit your initial notification no later than August 20, 2004.

(c) If you start up your new iron and steel foundry on or after April 22, 2004, you must submit your initial notification no later than 120 calendar days after you become subject to this subpart.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required by §63.7(b)(1).

(e) If you are required to conduct a performance test or other initial compliance demonstration, you must submit a notification of compliance status according to the requirements of §63.9(h)(2)(ii). For opacity performance tests, the notification of compliance status may be submitted with the semiannual compliance report in §63.7751(a) and (b) or the semiannual part 70 monitoring report in §63.7551(d).

(1) For each initial compliance demonstration that does not include a performance test, you must submit the notification of compliance status before the close of business on the 30th calendar day following completion of the initial compliance demonstration.

(2) For each initial compliance demonstration that does include a performance test, you must submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to the requirement specified in §63.10(d)(2).

[69 FR 21923, Apr. 22, 2004, as amended at 73 FR 7222, Feb. 7, 2008]

§ 63.7751 What reports must I submit and when?

(a) Compliance report due dates. Unless the Administrator has approved a different schedule, you must submit a semiannual compliance report to your permitting authority according to the requirements specified in paragraphs (a)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your iron and steel foundry by §63.7683 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your iron and steel foundry.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after your first compliance report is due.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.

(5) For each iron and steel foundry that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of the dates specified in paragraphs (a)(1) through (4) of this section.

(b) Compliance report contents. Each compliance report must include the information specified in paragraphs (b)(1) through (3) of this section and, as applicable, paragraphs (b)(4) through (8) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took action consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).

(5) If there were no deviations from any emissions limitations (including operating limit), work practice standards, or operation and maintenance requirements, a statement that there were no deviations from the emissions limitations, work practice standards, or operation and maintenance requirements during the reporting period.

(6) If there were no periods during which a continuous monitoring system (including a CPMS or CEMS) was out-of-control as specified by §63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.

(7) For each deviation from an emissions limitation (including an operating limit) that occurs at an iron and steel foundry for which you are not using a continuous monitoring system (including a CPMS or CEMS) to comply with an emissions limitation or work practice standard required in this subpart, the compliance report must contain the information specified in paragraphs (b)(1) through (4) and (b)(7)(i) and (ii) of this section. This requirement includes periods of startup, shutdown, and malfunction.

(i) The total operating time of each emissions source during the reporting period.

(ii) Information on the number, duration, and cause of deviations (including unknown cause) as applicable and the corrective action taken.

(8) For each deviation from an emissions limitation (including an operating limit) or work practice standard occurring at an iron and steel foundry where you are using a continuous monitoring system (including a CPMS or CEMS) to comply with the emissions limitation or work practice standard in this subpart, you must include the information specified in paragraphs (b)(1) through (4) and (b)(8)(i) through (xi) of this section. This requirement includes periods of startup, shutdown, and malfunction.

(i) The date and time that each malfunction started and stopped.

(ii) The date and time that each continuous monitoring system was inoperative, except for zero (low-level) and high-level checks.

(iii) The date, time, and duration that each continuous monitoring system was out-of-control, including the information in §63.8(c)(8).

(iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(v) A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and unknown causes.

(vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.

(viii) A brief description of the process units.

(ix) A brief description of the continuous monitoring system.

(x) The date of the latest continuous monitoring system certification or audit.

(xi) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

(c) Immediate startup, shutdown, and malfunction report. If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan and the source exceeds any applicable emissions limitation in §63.7690, you must submit an immediate startup, shutdown, and malfunction report according to the requirements of §63.10(d)(5)(ii).

(d) Part 70 monitoring report. If you have obtained a title V operating permit for an iron and steel foundry pursuant to 40 CFR part 70 or 40 CFR part 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report for an iron and steel foundry along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emissions limitation or operation and maintenance requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements for an iron and steel foundry to your permitting authority.

[69 FR 21923, Apr. 22, 2004, as amended at 73 FR 7222, Feb. 7, 2008]

§ 63.7752 What records must I keep?

(a) You must keep the records specified in paragraphs (a)(1) through (4) of this section:

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that you submitted, according to the requirements of §63.10(b)(2)(xiv).

(2) The records specified in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests and performance evaluations as required by §63.10(b)(2)(viii).

(4) Records of the annual quantity of each chemical binder or coating material used to coat or make molds and cores, the Material Data Safety Sheet or other documentation that provides the chemical composition of each component, and the

annual quantity of HAP used in these chemical binder or coating materials at the foundry as calculated from the recorded quantities and chemical compositions (from Material Data Safety Sheets or other documentation).

(b) You must keep the following records for each CEMS.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Previous (*i.e.,* superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(3) Request for alternatives to relative accuracy tests for CEMS as required in §63.8(f)(6)(i).

(4) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(c) You must keep the records required by §§63.7743, 63.7744, and 63.7745 to show continuous compliance with each emissions limitation, work practice standard, and operation and maintenance requirement that applies to you.

[69 FR 21923, Apr. 22, 2004, as amended at 73 FR 7222, Feb. 7, 2008]

§ 63.7753 In what form and for how long must I keep my records?

(a) You must keep your records in a form suitable and readily available for expeditious review, according to the requirements of §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to the requirements in §63.10(b)(1). You can keep the records for the previous 3 years offsite.

Other Requirements and Information

§ 63.7760 What parts of the General Provisions apply to me?

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

§ 63.7761 Who implements and enforces this subpart?

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

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

(c) The authorities that cannot be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to non-opacity emissions limitations in §63.7690 and work practice standards in §63.7700 under §63.6(g).

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

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

Definitions

§ 63.7765 What definitions apply to this subpart?

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

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

Automated shakeout line means any mechanical process unit designed for and dedicated to separating a casting from a mold. These mechanical processes include, but are not limited to, shaker decks, rotary separators, and high-frequency vibration units. Automated shakeout lines do not include manual processes for separating a casting from a mold, such as personnel using a hammer, chisel, pick ax, sledge hammer, or jackhammer.

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

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

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

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

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

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

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

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

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

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

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

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

A deviation is not always a violation. The determination of whether a deviation constitutes a violation of the standard is up to the discretion of the entity responsible for enforcement of the standards.

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

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

Emissions limitation means any emissions limit or operating limit.

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

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

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

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

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

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

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

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

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

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

Off blast means those periods of cupola operation when the cupola is not actively being used to produce molten metal. Off blast conditions include cupola startup when air is introduced to the cupola to preheat the sand bed and other cupola startup procedures as defined in the startup, shutdown, and malfunction plan. Off blast conditions also include idling conditions when the blast air is turned off or down to the point that the cupola does not produce additional molten metal.

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

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

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

Responsible official means responsible official as defined in §63.2.

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

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

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

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

[69 FR 21923, Apr. 22, 2004, as amended at 70 FR 29404, May 20, 2005; 73 FR 7222, Feb. 7, 2008]

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

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

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

63.7(a)(3), (b)–(h)	Performance testing requirements	Yes	
63.8(a)(1)–(a)(3), (b), (c)(1)–(c)(3), (c)(6)–(c)(8), (d), (e), (f)(1)–(f)(6), (g)(1)–(g)(4)	Monitoring requirements	Yes	Subpart EEEEE specifies requirements for alternative monitoring systems.
63.8(a)(4)	Additional monitoring requirements for control devices in §63.11	No	Subpart EEEEE does not require flares.
63.8(c)(4)	Continuous monitoring system (CMS) requirements	No	Subpart EEEEE specifies requirements for operation of CMS and CEMS.
63.8(c)(5)	Continuous opacity monitoring system (COMS) Minimum Procedures	No	Subpart EEEEE does not require COMS.
63.8(g)(5)	Data reduction	No	Subpart EEEEE specifies data reduction requirements.
63.9	Notification requirements	Yes	Except: for opacity performance tests, Subpart EEEEE allows the notification of compliance status to be submitted with the semiannual compliance report or the semiannual part 70 monitoring report.
63.10(a)–(b), (c)(1)–(6), (c)(9)–(15), (d)(1)–(2), (e)(1)–(2), (f)	Recordkeeping and reporting requirements	Yes	Additional records for CMS in §63.10(c)(1)–(6), (9)–(15) apply only to CEMS.
63.10(c)(7)–(8)	Records of excess emissions and parameter monitoring exceedances for CMS	No	Subpart EEEEE specifies records requirements.
63.10(d)(3)	Reporting opacity or visible emissions observations	Yes	
63.10(e)(3)	Excess emissions reports	No	Subpart EEEEE specifies reporting requirements.
63.10(e)(4)	Reporting COMS data	No	Subpart EEEEE data does not require COMS.
63.11	Control device requirements	No	Subpart EEEEE does not require flares.

63.12	State authority and delegations	Yes	
63.13–63.15	Addresses of State air pollution control agencies and EPA regional offices. Incorporation by reference. Availability of information and confidentiality	Yes	

[69 FR 21923, Apr. 22, 2004, as amended at 73 FR 7223, Feb. 7, 2008]

Indiana Department of Environmental Management
Office of Air Quality

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

Source Description and Location

Source Name:	INTAT Precision, Inc.
Source Location:	2148 State Rd. 3 North, Rushville, IN 46173
County:	Rush
SIC Code:	3321 (Gray and Ductile Iron Foundries)
Operation Permit No.:	T139-25610-00011
Operation Permit Issuance Date:	November 19, 2009
Significant Source Modification No.:	139-32540-00011
Significant Permit Modification No.:	139-32559-00011
Permit Reviewer:	Mehul Sura

Existing Approvals

The source was issued Part 70 Operating Permit No. T139-25610-00011 on November 19, 2009. The source has since received the following approvals:

(a) Significant Permit Modification No.:139-30099-00011, issued April 14, 2011

(b) Significant Permit Modification No.:139-31528-00011, issued August 29, 2012

County Attainment Status

The source is located in Rush County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.
[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM2.5.	

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

(b) PM2.5
Rush County has been classified as attainment for $PM_{2.5}$. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for $PM_{2.5}$ emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air

pollution control board issued an emergency rule establishing the direct $PM_{2.5}$ significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct $PM_{2.5}$ and SO_2 emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

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

Fugitive Emissions

Since this source is classified as a stationary gray and ductile iron foundry, 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

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

Pollutant	**Emissions** (ton/yr)
PM	>100
PM_{10}	>100
$PM_{2.5}$	>100
SO_2	<100
VOC	>100
CO	>100
NO_X	<100
Single HAPs	>10
Total HAPs	>25

(a) PSD Major Source Status

This existing source is a major stationary source, under PSD (326 IAC 2-2), because at least one regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

These emissions are based upon the Significant Permit Modification No. 139-31528-00011, issued on August 29, 2012.

(b) HAPs Major Status

This existing source is a major source of HAPs, as defined in 40 CFR 63.2, because HAP emissions are greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by INTAT Precision, Inc. on November 21, 2012, relating to addition of the following new emission units:

One (1) Ductile Iron Foundry Line, approved in 2013 for construction, identified as Plant 2, Line 4, consisting of the following:

(1) One (1) electric Induction Furnace, identified as EU-N1, with a nominal capacity of 10 tons of metal per hour, utilizing Baghouse DC-N1A for particulate control, and exhausting to Stack S-N1.

(2) One (1) Sand Handling System, identified as EU-N2A, and one (1) Return Sand Handling System, identified as EU-N2B, with a nominal capacity of 75 tons of sand per hour, both systems utilizing Baghouse DC-N1B for particulate control, exhausting to Stack S-N1.

(3) One (1) Pouring Station, identified as EU-N3, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(4) One (1) Cooling Line, identified as EU-N4, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(5) One (1) Casting Shakeout System, identified as EU-N5, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(6) One (1) Bad Heat Shakeout System, identified as EU-N5A, with a nominal capacity of 10 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(7) One (1) Shot Blast Unit, identified as EU-N6, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control and exhausting to Stack S-N2.

Note: Baghouse DC-N2 is common control for the Pouring Station (EU-N3), Cooling Line (EU-N4), Casting Shakeout system (EU-N5), Bad Heat Shakeout system (EU-N5A) and Shot Blast unit (EU-N6).

In addition, the following changes will be made to the existing equipment for the existing Ductile Iron Foundry Line, constructed in 1997, identified as Plant 2 to support the proposed Line 4:

(a) The Charge handling for the proposed Line 4 will be performed at the existing Plant 2 Indoor Charge Handling System, identified as 1000A, therefore, the throughput capacity of the Indoor Charge Handling system, identified as 1000A, will be increased from 10 tons of metal per hour to 20 tons of metal per hour.

(b) The ductile iron conversion for the proposed Line 4 will occur at existing Plant 2 Ductile Iron Conversion station, identified as 1150, therefore, the throughput capacity of the Ductile Iron Conversion station, identified as 1150, will be increased from 10 tons per hour to 25 tons per hour.

(c) The grinding process for the castings produced on the proposed Line 4 will be performed at the existing Plants 1 and 2 six Bench grinders.

Note: These grinders are currently identified in the permit as Insignificant Activities. These grinders will be listed as significant emissions units with different identifications through this modification.

(d) Some of the metal melted in the existing Plant 2 electric Induction furnaces, identified as 1110, will be used on the proposed Line 4. The throughput capacity of Plant 2 electric Induction furnaces, identified as 1110, will be increased from 10 tons per hour to 20 tons per hour. However, there will be no change in the existing limits for these 2 furnaces.

(e) The throughput capacity of Pouring Station, identified as 2000, will be increased from 10 tons per hour to 20 tons per hour. However, there will be no change in the existing throughput limit for this Pouring Station and this Pouring Station will not be used for the proposed Line 4.

(f) The cores for the proposed Line 4 will be produced at existing Plants 1 and 2 Core production facilities. These Core production facilities are common to the other existing ductile iron foundry lines of the plant.

Enforcement Issues

There are no pending enforcement actions related to this modification.

Emission Calculations

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

Permit Level Determination – Part 70

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.

Total PTE Increase due to the Modification		
Pollutant	**Total PTE of New and Modified Units** (ton/yr)*	**Significant Source Modification Threshold under 326 IAC 2-7-10.5(f)** (tons/yr)
PM	3425.7	25
PM_{10}	828.1	25
$PM_{2.5}$	638.7	25
SO_2	3.8	25
VOC	96.3	25
CO	394.2	100
NO_X	33.5	25
GHGs	657	-
Lead	4.8	1
Total HAPs	4.8	25

* Please refer to Appendix A of this Technical Support Document for the details of new and modified emission units.

(a) Significant Source Modification

This source modification is subject to 326 IAC 2-7-10.5(g) due to the following reasons:

(i) The PTE (total PTE of New and Modified Units) of PM, PM10, PM2.5, VOC, NOx, CO, and Lead are greater than the Significant Source Modification Threshold as specified in the above table.

(ii) This modification is subject to 326 IAC 8-1-6 (New facilities; general reduction requirements).

(b) Significant Permit Modification

This modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d)(1), because the addition of this proposed modification involves adding new limits in the permit.

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 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 the Modification (tons/year)								
Process/facility	**PM**	**PM10**	**PM2.5**	**SO_2**	**VOC**	**CO**	**NO_X**	**HAPs**	**CO2e**
Isocure Cold Box Core Machines (P4, P5, P6, P7)	3.58	3.58	3.58	-	23.83	-	-	3.99	-
Plant 1 (constructed in 1988, modified in 2001/2004)									
Charge Handling (P1, P2, P3)	26.19	15.71	15.1	-	-	-	-	1.00	-
Melting System (P8)	8.21	8.21	8.21	-	-	-	-	0.04	-
Two (2) Ladle Heaters (P10)	0.11	0.46	0.46	0.04	0.33	5.08	6.04	0.11	-
Inoculation System (P11)	8.21	8.21	8.21	–	0.09	-	-	0.02	-
Pouring Station (P13B), Cooling Line (P14B), Shakeout Unit (P16B), and Bad Heat Shakeout	23.17	76.77	76.77	1.31	51.42	99.78	1.89	18.74	-
Casting Conveyors & Desprue Ops (P17B - P22B)	5.19	5.19	5.19	-	-	-	-	-	-
Shot Blast Process (P40 – P42)	8.63	8.63	8.63	-	-	-	-	0.28	-
Grinding Process (Grinders 3-9)	8.63	8.63	8.63	-	-	-	-	0.28	-
Sand System (P32B - P39B)	9.75	9.75	9.75	-	-	-	-	-	-
Wheelabrator MeshBelt Blast	24.90	14.90	14.90	-	-	-	-	0.11	-
Insignificant Activities (P40, P41, P47 - P52, P53, P54, P58, P59)	6.50	6.55	6.55	0.01	0.05	0.77	0.92	0.02	-
Subtotal	133.07	193.59	193.59	1.36	80.52	105.63	8.85	24.59	-
Plant 2 (constructed in 1997, modified in 2004)									
Pre-Blast (3055)	17.31	17.31	5.19	-	-	-	-	-	-
Final Blast (3090)	17.31	17.31	8.63	-	-	-	-	-	-
Charge Handling (1000A)	21.00	21.00	8.63	-	-	-	-	0.80	-
Melting, Inoculation and									-

	Potential to Emit of the Entire Source After the Modification (tons/year)									
Process/facility	**PM**	**PM10**	**PM2.5**	**SO_2**	**VOC**	**CO**	**NO_X**	**HAPs**		**CO2e**
Pouring (1110, 1150, 2000)	17.43	17.53	9.75	0.38	2.70	1.47	1.94	1.52		
Casting Conveyor & Cooling Conveyor System (2015, 2020)	17.78	17.78	14.90	-	-	-	-	0.67		-
Casting Shakeout System (3010)	17.78	17.78	6.55	-	22.30	-	-	0.36		-
Sand & Waste Sand Handling System (4000,4140, 5000)	25.50	25.50	193.59	-	-	-	-	-		-
Finishing Operation (8000)	0.45	0.45	0.45	-	-	-	-	0.02		-
Subtotal	134.56	134.66	134.66	0.38	25.00	1.47	1.94	3.37		-
Plant 2 Line 4 (year 2013 modification)*										
Induction Furnace (EU-N1)	total less than 25 **	total less than 15 **	total less than 10 **	-	total less than 40 **	total less than 100 **	-	-	total less than 0.6 for Lead **	-
Sand Handling (EU-N2A and EU-N2B)				-			-	-		-
Pouring and Cooling (EU-N3 and EU-N4)				1.31			0.66	4.23		657
Casting Shakeout (EU-N5)				-			-	-		-
Shot Blast Unit (EU-N6)				-			-	-		-
One (1) Indoor Charge Handling System (1000A)				-			-	-		-
Ductile Iron Conversion (EU1150)				0			-	-		-
Six (6) Bench Grinders (Cells 1, 2, 3, 4, 11 and 12)				-			-	-		-
Core Production (P4, P5, P6 and P7)				2.50			32.85	-		-
Subtotal	<25	<15	<10	3.8	<40	<100	38.5	<4.23	<0.6	657
PSD Significant Level	**25**	**15**	**10**	**40**	**40**	**100**	**40**	**-**	**0.6**	**75,000**
Total PTE of the Source	**296.21**	**346.83**	**341.83**	**5.54**	**169.35**	**207.1**	**49.29**	**36.18**	*******	*******
PSD Major Source	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**25**	**25**	**100,000**

	Potential to Emit of the Entire Source After the Modification (tons/year)									
Process/facility	**PM**	**PM10**	**PM2.5**	**SO_2**	**VOC**	**CO**	**NO_X**	**HAPs**		**CO2e**
Thresholds										

* SO2 and NOx PTEs of Plant 2, Line 4 (proposed 2013 modification) are uncontrolled/unlimited emissions.

** PM, PM10, PM2.5, VOC, CO and Lead PTEs of Plant 2, Line 4 (proposed 2013 modification) are based on the following limits taken by Permittee:

(a) The PM emissions from this proposed 2013 modification shall be less than 25 tons per twelve consecutive month period.

(b) The PM10 emissions from this proposed 2013 modification shall be less than exceed 15 tons per twelve consecutive month period.

(c) The PM2.5 emissions from this proposed 2013 modification shall be less than exceed 10 tons per twelve consecutive month period.

(d) The Lead emissions from this proposed 2013 modification shall be less than 0.6 tons per twelve consecutive month period.

(e) The CO emissions from this proposed 2013 modification shall be less than 100 tons per twelve consecutive month period.

(f) The VOC emissions from this proposed 2013 modification shall be less than 40 tons per twelve consecutive month period.

Note 1: This proposed 2013 modification is also called the Plant 2, Line 4.

Note 2: See 'Compliance Determination and Monitoring Requirements' Section of this TSD for the equations to be used to show compliance with the above mentioned limits.

*** Total PTE of the Source for Lead and CO2e have not been evaluated under this modification.

This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS):
There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) included in the permit due to this proposed modification.

National Emission Standards for Hazardous Air Pollutants (NESHAP):

(a) Subpart EEEEE—National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries

The proposed Plant 2 Line 4 is subject to the requirements of this NESHAP (40 CFR 63, Subpart EEEEE, which is incorporated by reference as 326 IAC 20-92) because it is an iron foundry line and it will be located at a major source of hazardous air pollutant (HAP) emissions. The facilities subject to this rule include the following:

One Ductile Iron Foundry Line, to be constructed in 2013, identified as Line 4, consisting of the following:

(1) One (1) Induction Furnace, identified as EU-N1, with a nominal capacity of 10 tons of metal per hour, utilizing Baghouse DC-N1A for particulate control, and exhausting to Stack S-N1.

(2) One (1) Sand Handling System, identified as EU-N2A, and one (1) Return Sand Handling System, identified as EU-N2B, with a nominal capacity of 75 tons of sand per hour, both systems utilizing Baghouse DC-N1B for particulate control, exhausting to Stack S-N1.

(3) One (1) Pouring Station, identified as EU-N3, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(4) One (1) Cooling Line, identified as EU-N4, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(5) One (1) Casting Shakeout System, identified as EU-N5, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(6) One (1) Bad Heat Shakeout System, identified as EU-N5A, with a nominal capacity of 10 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(7) One (1) Shot Blast Unit, identified as EU-N6, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control and exhausting to Stack S-N2.

Nonapplicable portions of the NESHAP will not be included in the permit. The above listed facilities are is subject to the following portions of Subpart EEEEE:

(1) 40 CFR 63.7680
(2) 40 CFR 63.7681
(3) 40 CFR 63.7682
(4) 40 CFR 63.7683(a)
(5) 40 CFR 63.7683(b)
(6) 40 CFR 63.7683(f)
(7) 40 CFR 63.7690(a)(1)(i)
(8) 40 CFR 63.7690(a)(5)(i)

(9) 40 CFR 63.7690(a)(7)
(10) 40 CFR 63.7700(a)
(11) 40 CFR 63.7700(b)
(12) 40 CFR 63.7710(a)
(13) 40 CFR 63.7710(b)(1)
(14) 40 CFR 63.7710(b)(3)
(15) 40 CFR 63.7710(b)(4)
(16) 40 CFR 63.7710(b)(5)
(17) 40 CFR 63.7710(b)(6)
(18) 40 CFR 63.7720
(19) 40 CFR 63.7730(a)
(20) 40 CFR 63.7730(b)
(21) 40 CFR 63.7731
(22) 40 CFR 63.7732(a)
(23) 40 CFR 63.7732(b)(1)
(24) 40 CFR 63.7732(b)(2)
(25) 40 CFR 63.7732(b)(4)
(26) 40 CFR 63.7732(c)(1)
(27) 40 CFR 63.7732(c)(2)
(28) 40 CFR 63.7732(c)(4)
(29) 40 CFR 63.7732(d)
(30) 40 CFR 63.7732(h)
(31) 40 CFR 63.7733(a)
(32) 40 CFR 63.7733(e)
(33) 40 CFR 63.7733(f)
(34) 40 CFR 63.7734(a)(1)(i)
(35) 40 CFR 63.7734(a)(5)(i)
(36) 40 CFR 63.7734(a)(7)
(37) 40 CFR 63.7734(b)(1)
(38) 40 CFR 63.7735(a)
(39) 40 CFR 63.7736(c)
(40) 40 CFR 63.7736(d)
(41) 40 CFR 63.7740(b)
(42) 40 CFR 63.7741(b)
(43) 40 CFR 63.7742
(44) 40 CFR 63.7743(a)(1)(i)
(45) 40 CFR 63.7743(a)(5)(i)
(46) 40 CFR 63.7743(a)(7)
(47) 40 CFR 63.7743(a)(12)
(48) 40 CFR 63.7743(c)
(49) 40 CFR 63.7744(a)
(50) 40 CFR 63.7745
(51) 40 CFR 63.7746
(52) 40 CFR 63.7750(a)
(53) 40 CFR 63.7750(b)
(54) 40 CFR 63.7750(d)
(55) 40 CFR 63.7750(e)
(56) 40 CFR 63.7751
(57) 40 CFR 63.7752(a)
(58) 40 CFR 63.7752(c)
(59) 40 CFR 63.7753
(60) 40 CFR 63.7760
(61) 40 CFR 63.7761
(62) 40 CFR 63.7765
(63) Table 1

Note: 40 CFR 63.7730 specifies performance testing requirements under this NESHAP and 40 CFR 63.7731 specifies details of subsequent testing requirements under this NESHAP.
The provisions of 40 CFR 63 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facilities described in this section except when otherwise specified in 40 CFR 63, Subpart EEEEE.

(b) There are no other NESHAPs (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit due to this modification.

Compliance Assurance Monitoring (CAM)
Pursuant to 40 CFR 64.2, CAM is applicable to a pollutant-specific emissions unit at a major source that is required to obtain a part 70 or 71 permit if the unit satisfies all of the following criteria:

(1) has a potential to emit before or after 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 new or modified emission unit involved:

Process	**Emission Unit ID**	**New or Modified Unit?**	**Control Device Used**	**Emission Limitation** (Y/N)	**Pollutant**	**Uncontrolled PTE** (ton/yr)	**Controlled PTE** (ton/yr)	**Part 70 Major Source Threshold** (ton/yr)	**CAM Applicable** (Y/N)	**Large Unit** (Y/N)
Line 4 Induction Furnace	EU-N1	New	DC-N1A	Y	PM10	37.668	1.31	100	N	N
					PM2.5	37.668	1.31	100	N	N
					PM	39.42	1.31	100	N	N
Line 4 Sand Handling	EU-N2A and EU-N2B	New	DC-N1B	Y	PM10	177.39	4.60	100	Y	N
					PM2.5	177.39	4.60	100	Y	N
					PM	1182.6	4.60	100	Y	N
Line 4 Pouring and Cooling	EU-N3 and EU-N4	New	DC-N2	Y	PM10	135.342	5.69	100	Y	N
					PM2.5	65.7	5.69	100	N	N
					PM	275.94	5.69	100	Y	N
Line 4 Casting Shakeout	EU-N5	New	DC-N2	Y	PM10	147.168	5.69	100	Y	N
					PM2.5	86.724	5.69	100	N	N
					PM	210.24	5.69	100	Y	N
Line 4 Shot Blast Unit	EU-N6	New	DC-N2	Y	PM10	111.69	5.69	100	Y	N
					PM2.5	111.69	5.69	100	N	N
					PM	1116.9	5.69	100	Y	N
Plant 2 Indoor Charge Handling System	1000A	Modified	None	Y	PM10	no further evaluation made because this operation does not equipped with control				
					PM2.5					
					PM					
Plant 2 Ductile Iron Conversion	EU1150	Modified	BH6010	Y	PM10	197.1	1.31	100	Y	N
					PM2.5	197.1	1.31	100	Y	N
					PM	118.26	1.31	100	Y	N
Plant 2 electric Induction furnaces	1110	Modified	BH6010	Y	PM10	128.34	21.9 total (for PM, PM10 and PM2.5)	100	Y	N
					PM2.5	113		100	Y	N
					PM	113		100	Y	N
Plant 2 Pouring System	2000	Modified	BH6010	Y	PM10	551		100	Y	N
					PM2.5	270.7		100	Y	N
					PM	131.4		100	Y	N

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to the following listed emission units for PM, PM10 and PM2.5. A CAM plan will be incorporated into this proposed modification. The Compliance Determination and Monitoring Requirements section includes a detailed description of the CAM requirements.

Process	Emission Unit ID
Line 4 Pouring and Cooling	EU-N3 and EU-N4
Line 4 Casting Shakeout	EU-N5
Line 4 Shot Blast Unit	EU-N6
Line 4 Sand Handling and Return Sand Handling	EU-N2A and EU-N2B
Plant 2 Ductile Iron Conversion	EU1150
Plant 2 electric Induction furnaces	1110
Plant 2 Pouring System	2000

CAM Applicability - SO2, VOC and NOX
None of the proposed emission units has SO2, VOC and NOX emissions greater than 100 tons per year. Therefore, CAM for SO2, VOC and NOX does not apply to any proposed emission unit.

CAM Applicability - Lead
None of the proposed emission units has Lead emissions greater than 10 tons per year. Therefore, CAM for Lead does not apply to any proposed emission unit.

CAM Applicability - CO
None of the emission units at this source is equipped with CO add-on controls. Therefore, CAM for CO does not apply to any proposed emission unit.

CAM for Existing Units
Existing units that are going support the proposed Line 4 are not evaluated for CAM.

State Rule Applicability Determination

326 IAC 2-2 (PSD)
PSD applicability is discussed under the Permit Level Determination – PSD section.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The following facilities are regulated by NESHAP 40 CFR 63, Subpart EEEEE. Therefore, these facilities are exempt from the requirements of 326 2-4.1.

Process	Emission Unit ID
Line 4 Induction Furnace	EU-N1
Line 4 Pouring and Cooling	EU-N3 and EU-N4
Line 4 Casting Shakeout	EU-N5
Line 4 Shot Blast Unit	EU-N6
Line 4 Sand Handling and Return Sand Handling	EU-N2A and EU-N2B

The remaining proposed emission units will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply to any proposed emission unit.

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 the facilities listed below shall be limited as specified when operating at the respective process weight rate:

Emission Unit/Activity	Emission Unit ID	Process Weight Rate (tons/hr)	Allowable Particulate Emission Rate (326 IAC 6-3-2) (lb/hr)	Emission Rate (lb/hr)*
Line 4 Induction Furnace	EU-N1	10	19.2	0.09
Line 4 Pouring	EU-N3	15	25.2	0.63
Line 4 Cooling	EU-N4	15	25.2	0.63
Line 4 Casting Shakeout	EU-N5	15	25.2	0.48
Line 4 Bad Heat Shakeout	EU-N5A	10	19.2	0.48
Line 4 Shot Blast Unit	EU-N6	15	25.2	2.55
Line 4 Sand Handling and Return Sand Handling	EU-N2A and EU-N2B	75	74.0	2.7
Plant 2 Indoor Charge Handling System	1000A	20	30.5	0.06
Plant 2 Ductile Iron Conversion station	EU1150	25	35.4	0.6
Plant 2 Melting	1110	20	30.51	0.5
Plant 2 Pouring	2000	20	30.51	0.5

* The emissions rate for the Indoor Charge Handling System 1000A in the above table is uncontrolled emission rate. The remaining emission rates listed in the above table are controlled emission rates.

The particulate control equipped on the above listed emission units shall be in operation and control emissions when these emission units are in operation.

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

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

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

or

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

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

326 IAC 8-1-6 (New facilities; general reduction requirements)
The requirements of 326 IAC 8-1-6 apply to a facility that meets the following criteria:

(a) Facility is constructed after 1979;

(b) Facility has potential emissions of twenty-five (25) tons or more per year;

(c) Facility is located anywhere in the state; and

(d) Facility is not otherwise regulated by:

(A) other provisions of article 8;

(B) 326 IAC 20-48; or

(C) 326 IAC 20-56.

The proposed Pouring (EU-N3), Cooling (EU-N4), Shakeout (EU-N5) and Bad Heat Shakeout (EU-N5A) processes of Line 4 are subject to the requirements of 326 IAC 8-1-6, because these processes emits VOC and meets all of the above criteria (please refer TSD Appendix A for the VOC PTE calculation detail). Therefore, BACT analyses for VOC were performed for EU-N3, EU-N4, EU-N5 and EU-N5A (please refer to TSD Appendix B for the BACT analyses). The BACT is determined as follows:

(a) The combined VOC emissions from the EU-N3, EU-N4 and EU-N5 shall not exceed 0.8 pounds per ton of iron.

(b) The Permittee shall comply with mold vent off gas ignition requirements for EU-N3 as specified under NESHAP, Subpart EEEEE.

All of the remaining proposed equipment has potential uncontrolled VOC emissions less than 25 tons per year therefore this equipment are not subject to this rule. There are no other limitations or standard included in 326 IAC 8 for this type of operation.

Compliance Determination and Monitoring Requirements

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

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

The compliance determination requirements applicable to this proposed modification are specified below.

(a) In order to demonstrate compliance with PM, PM10, PM2.5, Lead, CO and VOC emission limits specified in 'Permit Level Determination – PSD' section of this TSD, the Permittee shall determine PM, PM10, PM2.5, Lead, CO and VOC emissions for each month as below:

Note: The Plant 2 Indoor Charge Handling System, Plant 2 Induction Furnace (1110), Plant 2 Ductile Iron Conversion process (1150), included in the equations below are described in Section D.3 and the Core production facilities, included in the equations below are described Section D.1 of the exiting permit.

The source should be able to clearly determine the emissions from the above mentioned operations that are distinct and solely for the proposed Line 4.

(1) PM2.5

$PM_{2.5}$ emissions (tons/month)	=	$\{(EF2.5_{Charge} * H_{M4}) + (EF2.5_{M4} * P_{M4}) + (EF2.5_{M2} * P_{M3}) + (EF2.5_{DIC} * P_{DIC4}) + (EF2.5_{PCSS4} * P_{PCSS4}) + (EF2.5_{Sand4} * P_{Sand4}) + (EF2.5_{GRD} * P_{GRD4}) + (EF2.5_{Core} * P_{M4})\}$ / 2000 lbs/ton
Where		
$EF2.5_{Charge}$	=	PM2.5 emission factor for Plant 2 Indoor Charge Handling System. 0.072 lb/hr shall be used. It is assumed that PM2.5 emissions from Plant 2 Indoor Charge Handling System are 60% of the PM10 emissions from Plant 2 Indoor Charge Handling System. The PM10 emission rate from Plant 2 Indoor Charge Handling System is 0.12 lb/hr, based on PM10 limit specified in Condition D.3.1(a) of existing the permit for this operation. The 60% of 0.12 lb/hr is 0.072 lb/hr.
H_{M4}	=	monthly hours during which the Plant 2 Indoor Charge Handling System operated to feed metals at line 4.
$EF2.5_{M4}$	=	PM2.5 emission factor lb/ton metal for Line 4 Induction Furnace (EU-N1) established during the most recent stack test. Until the test, 0.03 lb/ton emission factor shall be used.
P_{M4}	=	monthly tons of metal melted in Line 4 Induction Furnace (EU-N1)
$EF2.5_{M2}$	=	PM2.5 emission factor lb/ton metal for Plant 2 Induction Furnace (1110) established during the most recent stack test performed for the Induction Furnace (1110). Until the test, 0.03 lb/ton metal emission factor shall be used.
P_{M3}	=	monthly tons of metal melted on the Plant 2 Induction Furnace (1110) and poured at Line 4.
$EF2.5_{DIC}$	=	$PM_{2.5}$ emission factor lb/ton metal for the Plant 2 Ductile Iron Conversion process (1150) established during the most recent stack test. Until the test, 0.03 lb/ton metal emission factor shall be used.
P_{DIC4}	=	monthly tons of metal ductile iron poured at Line 4.
$EF2.5_{PCSS4}$	=	PM2.5 emission factor lb/ton metal for Line 4 Pouring, Cooling, Shakeout and Shotblast (EU-N3, EU-N4, EU-N5, EU-N5A and EU-N6) established during most recent stack test. Until the test, 0.13 lb/ton metal emission factor shall be used.
P_{PCSS4}	=	monthly tons of metal poured at Line 4.
$EF2.5_{Sand4}$	=	$PM_{2.5}$ emission factor (lb/ton sand) for Line 4 Sand Handling and Waste Sand Handling (EU-N2A and EU-N2B) established during the most recent stack test. Until the test, 0.014 (lb/ton sand) emission factor shall be used.
P_{Sand4}	=	monthly throughput (tons of sand) for Sand Handling and Return Sand Handling on line 4.
$EF2.5_{GRD4}$	=	PM2.5 emission factor lb/ton metal for Cells 1 and 2 of the Bench Grinders established during the most recent stack test. Until the test, 0.02 lb/ton metal emission factor shall be used.
P_{GRD4}	=	monthly throughput (ton metal) for Grinding Operations for Six (6) Bench Grinders
$EF2.5_{Core}$	=	PM2.5 emission factor for Core production facilities. 0.014 lb/ton metal emission factor shall be used.

The PM2.5 emissions rate for Plant 2 Indoor Charge Handling System is determined as follows:

It is assumed that PM2.5 emissions from Plant 2 Indoor Charge Handling System are 60% of the PM10 emissions from Plant 2 Indoor Charge Handling System. The PM10 emission rate from Plant 2 Indoor Charge Handling System is 0.12 lb/hr, based on PM10 limit specified in the existing permit for this operation. The 60% of 0.12 lb/hr is 0.072 lb/hr.

(2) PM10

PM10 emissions (tons/month)	=	$\{(EF10_{Charge} * H_{M4}) + (EF10_{M4} * P_{M4}) + (EF10_{M2} * P_{M3}) + (EF10_{DIC} * P_{DIC4}) + (EF10_{PCSS4} * P_{PCSS4}) + (EF10_{Sand4} * P_{Sand4}) + (EF10_{GRD} * P_{GRD4}) + (EF10_{Core} * P_{M4})\}$ / 2000 lbs/ton
Where		
$EF10_{Charge}$	=	PM10 emission factor for Plant 2 Indoor Charge Handling System. 0.12 lb/hr shall be used. Since the Plant 2 Indoor Charge Handling System is common to both the Plant 2 and Line 4, the same lb/hr emission rate is used.
H_{M4}	=	monthly hours during which the Plant 2 Indoor Charge Handling System operated to feed metals at line 4.
$EF10_{M4}$	=	PM10 emission factor lb/ton metal for Induction Furnace (EU-N1) established during the most recent stack test. Until the test, 0.03 lb/ton emission factor shall be used.
P_{M4}	=	monthly tons of metal melted in Induction Furnace (EU-N1)
$EF10_{M2}$	=	PM10 emission factor lb/ton metal for Induction Furnace (1110) established during the most recent stack test performed for the Induction Furnace (1110). Until the test, 0.03 lb/ton metal emission factor shall be used.
P_{M3}	=	monthly tons of metal melted on the Induction Furnace (1110) and poured on Line 4.
$EF10_{DIC}$	=	PM10 emission factor lb/ton metal for the Plant 2 Ductile Iron Conversion process (1150) established during the most recent stack test. Until the test, 0.03 lb/ton metal emission factor shall be used.
P_{DIC4}	=	monthly tons of metal ductile iron poured on line 4.
$EF10_{PCSS4}$	=	PM10 emission factor lb/ton metal for Line 4 Pouring, Cooling, Shakeout and Shotblast (EU-N3, EU-N4, EU-N5 and EU-N6) established during most recent stack test. Until the test, 0.13 lb/ton metal emission factor shall be used.
P_{PCSS4}	=	monthly tons of metal poured on line 4.
$EF10_{Sand4}$	=	PM10 emission factor (lb/ton sand) for Line 4 Sand Handling and Waste Sand Handling (EU-N2A and EU-N2B) established during the most recent stack test Until the test, 0.014 (lb/ton sand) emission factor shall be used.
P_{Sand4}	=	monthly throughput (tons of sand) for Sand Handling and Return Sand Handling on line 4.
$EF10_{GRD4}$	=	PM10 emission factor lb/ton metal for Cells 1 and 2 established during the most recent stack test. Until the test, 0.02 lb/ton metal emission factor shall be used.
P_{GRD4}	=	monthly throughput (ton metal) for Grinding Operations for Six (6) Bench Grinders
$EF10_{Core}$	=	PM10 emission factor for Core production facilities. 0.014 lb/ton metal emission factor shall be used.

(3) PM

PM emissions (tons/month)	=	$\{(EFPM_{Charge} * H_{M4}) + (EFPM_{M4} * P_{M4}) + (EFPM_{M2} * P_{M3}) + (EFPM_{DIC} * P_{DIC4}) + (EFPM_{PCSS4} * P_{PCSS4}) + (EFPM_{Sand4} * P_{Sand4}) + (EFPM_{GRD} * P_{GRD4}) + (EFPM_{Core} * P_{M4})\}$ / 2000 lbs/ton
Where		
$EFPM_{Charge}$	=	PM emission factor for Plant 2 Indoor Charge Handling System. 0.12 lb/hr shall be used. Since the Plant 2 Indoor Charge Handling System is common to both the Plant 2 and Line 4, the same lb/hr emission rate is used.
H_{M4}	=	monthly hours during which the Plant 2 Indoor Charge Handling System operated to feed metals at line 4.
$EFPM_{M4}$	=	PM emission factor lb/ton metal for Induction Furnace (EU-N1) established during the most recent stack test. Until the test, 0.03 lb/ton emission factor shall be used.
P_{M4}	=	monthly tons of metal melted in Line 4 Induction Furnace (EU-N1)
$EFPM_{M2}$	=	PM emission factor lb/ton metal for Plant 2 Induction Furnace (1110)

		established during the most recent stack test performed for the Induction Furnace (1110). Until the test, 0.03 lb/ton metal emission factor shall be used.
P_{M3}	=	monthly tons of metal melted on the Induction Furnace (1110) and poured on Line 4.
$EFPM_{DIC}$	=	PM emission factor lb/ton metal for the Plant 2 Ductile Iron Conversion process (1150) established during the most recent stack test. Until the test, 0.03 lb/ton metal emission factor shall be used.
P_{DIC4}	=	monthly tons of metal ductile iron poured on line 4.
$EFPM_{PCSS4}$	=	PM emission factor lb/ton metal for Line 4 Pouring, Cooling, Shakeout and Shotblast (EU-N3, EU-N4, EU-N5, EU-N5A and EU-N6) established during most recent stack test. Until the test, 0.13 lb/ton metal emission factor shall be used.
P_{PCSS4}	=	monthly tons of metal poured on line 4.
$EFPM_{Sand4}$	=	PM emission factor (lb/ton sand) for Line 4 Sand Handling and Waste Sand Handling (EU-N2A and EU-N2B) established during the most recent stack test Until the test, 0.014 (lb/ton sand) emission factor shall be used.
P_{Sand4}	=	monthly throughput (tons of sand) for Sand Handling and Waste Sand Handling on line 4.
$EFPM_{GRD4}$	=	PM emission factor lb/ton metal for Cells 1 and 2 established during the most recent stack test. Until the test, 0.02 lb/ton metal emission factor shall be used.
P_{GRD4}	=	monthly throughput (ton metal) for Grinding Operations for Six (6) Bench Grinders
$EFPM_{Core}$	=	PM2.5 emission factor for Core production facilities. 0.014 lb/ton metal emission factor shall be used.

(4) Lead

Lead emissions (tons/month)	=	$\{(EFLead_{M4} * P_{M4}) + (EFLead_{M2} * P_{M3}) + (EFLead_{PCSS4} * P_{PCSS4})\} * 8760$ hrs/yr / 2000 lbs/ton
Where		
$EFLead_{M4}$	=	Lead emission factor lb/ton metal for Line 4 Induction Furnace (EU-N1) established during the most recent stack test. Until the test, 0.003 lb/ton emission factor shall be used.
P_{M4}	=	monthly tons of metal melted in Line 4 Induction Furnace (EU-N1)
$EFLead_{M2}$	=	Lead emission factor lb/ton metal for Plant 2 Induction Furnace (1110) established during the most recent stack test performed for the Induction Furnace (1110). Until the test, 0.003 lb/ton metal emission factor shall be used.
P_{M3}	=	monthly tons of metal melted on the Induction Furnace (1110) and poured on Line 4.
$EFLead_{PCSS4}$	=	Lead emission factor lb/ton metal for Line 4 Pouring, Cooling, Shakeout and Shotblast (EU-N3, EU-N4, EU-N5, EU-N5A and EU-N6). 0.0002 lb/ton metal emission factor shall be used.
P_{PCSS4}	=	monthly tons of metal poured on Line 4.

(5) VOC

VOC emissions (tons/month)	=	$\{(EFVOC_{PCSS} + EFVOC_{Core}) * P_M\}$ / 2000 lbs/ton
Where		
$EFVOC_{PCSS}$	=	VOC emission factor lb/ton metal for Line 4 Pouring, Cooling, Shakeout and Shotblast (EU-N3, EU-N4, EU-N5, EU-N5A and EU-N6) established during

		most recent stack test. Until the test, 0.8 lb/ton metal emission factor shall be used.
$EFVOC_{Core}$	=	VOC emission factor lb/ton metal for Core production facilities. 1.72 lb/ton of core emission factor shall be used.
P_M	=	monthly tons of metal poured on Line 4.

(6) CO

CO emissions (tons/month)	=	$(EFCO_{PCSS4} * P_{PCSS4})$ / 2000 lbs/ton
Where		
$EFCO_{PCSS4}$	=	CO emission factor lb/ton metal for Line 4 Pouring, Cooling, Shakeout and Shotblast (EU-N3, EU-N4, EU-N5, EU-N5A and EU-N6) established during most recent stack test. Until the test, 2.5 lb/ton metal emission factor shall be used.
P_{PCSS4}	=	monthly tons of metal poured on Line 4.

(b) In order to comply with PM, PM10 and PM2.5 limits specified in 'Permit Level Determination – PSD' section of this TSD, the particulate control listed in the table below shall be in operation and control emissions when one or more of the associated emission unit listed in the table below is in operation.

control	**Associated Process**	**Associated Emission Unit ID**
DC-N1A	Induction Furnace	EU-N1
DC-N2	Pouring and Cooling, Casting Shakeout and Shot blast	EU-N3 and EU-N4, EU-N5, EU-N5A and EU-N6
DC-N1B	Sand Handling and Return Sand Handling System	EU-N2A and EU-N2B
Fabric Filters	Grinding Operations	Grinding Cell 8000
BH6010	Induction Furnace and Ductile Iron Conversion Station	1110 and EU1150

(c) In order to comply with the Lead limit specified in 'Permit Level Determination – PSD' section of this TSD, the Lead control listed in the table below shall be in operation and control emissions when the associated emission unit listed in the table below is in operation.

Control	**Associated Process**	**Associated Emission Unit ID**
DC-N1A	Induction Furnace	EU-N1
BH6010	Induction Furnace	1110

(d) <u>Mold Vent Ignition</u>
In order to demonstrate compliance with VOC emission limits specified in 'Permit Level Determination – PSD' and BACT limit specfied in 'Volatile Organic Compounds (VOCs) BACT - EU-N3, EU-N4, EU-N5 and EU-N5A' section of Appendix B – 326 IAC 8-1-6 BACT Analyses, the Permittee shall comply with the following mold vent off gas ignition requirements for EU-N3:

(A) The Permittee shall operate the mold vent off gas ignition system for EU-N3 according to the mold vent ignition operation and maintenance plan approved by IDEM, OAQ.

(B) The Permittee shall prepare and submit the mold vent ignition operation and maintenance plan to the IDEM, OAQ for approval.

The operation and maintenance plan must include procedures for igniting gases from mold vents in pouring areas and pouring stations that use a sand mold system. The plan must contain the elements below:

Procedures for providing an ignition source to mold vents of sand mold systems in each pouring area and pouring station unless the Permittee determine the mold vent gases either are not ignitable, ignite automatically, or cannot be ignited due to accessibility or safety issues. The Permittee shall document and maintain records of this determination. The determination of ignitability, accessibility, and safety may encompass multiple casting patterns provided the castings utilize similar sand-to-metal ratios, binder formulations, and coating materials. The determination of ignitability must be based on observations of the mold vents within 5 minutes of pouring, and the flame must be present for at least 15 seconds for the mold vent to be considered ignited. For the purpose of this determination:

(i) Mold vents that ignite more than 75 percent of the time without the presence of an auxiliary ignition source are considered to ignite automatically; and

(ii) Mold vents that do not ignite automatically and cannot be ignited in the presence of an auxiliary ignition source more than 25 percent of the time are considered to be not ignitable.

(C) The Permittee shall maintain a current copy of the mold vent ignition operation and maintenance plan onsite approved by IDEM, OAQ and make available for inspection upon request.

(e) The testing requirements are specified below. These testing shall be performed no later than 180 days after Initial startup of Plant 2, Line 4 and repeated every five years.

Process	Emission Unit ID	testing parameter *	particulate control ID	unit of testing parameter
Induction Furnaces	1110 and EU-N1	PM	BH6010 (for 1110) and DC-N1A (for EU-N1)	lb/ton of metal
		PM10		
		PM2.5		
		Lead		
Pouring and Cooling, Casting Shakeout and Shot blast	EU-N3 and EU-N4, EU-N5, EU-N5A and EU-N6	PM	DC-N2	
		PM10		
		PM2.5		
		VOC	-	
		CO	-	
Sand Handling and Return Sand Handling System	EU-N2A and EU-N2B	PM	DC-N1B	lb/ton of sand processed
		PM10		
		PM2.5		
Ductile Iron Conversion Station**	1150	PM	BH6010	lb/ton of metal
		PM10		
		PM2.5		
Melting, Ductile Iron Conversion Station and Pouring System (1110, 1150 & 2000) ***	(1110, 1150 & 2000)	PM	BH6010	lb/ton of metal
		PM10		

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

** The Proposed Plant 2, Line 4 must be in operation to test the Ductile Iron Conversion Station (1150) at its modified nominal capacity (25 tons of metal per hour) and to feed the molten metal from Induction Furnace (1110) to the Proposed Plant 2, Line 4. Therefore, the testing time frame is included as 'no later than 180 days after Initial startup of Line 4'.

*** The baghouse BH6010 equipped on Melting, Ductile Iron Conversion Station and Pouring System (1110, 1150 & 2000) has existing PM/PM10 limit of 0.5 lb/ton of material and associated testing requirement in the permit. The PM and PM10 loading to baghouse is increased significantly, due to increase in throughput capacities of Melting, Ductile Iron Conversion Station and Pouring System through this proposed modification. To verify that the baghouse can accommodate this emission increase while complying with the 0.5 lb/ton of material limit, the testing requirement for the baghouse BH6010 has been added in the permit.

The Compliance monitoring Requirements applicable to this modification are below.

Baghouse DC-N1B

Control Device	Emission Unit	Emission Unit	Parameter	Frequency
DC-N1B	Sand Handling and Return Sand Handling System	EU-N2A and EU-N2B	Visible Emissions	Daily
			Pressure Drop	Daily

Baghouse DC-N1A and DC-N2

Control Device	Emission Unit	Emission Unit	Parameter	Frequency
DC-N1A	Induction Furnace	EU-N1	Pressure Drop	Daily
			Baghouse Inspections	quarterly
			Bag leak detection using Bag leak detection systems (BLDS)*	continuously
DC-N2	Pouring and Cooling, Casting Shakeout Shot Blast Unit	EU-N3 and EU-N4, EU-N5, EU-N5A and EU-N6	Pressure Drop	Daily
			Baghouse Inspections	quarterly
			Bag leak detection using Bag leak detection systems (BLDS)*	continuously

* The Baghouse DC-N1A and DC-N2 are required to be operated under NESHAP, Subpart EEEEE to control PM and HAPs emissions. This NESHAP specifies BLDS, Pressure Drop and Baghouse Inspection monitoring requirements for these baghouses. These monitoring requirements satisfy CAM for PM, PM10 and PM2.5 pollutants.

Existing filters

The compliance monitoring requirements of the particulate control equipment equipped on the emission units listed below are already specified in the existing permit. The Permittee shall continue to comply with these monitoring requirements for this proposed modification as well.

Control	Emission Unit	Emission Unit ID
Fabric Filter	Grinding Operations	Cell 1, 2, 3, 4, 11 and 12
dust collector	Core Production	P4, P5, P6 and P7

Existing Baghouse BH6010
The compliance monitoring requirements of the particulate control equipment equipped on the emission units listed below are already specified in the existing permit. These monitoring requirements satisfy CAM for PM (condensable), PM10 and PM2.5 pollutants.

Control	Emission Unit	Emission Unit ID
BH6010	Induction furnaces, Pouring System and Ductile Iron Conversion	1110, 2000 and EU1150

All of the above compliance monitoring conditions are necessary to ensure that the particulate Control operate properly in order to comply with 326 IAC 2-2, 326 IAC 6-3-2, 326 IAC 2-7 (Part 70) and CAM.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. T139-25610-00011. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

(a) The proposed modification has been included in the permit.

(b) The requirements of 326 IAC 8-3-2 (Cold cleaner degreaser control equipment and operating requirements) rule have been updated for the Degreasing operations.

(c) Condition D.1.2 is specifically listed for Plant 1 when the Core Sand Bins and Isocure Cold Box Core Machines are operating for Plant 1. In order to distinguish the emissions which occurred when the Core Sand Bins and Isocure Cold Box Core Machines are operating for Plant 1 from the emissions which occurred when the Core Sand Bins and Isocure Cold Box Core Machines are operating for Line 4, Condition D.1.2 has been revised.

(d) The rule site for responsible official has changed from 326 IAC 2-7-1 (34) to 326 IAC 2-7-1 (35).

(e) Section B -Duty to Provide Information has been revised.

(f) To clarify that Section B - Certification only states what a certification must be, IDEM, OAQ has revised the condition.

(g) Instructions for the Section B – Annual Compliance Certification (ACC) condition have been revised. The emission statement reporting requirements changed. The submission date for the ACC will continue to depend on which county the source is located.

(h) IDEM has clarified Section B - Preventive Maintenance Plan.

(i) IDEM, OAQ is revising Section B - Emergency Provisions to delete paragraph (h). 326 IAC 2-7-5(3)(C)(ii) allows that deviations reported under an independent requirement do not have to be included in the Quarterly Deviation and Compliance Monitoring Report.

(j) IDEM, OAQ has added 326 IAC 5-1-1 to the exception clause of Section C - Opacity, since 326 IAC 5-1-1 does list exceptions.

(k) The last sentence of Condition C.3 - Open Burning has been deleted because the open burning provision is now federally enforceable and is included in Indiana's State Implementation Plan (SIP).

(l) IDEM, OAQ has decided to clarify the Permittee's responsibility under CAM.

(m) IDEM, OAQ has clarified the Permittee's responsibility with regards to record keeping.

(n) The source mailing address has been removed from Condition A.1 and the forms.

SECTION A SOURCE SUMMARY

. . .

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

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

Source Address:	2148 State Road 3 North, Rushville, Indiana 46173
~~Mailing Address:~~	~~P.O. Box 488, Rushville, Indiana 46173~~
General Source Phone Number:	(317) 932-5323
SIC Code:	3321 **(Gray and Ductile Iron Foundries)**

. . .

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

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

(a) Core production facilities consisting of:

. . .

Note: Plant 2 Ductile Iron Foundry Line 4 (Year 2013 modification) will also utilize the cores produced by these bins and machines.

. . .

(c) One (1) Ductile Iron Foundry Line, constructed in 1997, identified as Plant 2, consisting of the following:

(1) One (1) Indoor Charge Handling system, identified as 1000A, **approved for modification in 2013**, with a ~~maximum~~**nominal** capacity of ~~10~~**20** tons of metal per hour;

Note: This Indoor Charge Handling system (1000A) is common for the Ductile Iron Foundry Lines, identified as Plant 2 and Line 4.

(2) One (1) Melting, ~~Inoculation~~**Ductile Iron Conversion Station** and Pouring system~~, identified as 1110, 1150 and 2000, respectively, with a maximum capacity of 10 tons of metal per hour~~, utilizing baghouse BH6010 for particulate control, exhausting to stack No. 6010, consisting of the following equipment:

(A) One (1) Ductile Iron Conversion Station, identified as 1150, approved for modification in 2013, with a nominal capacity of 25 tons of metal per hour.

Note: This Ductile Iron Conversion Station (1150) is common for the Ductile Iron Foundry Lines identified as Plant 2 and Line

4.

(~~A~~**B**) Two (2) Electric Induction Furnaces **identified as 1110**, each with a ~~maximum~~**nominal** capacity of 10 tons of metal per hour;

Note: These electric induction furnaces (1110) are common for the Ductile Iron Foundry Lines, identified as Plant 2 and Line 4.

(~~B~~**C**) One (1) Electric Holding Furnace, uncontrolled; and

(~~C~~**D**) Two (2) natural gas-fired Ladle Heaters, identified as 6600 and 6610, each with a maximum heat input rate of 2 MMBtu per hour;

(E) One Pouring Station, identified as 2000, approved for modification in 2013, with a nominal capacity of 20 tons of metal per hour.

~~Note: The maximum throughput of metal for the Melting, Inoculation and Pouring System is limited to 10 tons of metal per hour by the maximum throughput from the Indoor Charge Handling System of 10 tons of metal per hour and the Power Control Systems at the plant.~~

Note: Baghouse BH6010 is common control for Ductile Iron Conversion Station (1150), two (2) Electric Induction Furnaces (1110) and Pouring Station (2000).

. . .

(d) One (1) Ductile Iron Foundry Line, approved in 2013 for construction, identified as Plant 2, Line 4, consisting of the following:

(1) One (1) electric Induction Furnace, identified as EU-N1, with a nominal capacity of 10 tons of metal per hour, utilizing Baghouse DC-N1A for particulate control, and exhausting to Stack S-N1.

(2) One (1) Sand Handling System, identified as EU-N2A, and one (1) Return Sand Handling System, identified as EU-N2B, with a nominal capacity of 75 tons of sand per hour, both system utilizing Baghouse DC-N1B for particulate control, exhausting to Stack S-N1.

(3) One (1) Pouring Station, identified as EU-N3, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control and mold vent ignition system for VOC control, and exhausting to Stack S-N2.

(4) One (1) Cooling Line, identified as EU-N4, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(5) One (1) Casting Shakeout System, identified as EU-N5, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(6) One (1) Bad Heat Shakeout System, identified as EU-N5A, with a nominal capacity of 10 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(7) One (1) Shot Blast Unit, identified as EU-N6, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control and exhausting to Stack S-N2.

Note: Baghouse DC-N2 is common control for the Pouring Station (EU-N3), Cooling Line (EU-N4), Casting Shakeout system (EU-N5), Bad Heat Shakeout system (EU-N5A) and Shot Blast unit (EU-N6).

(e) Six (6) Bench Grinders, modified in 2013, with a nominal capacity of 5.5 tons of metal per hour:
(1) Cells 1 and 2, controlled by fabric filter AAF;
(2) Cell 3, controlled by fabric filter DC#3;
(3) Cell 4, controlled by fabric filter DC#4;
(4) Cell 11, controlled by fabric filter DC#1; and
(5) Cell 12 controlled by Aercology #1;
all exhausting inside/outside the building.

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

. . .

~~(c) Grinding and Machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with a design grain loading of less than or equal to three one-hundredths (0.03) grains per actual cubic foot and a gas flow rate less than or equal to four thousand (4000) actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations, including the following specifically regulated grinders:~~

(1) ~~Six (6) Bench Grinders, identified as 8000, with a maximum capacity of 5.5 tons of metal per hour, controlled by fabric filters FFA, FFB, FFC, FFD and FFE; four (4) grinders each controlled by one fabric filter, and two (2) grinders controlled by one (1) fabric filter, all exhausting inside the building. [326 IAC 6-3-2]~~

(~~d~~**c**) Other activities:

. . .

. . .

~~**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, T139-25610-00011, 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. 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(34). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.~~

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

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

~~(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.~~

~~(b) One (1) certification shall be included, using the attached Certification Form 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(34).~~

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

~~(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. 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(34).~~

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

~~(a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:~~

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

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

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

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

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

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

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

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

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

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

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

~~(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, 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 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~~

~~no later than 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(34).~~

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

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

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

~~(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to 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)(9) be revised in response to an emergency.~~

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

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

~~(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report. Any emergencies that have been previously reported pursuant to paragraph (b)(5) of this condition and certified by a "responsible official" need only reference the date of the original report.~~

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

~~(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed 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 T139-25610-00011 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 [Reserved]~~

~~B.16 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(34).~~

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

~~(1) That this permit contains a material mistake.~~

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

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

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

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

~~B.17 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]~~

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

~~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 in writing by IDEM, OAQ any additional information identified as being needed to process the application.~~

~~B.18 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 shall be certified by a "responsible official" as defined by 326 IAC 2-7-1(34).~~

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

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

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

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

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

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

~~(4) The Permittee notifies the:~~

~~Indiana Department of Environmental Management~~
~~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),(c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.~~

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

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

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

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

~~(3) Any change in emissions; and~~

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

~~The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require 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(34).~~

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

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

~~(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.21 Source Modification Requirement [326 IAC 2-7-10.5]~~

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

~~B.22 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.23 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~~

~~The application 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(34).~~

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

~~B.24 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.25 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 emission limitation, standard or rule 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(c)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.~~

~~C.2 Opacity [326 IAC 5-1]~~

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

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

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

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

~~The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3(a)(2)(D) and (E), 4-1-3(b)(2)(A)&(B), 4-1-3(b)(3)(D), 4-1-3(b)(4) & (5), 4-1-3(c)(1)(B)-(F), 4-1-3(C)(2)(B), 4-1-3(c)(6), 4-1-3(c)(8), and 4-1-6 are not federally enforceable.~~

~~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 by using ambient air quality modeling pursuant to 326 IAC 1-7-4. 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(34).~~

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

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

~~(g) Indiana 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(34).~~

~~(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require 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(34).~~

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

~~Compliance Requirements [326 IAC 2-1.1-11]~~

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

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

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

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

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

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

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

~~The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).~~

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

~~C.11 **Reserved**~~

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

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

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

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

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

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

~~(a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.~~

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

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

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

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

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

~~(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.~~

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

~~(1) initial inspection and evaluation;~~

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

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

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

~~(1) monitoring results;~~

~~(2) review of operation and maintenance procedures and records; and/or~~

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

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

~~(e) The Permittee shall record the reasonable responses steps taken.~~

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

~~(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall 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(34).~~

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

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

~~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(32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.~~

~~The statement must be submitted to:~~

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

~~The emission statement does require 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(34).~~

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

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

~~(b) Unless otherwise specified in this permit, 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) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:~~

~~(1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, document and maintain the following records:~~

~~(A) A description of the project.~~

~~(B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.~~

~~(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:~~

~~(i) Baseline actual emissions;~~

~~(ii) Projected actual emissions;~~

~~(iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1 (mm)(2)(A)(iii); and~~

~~(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.~~

~~(d) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:~~

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

~~(2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.~~

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

~~(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. 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 no later than thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).~~

~~(b) The address for report submittal is:~~

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

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

~~(d) **Reserved**~~

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

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

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

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

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

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

~~(2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.~~

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

~~(4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.~~

~~Reports required in this part 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~~

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

~~**Stratospheric Ozone Protection**~~

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

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

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, T139-25610-00011, 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. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted 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) If required by specific condition(s) in Section D of this permit, 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.

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. 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).

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

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

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

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

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

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

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

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, 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 T139-25610-00011 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

(4) 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(40). 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(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

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

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

(3) Any change in emissions; and

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

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require 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 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.7 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.8 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.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)][40 CFR 64][326 IAC 3-8]

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

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

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

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

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

(b) 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.

(c) 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.10 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.

(c) 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.11 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

(a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

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

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

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

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

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

(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as

practicable in accordance with good air pollution control practices for minimizing excess emissions.

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

(1) initial inspection and evaluation;

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

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

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

(1) monitoring results;

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

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

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

(e) The Permittee shall record the reasonable response steps taken.

(II)

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

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

(2) Determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

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

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

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

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

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

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

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

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

(h) ***CAM recordkeeping requirements.***

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

(2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements

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

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

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline

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

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

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

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

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

The statement must be submitted to:

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

The emission statement does require 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] [326 IAC 2-2][326 IAC 2-3]

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

(AA) All calibration and maintenance records.
(BB) All original strip chart recordings for continuous monitoring instrumentation.
(CC) Copies of all reports required by the Part 70 permit.

Records of required monitoring information include the following:

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

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

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

(c) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A), 326 IAC 2-2-8 (b)(6)(B), 326 IAC 2-3-2 (l)(6)(A), and/or 326 IAC 2-3-2 (l)(6)(B)) that a "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

(1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, document and maintain the following records:

(A) A description of the project.

(B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.

(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:

(i) Baseline actual emissions;

(ii) Projected actual emissions;

(iii) Amount of emissions excluded under section 326 IAC 2-2-1(pp)(2)(A)(iii) and/or 326 IAC 2-3-1 (kk)(2)(A)(iii); and

(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

(d) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A) and/or 326 IAC 2-3-2 (l)(6)(A)) that a "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

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

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

C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [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.

(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) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

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

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

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

(f) The report for project at an existing emissions unit shall be submitted no later than sixty (60) days after the end of the year and contain the following:

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

(2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.

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

(4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part 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

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

Stratospheric Ozone Protection

C.18 Compliance with 40 CFR 82 and 326 IAC 22-1

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

. . .

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) Core production facilities consisting of:

. . .

Note: Plant 2 Ductile Iron Foundry Line 4 (Year 2013 modification) will also utilize the cores produced by these bins and machines.

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

. . .

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

In order to render 326 IAC 2-2 not applicable, ~~T~~total PM and PM_{10} emissions from the Core Sand Bins and Isocure Cold Box Core Machines **(Stack 9), except the emissions associated with Plant 2, Line 4,** shall each not exceed 0.82 pound per hour.

. . .

. . .

D.2.6 PSD BACT for Volatile Organic Compounds (VOC) [326 IAC 2-2-3][326 IAC 8-1-6]

Pursuant to 326 IAC 2-2-3 (PSD), and 326 IAC 8-1-6 (BACT) **(established in year 2004 through SSM No. 139-17898-00011)**, the following conditions shall apply to the Pouring station (P13B), Cooling line (P14B), Shakeout (P16B) and Bad Heat Shakeout processes of Plant 1, Casting Line 2:

. . .

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(c) One (1) Ductile Iron Foundry Line, constructed in 1997, identified as Plant 2, consisting of the following:

(1) One (1) Indoor Charge Handling system, identified as 1000A, **approved for modification in 2013,** with a **nominal**~~maximum~~ capacity of **20**~~10~~ tons of metal per hour;

Note: This Indoor Charge Handling system (1000A) is common to the Ductile Iron Foundry Lines, identified as Plant 2 and Line 4.

(2) One (1) Melting, ~~Inoculation~~**Ductile Iron Conversion Station** and Pouring system~~,~~

~~identified as 1110, 1150 and 2000, respectively, with a maximum capacity of 10 tons of metal per hour,~~ utilizing baghouse BH6010 for particulate control, exhausting to stack No. 6010, consisting of the following equipment:

(A) One (1) Ductile Iron Conversion Station identified as 1150, approved for modification in 2013, with a nominal capacity of 25 tons of metal per hour.

Note: This Ductile Iron Conversion Station (1150) is common for the Ductile Iron Foundry Lines, identified as Plant 2 and Line 4.

(~~A~~**B**) Two (2) Electric Induction Furnaces **identified as 1110**, each with a ~~maximum~~**nominal** capacity of 10 tons of metal per hour;

Note: These electric induction furnaces (1110) are common to the Ductile Iron Foundry Lines identified as Plant 2 and Line 4.

(~~B~~**C**) One (1) Electric Holding Furnace, uncontrolled; and

(~~C~~**D**) Two (2) natural gas-fired Ladle Heaters, identified as 6600 and 6610, each with a maximum heat input rate of 2 MMBtu per hour;

(E) One Pouring Station, identified as 2000, approved for modification in 2013, with a nominal capacity of 20 tons of metal per hour.

~~Note: The maximum throughput of metal for the Melting and Pouring system is limited to 10 tons of metal per hour by the maximum throughput from the Charge Handling system of 10 tons of metal per hour and the Power Control systems at the plant.~~

Note: Baghouse BH6010 is common control for Ductile Iron Conversion Station (1150), two (2) Electric Induction Furnaces (1110) and Pouring Station (2000).

. . .

~~**Insignificant Activities:**~~

~~(i)(1)~~**(e)** ~~Six (6) Bench Grinders, identified as 8000, with a maximum capacity of 5.5 tons of metal per hour, controlled by fabric filters FFA, FFB, FFC, FFD and FFE; four (4) grinders each controlled by one fabric filter, and two (2) grinders controlled by one (1) fabric filter, all exhausting inside the building. [326 IAC 6-3-2]~~

Six (6) Bench Grinders, modified in 2013, with a nominal capacity of 5.5 tons of metal per hour:

(1) Cells 1 and 2, controlled by fabric filter AAF;
(2) Cell 3, controlled by fabric filter DC#3;
(3) Cell 4, controlled by fabric filter DC#4;
(4) Cell 11, controlled by fabric filter DC#1; and
(5) Cell 12 controlled by Aercology #1;
all exhausting inside/outside the building.

(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 Limit [326 IAC 2-2]

In order to render 326 IAC not applicable, the Permittee shall comply with the following:

(a) The Charge Handling operation (1000A) shall comply with the following limits:

~~Emissions of PM and PM10 shall each not exceed 0.12 pound per hour.~~

(i) Emissions of PM shall not exceed 0.12 pound per hour.

(ii) Emissions of PM_{10} shall each not exceed 0.12 pound per hour.

(b) Emissions of PM and PM_{10} and the throughput of metal and sand for the Plant 2 Ductile Iron Foundry Line, constructed in 1997, shall be limited as follows:

Process	**Control Device ID**	**PM/ PM_{10} Emission Limitation (lb/ton material)**	**Throughput Limit of Material (tons per 12 consecutive month period)**
Melting, ~~Inoculation~~**Ductile Iron Conversion Station** and Pouring System (1110, 1150 & 2000)	baghouse BH6010	0.50	61,500 (metal)
. . .	. . .	. . .	. . .
~~Grinding (8000)~~ **Six (6) Bench Grinders**	fabric filters ~~FFA - FFE~~ **AAF, DC#3, DC#4, DC#1 and Aercology #1**	0.06	48,180 (metal)

Compliance with these limits, in conjunction with the limited PTE of Plant 2 Ductile Iron Foundry Line limits ~~The~~**the** PM and PM_{10} emissions from the Plant 2 Ductile Iron Foundry Line constructed in 1997 ~~are~~ **to** each less than 100 tons per year. Any emissions from the Electric Holding Furnace are accounted for in the emissions from melting in the Electric Induction Furnaces.

. . .

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

. . .

Unit	**Control Device ID**	**Process Weight Rate (ton per hour)**	**Allowable Emissions (pounds per hour)**
Charge Handling (1000A)	NA	~~10.0~~**20**	~~19.18~~**30.51**
Melting, ~~Inoculation~~ and Pouring (1110~~, 1150,~~ and 2000)	baghouse BH6010	~~10.0~~**20**	~~19.18~~**30.51**
Ductile Iron Conversion Station (1150)	**baghouse BH6010**	**25**	**35.4**
. . .	. . .	. . .	. . .
~~Grinding (8000)~~ **Six (6) Bench Grinders**	fabric filters ~~FFA - FFE~~ **AAF, DC#3, DC#4, DC#1 and Aercology #1**	5.50	12.85

. . .

D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

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

(a) In order to demonstrate compliance with Conditions D.3.1(b), and D.3.2, the Permittee shall perform PM, and PM_{10} for the following facilities utilizing methods as approved by the Commissioner:

(1) the baghouse controlling the Melting, ~~Inoculation~~**Ductile Iron Conversion Station** and Pouring operations (1110, 1150, and 2000) exhausting to stack No. 6010;

. . .

(5) ~~one (1)~~ fabric filter **AAF** controlling ~~two (2) bench grinders~~ **Cells 1 and 2**, exhausting to the room.

The test specified in paragraph (1) above shall be performed no later than 180 days after initial startup of Plant 2, Line 4.

These tests shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. PM_{10} includes filterable and condensable PM_{10}. Testing shall be conducted in accordance with Section C - Performance Testing.

. . .

. . .

D.3.6 Visible Emissions Notations **[40 CFR 64]**

(a) Visible emission notations of the Charge Handling operation and the stack exhausts for the Melting, Inoculation, Pouring, Cooling, Shakeout, Sand Handling, Waste Sand Handling**, Grinding processes (when venting outside)** and the Final Blast Shot Blast machines shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

The above monitoring condition satisfy the Compliance Assurance Monitoring (CAM) for 1110, 2000 and EU1150.

. . .

D.3.7 Parametric Monitoring **[40 CFR 64]**

. . .

The above monitoring condition satisfy the Compliance Assurance Monitoring (CAM) for 1110, 2000 and EU1150.

D.4.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

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

(a) Equip the **degreaser**~~cleaner~~ with a cover**.**

(b) Equip the **degreaser**~~cleaner~~ with a **device**~~facility~~ for draining cleaned parts**.**~~;~~

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

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

(e) Provide a permanent, conspicuous label **that lists**~~summarizing~~ the **operating**~~operation~~ requirements **in subdivisions (3), (4), (6), and (7).**~~;~~

(f) Store waste solvent only in **closed**~~covered~~ containers**.**

(g) Prohibit the disposal or transfer ~~and not dispose~~ of waste solvent ~~or transfer it to another party,~~ in such a manner that **could allow** greater than twenty percent (20%) of the waste solvent (by weight) **to**~~can~~ evaporate into the atmosphere.

SECTION D.5 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(d) One (1) Ductile Iron Foundry Line, approved in 2013 for construction, identified as Plant 2, Line 4, consisting of the following:

(1) One (1) electric Induction Furnace, identified as EU-N1, with a nominal capacity of 10 tons of metal per hour, utilizing Baghouse DC-N1A for particulate control, and exhausting to Stack S-N1.

(2) One (1) Sand Handling System, identified as EU-N2A, and one (1) Return Sand Handling System, identified as EU-N2B, with a nominal capacity of 75 tons of sand per hour, both system utilizing Baghouse DC-N1B for particulate control, exhausting to Stack S-N1.

(3) One (1) Pouring Station, identified as EU-N3, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control and mold vent ignition system for VOC control, and exhausting to Stack S-N2.

(4) One (1) Cooling Line, identified as EU-N4, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(5) One (1) Casting Shakeout System, identified as EU-N5, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(6) One (1) Bad Heat Shakeout System, identified as EU-N5A, with a nominal capacity of 10 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(7) One (1) Shot Blast Unit, identified as EU-N6, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control and exhausting to Stack S-N2.

Note: Baghouse DC-N2 is common control for the Pouring Station (EU-N3), Cooling Line (EU-N4), Casting Shakeout system (EU-N5), Bad Heat Shakeout system (EU-N5A) and Shot Blast unit (EU-N6).

(e) Six (6) Bench Grinders, modified in 2013, with a nominal capacity of 5.5 tons of metal per hour:

(1) Cells 1 and 2, controlled by fabric filter AAF;
(2) Cell 3, controlled by fabric filter DC#3;
(3) Cell 4, controlled by fabric filter DC#4;
(4) Cell 11, controlled by fabric filter DC#1; and
(5) Cell 12 controlled by Aercology #1;
all exhausting inside/outside the building.

(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.5.1 PSD Minor Limit [326 IAC 2-2]

In order to render 326 IAC 2-2 not applicable to the 2013 modification (approved under SSM 139-32540-00011) of the existing PSD major source, the emissions shall be limited as follows:

(a) The PM emissions shall be less than 25 tons per twelve consecutive month period, with compliance determined at the end of each month.

(b) The PM10 emissions shall be less than 15 tons per twelve consecutive month period, with compliance determined at the end of each month.

(c) The PM2.5 emissions shall be less than 10 tons per twelve consecutive month period, with compliance determined at the end of each month.

(d) The Lead emissions shall be less than 0.6 tons per twelve consecutive month period, with compliance determined at the end of each month.

(e) The CO emissions shall be less than 100 tons per twelve consecutive month period, with compliance determined at the end of each month.

(f) The VOC emissions shall be less than 40 tons per twelve consecutive month period, with compliance determined at the end of each month.

D.5.2 General Reduction Requirements for New Facilities [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6, the combined VOC emissions from the EU-N3, EU-N4 and EU-N5 shall not exceed 0.8 pounds per ton of iron and the VOC emissions from EU-3 shall be controlled by a mold vent off gas ignition system.

D.5.3 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the facilities listed below shall be limited as specified when operating at the respective process weight rate:

Emission Unit/Activity (Line 4)	Emission Unit ID	Process Weight Rate (tons/hr)	Allowable Particulate Emission Rate (326 IAC 6-3-2) (lb/hr)

Emission Unit/Activity (Line 4)	Emission Unit ID	Process Weight Rate (tons/hr)	Allowable Particulate Emission Rate (326 IAC 6-3-2) (lb/hr)
Induction Furnace	EU-N1	10	19.2
Sand Handling and Return Sand Handling	EU-N2A and EU-N2B	75	74.0
Pouring	EU-N3	15	25.2
Cooling	EU-N4	15	25.2
Casting Shakeout	EU-N5	15	25.2
Bad Heat Shakeout	EU-N5A	10	19.2
Shot Blast Unit	EU-N6	15	25.2

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

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

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

or

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

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

D.5.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.5.5 Emission Calculations [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition D.5.1, the Permittee shall determine the emissions for each month as below:

Note: The Plant 2 Indoor Charge Handling System, Plant 2 Induction Furnace (1110), Plant 2 Ductile Iron Conversion process (1150), included in the equations below are listed Section D.3.

The Core production facilities included in the equations below are listed Section D.1.

(a) PM2.5

$PM_{2.5}$ emissions (tons/month)	=	$\{(EF2.5_{Charge} * H_{M4}) + (EF2.5_{M4} * P_{M4}) + (EF2.5_{M2} * P_{M3}) + (EF2.5_{DIC} * P_{DIC4}) + (EF2.5_{PCSS4} * P_{PCSS4}) + (EF2.5_{Sand4} * P_{Sand4}) + (EF2.5_{GRD} * P_{GRD4}) + (EF2.5_{Core} * P_{M4})\}$ / 2000 lbs/ton
Where		
$EF2.5_{Charge}$	=	PM2.5 emission factor for Plant 2 Indoor Charge Handling System. 0.072 lb/hr shall be used. It is assumed that PM2.5 emissions from Plant 2 Indoor Charge

		Handling System are 60% of the PM10 emissions from Plant 2 Indoor Charge Handling System. The PM10 emission rate from Plant 2 Indoor Charge Handling System is 0.12 lb/hr, based on PM10 limit specified in Condition D.3.1(a) of existing the permit for this operation. The 60% of 0.12 lb/hr is 0.072 lb/hr.
H_{M4}	=	**monthly hours during which the Plant 2 Indoor Charge Handling System operated to feed metals at line 4.**
$EF2.5_{M4}$	=	**PM2.5 emission factor lb/ton metal for Line 4 Induction Furnace (EU-N1) established during the most recent stack test. Until the test, 0.03 lb/ton emission factor shall be used.**
P_{M4}	=	**monthly tons of metal melted in Line 4 Induction Furnace (EU-N1)**
$EF2.5_{M2}$	=	**PM2.5 emission factor lb/ton metal for Plant 2 Induction Furnace (1110) established during the most recent stack test performed for the Induction Furnace (1110). Until the test, 0.03 lb/ton metal emission factor shall be used.**
P_{M3}	=	**monthly tons of metal melted on the Plant 2 Induction Furnace (1110) and poured at Line 4.**
$EF2.5_{DIC}$	=	**$PM_{2.5}$ emission factor lb/ton metal for the Plant 2 Ductile Iron Conversion process (1150) established during the most recent stack test. Until the test, 0.03 lb/ton metal emission factor shall be used.**
P_{DIC4}	=	**monthly tons of metal ductile iron poured at Line 4.**
$EF2.5_{PCSS4}$	=	**PM2.5 emission factor lb/ton metal for Line 4 Pouring, Cooling, Shakeout and Shotblast (EU-N3, EU-N4, EU-N5, EU-N5A and EU-N6) established during most recent stack test. Until the test, 0.13 lb/ton metal emission factor shall be used.**
P_{PCSS4}	=	**monthly tons of metal poured at Line 4.**
$EF2.5_{Sand4}$	=	**$PM_{2.5}$ emission factor (lb/ton sand) for Line 4 Sand Handling and Waste Sand Handling (EU-N2A and EU-N2B) established during the most recent stack test. Until the test, 0.014 (lb/ton sand) emission factor shall be used.**
P_{Sand4}	=	**monthly throughput (tons of sand) for Sand Handling and Return Sand Handling on line 4.**
$EF2.5_{GRD4}$	=	**PM2.5 emission factor lb/ton metal for Cells 1 and 2 of the Bench Grinders established during the most recent stack test. Until the test, 0.02 lb/ton metal emission factor shall be used.**
P_{GRD4}	=	**monthly throughput (ton metal) for Grinding Operations for Six (6) Bench Grinders**
$EF2.5_{Core}$	=	**PM2.5 emission factor for Core production facilities. 0.014 lb/ton metal emission factor shall be used.**

(b) PM10

PM10 emissions (tons/month)	=	**$\{(EF10_{Charge} * H_{M4}) + (EF10_{M4} * P_{M4}) + (EF10_{M2} * P_{M3}) + (EF10_{DIC} * P_{DIC4}) + (EF10_{PCSS4} * P_{PCSS4}) + (EF10_{Sand4} * P_{Sand4}) + (EF10_{GRD} * P_{GRD4}) + (EF10_{Core} * P_{M4})\} / 2000$ lbs/ton**
Where		
$EF10_{Charge}$	=	**PM10 emission factor for Plant 2 Indoor Charge Handling System. 0.12 lb/hr shall be used. Since the Plant 2 Indoor Charge Handling System is common to both the Plant 2 and Line 4, the same lb/hr emission rate is used.**
H_{M4}	=	**monthly hours during which the Plant 2 Indoor Charge Handling System operated to feed metals at line 4.**
$EF10_{M4}$	=	**PM10 emission factor lb/ton metal for Induction Furnace (EU-N1) established during the most recent stack test. Until the test, 0.03 lb/ton emission factor shall be used.**

P_{M4}	**=**	**monthly tons of metal melted in Induction Furnace (EU-N1)**
$EF10_{M2}$	**=**	**PM10 emission factor lb/ton metal for Induction Furnace (1110) established during the most recent stack test performed for the Induction Furnace (1110). Until the test, 0.03 lb/ton metal emission factor shall be used.**
P_{M3}	**=**	**monthly tons of metal melted on the Induction Furnace (1110) and poured on Line 4.**
$EF10_{DIC}$	**=**	**PM10 emission factor lb/ton metal for the Plant 2 Ductile Iron Conversion process (1150) established during the most recent stack test. Until the test, 0.03 lb/ton metal emission factor shall be used.**
P_{DIC4}	**=**	**monthly tons of metal ductile iron poured on line 4.**
$EF10_{PCSS4}$	**=**	**PM10 emission factor lb/ton metal for Line 4 Pouring, Cooling, Shakeout and Shotblast (EU-N3, EU-N4, EU-N5 and EU-N6) established during most recent stack test. Until the test, 0.13 lb/ton metal emission factor shall be used.**
P_{PCSS4}	**=**	**monthly tons of metal poured on line 4.**
$EF10_{Sand4}$	**=**	**PM10 emission factor (lb/ton sand) for Line 4 Sand Handling and Waste Sand Handling (EU-N2A and EU-N2B) established during the most recent stack test Until the test, 0.014 (lb/ton sand) emission factor shall be used.**
P_{Sand4}	**=**	**monthly throughput (tons of sand) for Sand Handling and Return Sand Handling on line 4.**
$EF10_{GRD4}$	**=**	**PM10 emission factor lb/ton metal for Cells 1 and 2 established during the most recent stack test. Until the test, 0.02 lb/ton metal emission factor shall be used.**
P_{GRD4}	**=**	**monthly throughput (ton metal) for Grinding Operations for Six (6) Bench Grinders**
$EF10_{Core}$	**=**	**PM10 emission factor for Core production facilities. 0.014 lb/ton metal emission factor shall be used.**

(c) PM

PM emissions (tons/month)	**=**	**$\{(EFPM_{Charge} * H_{M4}) + (EFPM_{M4} * P_{M4}) + (EFPM_{M2} * P_{M3}) + (EFPM_{DIC} * P_{DIC4}) + (EFPM_{PCSS4} * P_{PCSS4}) + (EFPM_{Sand4} * P_{Sand4}) + (EFPM_{GRD} * P_{GRD4}) + (EFPM_{Core} * P_{M4})\} / 2000$ lbs/ton**
Where		
$EFPM_{Charge}$	**=**	**PM emission factor for Plant 2 Indoor Charge Handling System. 0.12 lb/hr shall be used. Since the Plant 2 Indoor Charge Handling System is common to both the Plant 2 and Line 4, the same lb/hr emission rate is used.**
H_{M4}	**=**	**monthly hours during which the Plant 2 Indoor Charge Handling System operated to feed metals at line 4.**
$EFPM_{M4}$	**=**	**PM emission factor lb/ton metal for Induction Furnace (EU-N1) established during the most recent stack test. Until the test, 0.03 lb/ton emission factor shall be used.**
P_{M4}	**=**	**monthly tons of metal melted in Line 4 Induction Furnace (EU-N1)**
$EFPM_{M2}$	**=**	**PM emission factor lb/ton metal for Plant 2 Induction Furnace (1110) established during the most recent stack test performed for the Induction Furnace (1110). Until the test, 0.03 lb/ton metal emission factor shall be used.**
P_{M3}	**=**	**monthly tons of metal melted on the Induction Furnace (1110) and poured on Line 4.**
$EFPM_{DIC}$	**=**	**PM emission factor lb/ton metal for the Plant 2 Ductile Iron Conversion process (1150) established during the most recent stack test. Until the test, 0.03 lb/ton metal emission factor shall be used.**
P_{DIC4}	**=**	**monthly tons of metal ductile iron poured on line 4.**

$EFPM_{PCSS4}$	**=**	**PM emission factor lb/ton metal for Line 4 Pouring, Cooling, Shakeout and Shotblast (EU-N3, EU-N4, EU-N5, EU-N5A and EU-N6) established during most recent stack test. Until the test, 0.13 lb/ton metal emission factor shall be used.**
P_{PCSS4}	**=**	**monthly tons of metal poured on line 4.**
$EFPM_{Sand4}$	**=**	**PM emission factor (lb/ton sand) for Line 4 Sand Handling and Waste Sand Handling (EU-N2A and EU-N2B) established during the most recent stack test Until the test, 0.014 (lb/ton sand) emission factor shall be used.**
P_{Sand4}	**=**	**monthly throughput (tons of sand) for Sand Handling and Waste Sand Handling on line 4.**
$EFPM_{GRD4}$	**=**	**PM emission factor lb/ton metal for Cells 1 and 2 established during the most recent stack test. Until the test, 0.02 lb/ton metal emission factor shall be used.**
P_{GRD4}	**=**	**monthly throughput (ton metal) for Grinding Operations for Six (6) Bench Grinders**
$EFPM_{Core}$	**=**	**PM2.5 emission factor for Core production facilities. 0.014 lb/ton metal emission factor shall be used.**

(d) Lead

Lead emissions (tons/month)	**=**	**$\{(EFLead_{M4} * P_{M4}) + (EFLead_{M2} * P_{M3}) + (EFLead_{PCSS4} * P_{PCSS4})\} * 8760$ hrs/yr / 2000 lbs/ton**
Where		
$EFLead_{M4}$	**=**	**Lead emission factor lb/ton metal for Line 4 Induction Furnace (EU-N1) established during the most recent stack test. Until the test, 0.003 lb/ton emission factor shall be used.**
P_{M4}	**=**	**monthly tons of metal melted in Line 4 Induction Furnace (EU-N1)**
$EFLead_{M2}$	**=**	**Lead emission factor lb/ton metal for Plant 2 Induction Furnace (1110) established during the most recent stack test performed for the Induction Furnace (1110). Until the test, 0.003 lb/ton metal emission factor shall be used.**
P_{M3}	**=**	**monthly tons of metal melted on the Induction Furnace (1110) and poured on Line 4.**
$EFLead_{PCSS4}$	**=**	**Lead emission factor lb/ton metal for Line 4 Pouring, Cooling, Shakeout and Shotblast (EU-N3, EU-N4, EU-N5, EU-N5A and EU-N6). 0.0002 lb/ton metal emission factor shall be used.**
P_{PCSS4}	**=**	**monthly tons of metal poured on Line 4.**

(e) VOC

VOC emissions (tons/month)	**=**	**$\{(EFVOC_{PCSS} + EFVOC_{Core}) * P_M\}$ / 2000 lbs/ton**
Where		
$EFVOC_{PCSS}$	**=**	**VOC emission factor lb/ton metal for Line 4 Pouring, Cooling, Shakeout and Shotblast (EU-N3, EU-N4, EU-N5, EU-N5A and EU-N6) established during most recent stack test. Until the test, 0.8 lb/ton metal emission factor shall be used.**
$EFVOC_{Core}$	**=**	**VOC emission factor lb/ton metal for Core production facilities. 1.72 lb/ton of core emission factor shall be used.**
P_M	**=**	**monthly tons of metal poured on Line 4.**

(f) CO

CO emissions (tons/month)	**=**	**($EFCO_{PCSS4}$ * P_{PCSS4}) / 2000 lbs/ton**
Where		
$EFCO_{PCSS4}$	**=**	**CO emission factor lb/ton metal for Line 4 Pouring, Cooling, Shakeout and Shotblast (EU-N3, EU-N4, EU-N5, EU-N5A and EU-N6) established during most recent stack test. Until the test, 2.5 lb/ton metal emission factor shall be used.**
P_{PCSS4}	**=**	**monthly tons of metal poured on Line 4.**

D.5.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) In order to show compliance with Conditions D.5.1 and D.5.5, the Permittee shall perform the following testing, no later than 180 days after the initial startup of Line 4:

(i) PM, PM10, PM2.5 and Lead testing for the baghouse DC-N1A (Stack S-N1) controlling the Line 4 Induction Furnace EU-N1.

(ii) PM, PM10, PM2.5 and Lead testing for the baghouse controlling the Plant 2 Induction Furnace (1110) exhausting to stack No. 6010.

(iii) PM, $PM_{10,}$ and PM2.5 testing for the baghouse DC-N1B (Stack S-N1) controlling the Line 4 Sand Handling and Return Sand Handling System (EU-N2A and EU-N2B).

(iv) PM, PM10 and PM2.5 testing for the baghouse DC-N2 (Stack S-N2) controlling the following Line 4 operations: Pouring and Cooling (EU-N3 and EU-N4), Casting Shakeout (EU-N5) Bad Heat Shakeout (EU-N5A) and Shot Blast Unit (EU-N6).

(v) CO testing for the Stack S-N2 for the Line 4 Pouring, Cooling and Casting Shakeout (EU-N3 and EU-N4, EU-N5 and EU-N5A).

(vi) PM, PM10 and PM2.5 testing for the baghouse controlling the Plant 2 Ductile Iron Conversion Station (1150) exhausting to stack No. 6010.

PM10 and PM2.5 includes filterable and condensable PM.

(b) In order to show compliance with Conditions D.5.1, D.5.2 and D.5.5(e), the Permittee shall perform VOC testing for the Pouring Station (EU-N3), Cooling Line (EU-N4) and Casting Shakeout System (EU-N5 and EU-N5A), no later than 180 days after the initial startup of Line 4.

The Permittte shall utilize test methods as approved by the Commissioner and the testing shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.5.7 Particulate Control [326 IAC 2-7-6(6)]

(a) In order to comply with Conditions D.5.1(a) through (d), and D.5.3, the baghouse DC-N1A for particulate and Lead control shall be in operation and control emissions from Induction Furnace EU-N1 at all times the EU-N1 is in operation.

(b) In order to comply with Conditions D.5.1(a) through (d), and D.5.3, the baghouse DC-N1B for particulate control shall be in operation and control emissions from

Sand Handling and Waste Sand Handling System (EU-N2A and EU-N2B) at all times that the Sand Handling and Waste Sand Handling System (EU-N2A and EU-N2B) are in operation.

(c) In order to comply with Conditions D.5.1(a) through (d), and D.5.3, the baghouse DC-N2 for particulate control shall be in operation and control emissions from Pouring and Cooling (EU-N3 and EU-N4), Shakeout (EU-N5 and EU-N5A) and Shot Blast Unit (EU-N6) at all times that these emissions units are in operation.

(d) In order to comply with Conditions D.5.1(a) through (d), and D.5.3, the Permittee shall install and operate continuous Bag leak detection systems (BLDSs) for the Baghouse DC-N1A and DC-N2.

The BLDS shall meet the following requirements:

(i) The BLDSs must be certified by the manufacturer to be capable of detecting particulate matter emissions.

(ii) The BLDS sensor must provide output of relative particulate matter loading.

(iii) The BLDS must be equipped with an alarm system that will alarm when an increase in relative particulate loading is detected over a preset level.

(iv) The BLDS shall be installed and operated in a manner consistent with available written guidance from the U.S. Environmental Protection Agency or, in the absence of such written guidance, the manufacturer's written specifications and recommendations for installation, operation, and adjustment of the system.

(v) The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time.

(vi) In no event shall the sensitivity be increased by more than 100 percent or decreased by more than 50 percent over a 365 day period unless such djustment follows a complete baghouse inspection, which demonstrates the baghouse is in good operating condition.

(vii) The bag detector must be installed downstream of the baghouses.

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

D.5.8 Mold Vent Ignition

In order to comply with Conditions D.5.1 and D.5.2, the Permittee shall comply with the following mold vent off gas ignition requirements for EU-N3:

(a) The Permittee shall operate the mold vent off gas ignition system for EU-N3 according to the mold vent ignition operation and maintenance plan approved by IDEM, OAQ.

(b) The Permittee shall prepare and submit the mold vent ignition operation and maintenance plan to the IDEM, OAQ for approval.

The operation and maintenance plan must include procedures for igniting gases from mold vents in pouring areas and pouring stations that use a sand mold system. The plan must contain the elements below:

Procedures for providing an ignition source to mold vents of sand mold systems in each pouring area and pouring station unless the Permittee determine the mold vent gases either are not ignitable, ignite automatically, or cannot be ignited due to accessibility or safety issues. The Permittee shall document and maintain records of this determination. The determination of ignitability, accessibility, and safety may encompass multiple casting patterns provided the castings utilize similar sand-to-metal ratios, binder formulations, and coating materials. The determination of ignitability must be based on observations of the mold vents within 5 minutes of pouring, and the flame must be present for at least 15 seconds for the mold vent to be considered ignited. For the purpose of this determination:

(i) Mold vents that ignite more than 75 percent of the time without the presence of an auxiliary ignition source are considered to ignite automatically; and

(ii) Mold vents that do not ignite automatically and cannot be ignited in the presence of an auxiliary ignition source more than 25 percent of the time are considered to be not ignitable.

(C) The Permittee shall maintain a current copy of the mold vent ignition operation and maintenance plan onsite approved by IDEM, OAQ and make available for inspection upon request.

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

D.5.9 Visible Emissions Notations

(a) Visible emission notations of the emission units associated with Baghouse DC-N1B 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.5.10 Parametric Monitoring [40 CFR 64]

(a) The Permittee shall record the pressure drop across the baghouse DC-N1A (used in conjunction with EU-N1), baghouse DC-N1B (used in conjunction with EU-N2A and EU-N2B), baghouse DC-N2 (used in conjunction with EU-N3, EU-N4, EU-N5, EU-N5A and EU-N6) at least once per day when one or more of the associated emission unit with these baghouses is in operation. When for any one reading, the pressure drop across any of the baghouses is outside the normal range of 1 and 10 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

(b) An inspection shall be performed each calendar quarter of the Baghouse DC-N1A and DC-N2. All defective bags shall be replaced.

The above monitoring conditions satisfy the Compliance Assurance Monitoring (CAM) for EU-N1, EU-N3, EU-N4, EU-N5, EU-N5A and EU-N6.

D.5.11 Broken or Failed Bag Detection

The Permittee shall comply with the following for Baghouse DC-N1B and in the event of a BLDS alarm for Baghouse DC-N1A and DC-N2:

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a 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 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 baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.5.12 Record Keeping Requirements

(a) To document the compliance status with Conditions D.5.1, the Permittee shall maintain monthly records of the following:

(i) tons of metal poured at Line 4
(ii) tons of cores produced at INTAT Precision, Inc. and used on Line 4
(iii) tons of metal which is melted in the Induction Furnace (1110) and poured on Line 4

(iv) tons of metal inoculated at Plant 2 Ductile Iron Conversion station (1150) and poured on line 4
(v) tons of metal melted in Induction Furnace (EU-N1)
(vi) tons of sand throughput at Sand Handling and Waste Sand Handling (EU-N2A and EU-N2B) on Line 4
(vii) tons of metal (only those metals which are produced at Line 4) throughput for Grinding Operations at Six (6) Bench Grinders
(viii) hours during which the Plant 2 Indoor Charge Handling System operated for Line 4
(ix) PM, PM10, PM2.5, Lead, VOC and CO emissions determined using the equations specified in Condition D.5.5

(b) To document the compliance status with Condition D.5.8, the Permittee shall maintain a current copy of the mold vent ignition operation and maintenance plan onsite approved by IDEM, OAQ and make available for inspection upon request.

(c) To document the compliance status with Condition D.5.8, the Permittee shall maintain records of visible emission notations of the stack exhaust of the emission units associated with baghouse DC-N1B once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(d) To document the compliance status with Condition D.5.9(a), the Permittee shall maintain once per day records of the pressure drop for the Baghouse DC-N1A, DC-N1B and DC-N2. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

(e) To document the compliance status with Condition D.5.9(b), the Permittee shall maintain records of the results of the inspections required under Condition 5.9(b).

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

D.5.13 Reporting Requirements

A quarterly summary of the information to document the compliance status with Conditions D.5.1 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(b) One (1) Ductile Iron Foundry Line, constructed in 1988, identified as Plant 1, consisting of the following:

(1) Melting operations originally constructed in 1988 and modified in 2004, consisting of:

(~~A~~**B**) . . .

(C) . . .

(~~c~~**2**) . . .

(~~1~~**B**) . . .

(~~2~~**C**) . . .

. . .

(~~d~~**c**) ~~Plant 2, Ductile Iron Foundry Line, constructed in 1997, consisting of the following~~**One (1) Ductile Iron Foundry Line, constructed in 1997, identified as Plant 2, consisting of the following**:

(**2**~~1~~) One (1) Melting and Pouring system~~, identified as 1110 and 2000, respectively, with a maximum capacity of 10 tons of metal per hour~~, utilizing baghouse BH6010 for particulate control, exhausting to stack No. 6010, consisting of the following equipment:

(**B**~~A~~) Two (2) Electric Induction Furnaces**, identified as 1110**, each with a **nominal**~~maximum~~ capacity of 10 tons of metal per hour;

Note: These electric induction furnaces (1110) are common for the Ductile Iron Foundry Lines identified as Plant 2 and Line 4.

(**C**~~B~~) One (1) Electric Holding Furnace, uncontrolled**;**~~);~~ and

(**D**~~C~~) . . .

Note: Baghouse BH6010 is common control for Ductile Iron Conversion Station (1150), two (2) Electric Induction Furnaces (1110), Pouring Station (2000).
~~Note: The maximum throughput of metal for the Melting and Pouring system is limited to 10 tons of metal per hour by the maximum throughput from the Charge Handling system of 10 tons of metal per hour and the Power Control systems at the plant.~~

(~~2~~**3**) . . .

(**4**~~3~~) . . .

(d) One Ductile Iron Foundry Line, approved in 2013 for construction, identified as Plant 2, Line 4, consisting of the following:

(1) One (1) Electric Melt Furnace, identified as EU-N1, with a nominal capacity of 10 tons of metal per hour, utilizing Baghouse DC-N1A for particulate control, and exhausting to Stack S-N1.

(2) One (1) Sand Handling System, identified as EU-N2A, and one (1) Return Sand Handling System, identified as EU-N2B, with a nominal capacity of 75 tons of sand per hour, utilizing Baghouse DC-N1B for particulate control, exhausting to Stack S-N1.

(3) One (1) Pouring Station, identified as EU-N3, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control and mold vent ignition system for VOC control, and exhausting to Stack S-N2.

(4) One (1) Cooling Line, identified as EU-N4, with a nominal capacity of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(5) One (1) Casting Shakeout System, identified as EU-N5, with a nominal capacity

of 15 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

(6) One (1) Bad Heat Shakeout System, identified as EU-N5A, with a nominal capacity of 10 tons of metal per hour, utilizing Baghouse DC-N2 for particulate control, and exhausting to Stack S-N2.

Note: Baghouse DC-N2 is common control for the Pouring Station (EU-N3), Cooling Line (EU-N4), Casting Shakeout system (EU-N5), Bad Heat Shakeout system (EU-N5A) and Shot Blast unit (EU-N6).

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

. . .

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

Part 70 Quarterly Report

Source Name: INTAT Precision Inc.
Source Address: State Road 3 North, Rushville, Indiana 46173
Part 70 Permit No.: T139-25610-00011
Part 70 Permit Condition No: D.5.1
Parameter: PM, PM10, PM2.5, Lead, CO and VOC emissions determined using Condition D.5.5
Limits: Limits specified in Condition D.5.1

QUARTER : **YEAR:**

Month	Pollutant	Column 1	Column 2	Column 1 + Column 2
		Emissions this Month (tons/year)	Emissions Previous 11 Months (tons/year)	Emissions for 12 Month Total (tons/year)
Month 1	PM			
	PM10			
	PM2.5			
	Lead			
	CO			
	VOC			
Month 2	PM			
	PM10			
	PM2.5			
	Lead			
	CO			
	VOC			
Month 3	PM			
	PM10			
	PM2.5			
	Lead			
	CO			
	VOC			

☐ **No deviation occurred in this quarter.**
☐ **Deviation/s occurred in this quarter.**
Deviation has been reported on:

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

Phone: _____

TSD Appendices

The following are the appendices of this TSD:

(1) Appendix A – Emission calculations

(2) Appendix B – 326 IAC 8-1-6 BACT Analyses

(3) Appendix C – Cost Analysis for the 326 IAC 8-1-6 BACT

Conclusion and Recommendation

The construction and operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 139-32540-00011 and Significant Permit Modification No. 139-31528-00011, respectively. 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 Mehul Sura 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) 233-6868 or toll free at 1-800-451-6027 extension (3-6868).

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

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

Appendix A: Emission Calculations
Uncontrolled Emission Summary

Company Name: INTAT Precision, Inc.
Source Address: 2148 State Rd. 3 North, Rushville, IN 46173
Significant Source Modification No: 139-32540-00011
Significant Permit Modification No: 139-31528-00011
Reviewer: Mehul Sura

	Tons of metal per hour	Tons of metal per year
Nominal Throughput	15	131400

Emission Factor

	Process	Emission Unit ID	Control	Stack ID	Existing Throughput	New Throughput	Change in Throughput	Throughput Unit	Emission Factor Unit	PM	PM10	PM2.5*	SO2	VOC	CO	NOX	lead	Be	Metallic HAPs	Organic HAPs	GHGs
Proposed Units	Induction Furnace	EU-N1	DC-N1A	S-N1	NA	10	10	tons of metal/hr	lb/ton of metal	0.9	0.86	0.86	-	-	-	-	0.1	0.0000046	0.072		-
	Sand Handling	EU-N2A and EU-N2B	DC-N1B	S-N1	NA	75	75	tons of sand/hr	lb/ton of sand	3.6	0.54	0.54	-	-	-	-	-	-	-		-
	Pouring and Cooling	EU-N3 and EU-N4	DC-N2	S-N2	NA	15	15	tons of metal/hr	lb/ton of metal	4.2	2.06	1	0.02	0.14	6.0	0.01	0.0063	-	0.024	0.28	10
	Casting Shakeout	EU-N5	DC-N2	S-N2	NA	15	15	tons of metal/hr	lb/ton of metal	3.2	2.24	1.32	-	1.2		-	-	-	-		-
	Shot Blast Unit	EU-N6	DC-N2	S-N2	NA	15	15	tons of metal/hr	lb/ton of metal	17	1.7	1.7	-	-	-	-	-	-	-		-
Existing Units	One (1) Indoor Charge Handling System	1000A	Uncontrolled	Vented Inside	10	20	10	tons of metal/hr	lb/hr	0.12	0.12	0.072	-	-	-	-	-	-	-		-
	Induction furnaces	1110	BH6010	6010	10	20	10	tons of metal/hr	lb/ton of metal	0.9	0.86	0.86	-	-	-	-	0.1	0.0000046	0.072	0	-
	Pouring System	2000	BH6010	6010	10	20	10	tons of metal/hr	lb/ton of metal	4.2	2.06	1	0.02	0.14	6	0.01	0.0063	-	0.024	0.28	10
	Ductile Iron Conversion	EU1150	BH6010	6010	10	25	15	tons of metal/hr	lb/ton of metal	1.8	1.8	1.8		0.005	-	-	-	-	-		-
	Six (6) Bench Grinders	Cells 1, 2, 3, 4, 11 and 12	Fabric Filter	Vented Inside	NA	NA	5.5	tons of metal/hr	lb/ton of metal	17	1.7	1.7	-	-	-	-	-	-	-		-
	Core Production	P4, P5, P6 and P7	dust collector	stack No. 9	NA	NA	15	tons of metal/hr	lb/ton of metal	1.1	0.9	-	0.038	-	-	0.5	-	-	-		-
			dust collector	stack No. 9	NA	NA	2	tons of cores/hr	lb/ton of core					1.72							

Uncontrolled Emissions (tons/yr)

	Process	Emission Unit ID	Control	Stack ID	Existing Throughput	New Throughput	Change in Throughput	Throughput Unit	Emission Factor Unit	PM	PM10	PM2.5*	SO2	VOC	CO	NOX	lead	Be	Metallic HAPs	Organic HAPs	GHGs
Proposed Units	Induction Furnace	EU-N1	DC-N1A	S-N1	NA	10	10	tons of metal/hr	lb/ton of metal	39.42	37.668	37.668	-	-	-	-	4.38	0.00020148	3.1536	-	-
	Sand Handling	EU-N2A and EU-N2B	DC-N1B	S-N1	NA	75	75	tons of sand/hr	lb/ton of sand	1182.6	177.39	177.39	-	-	-	-	-		-		-
	Pouring and Cooling	EU-N3 and EU-N4	DC-N2	S-N2	NA	15	15	tons of metal/hr	lb/ton of metal	275.94	135.342	65.7	1.31	9.198	394.2	0.66	0.41391	-	1.5768	18.396	657
	Casting Shakeout	EU-N5	DC-N2	S-N2	NA	15	15	tons of metal/hr	lb/ton of metal	210.24	147.168	86.724	-	78.84		-	-				-
	Shot Blast Unit	EU-N6	DC-N2	S-N2	NA	15	15	tons of metal/hr	lb/ton of metal	1116.9	111.69	111.69	-	-	-	-	-				-
Existing Units	One (1) Indoor Charge Handling System	1000A	Uncontrolled	Vented Inside	10	20	10	tons of metal/hr	lb/hr	0.5256	0.5256	0.31536	-	-	-	-	-				-
	Induction furnaces	1110	BH6010	6010	10	20	10	tons of metal/hr	lb/ton of metal	39.42	37.668	37.668	-	-	-	-	4.38	0.00020148	3.1536	-	-
	Pouring System	2000	BH6010	6010	10	20	10	tons of metal/hr	lb/ton of metal	183.96	90.228	43.8	0.876	6.132	262.8	0.438	0.27594	-	1.0512	12.264	438
	Ductile Iron Conversion	EU1150	BH6010	6010	10	25	15	tons of metal/hr	lb/ton of metal	118.26	118.26	118.26	0	0.3285	-	-	-				-
	Six (6) Bench Grinders	Cells 1, 2, 3, 4, 11 and 12	Fabric Filter	Vented Inside	NA	NA	5.5	tons of metal/hr	lb/ton of metal	409.53	40.953	40.953	-	-	-	-	-				-
	Core Production	P4, P5, P6 and P7	dust collector	stack No. 9	NA	NA	15	tons of metal/hr	lb/ton of metal	72.27	59.13	-	2.50	-	-	32.85	-				-
			dust collector	stack No. 9	NA	NA	2	tons of cores/hr	lb/ton of core	0	0	0	0	15.0672	0	0	0	0	0	0	0
									Total Uncontrolled	**3649.1**	**956.0**	**720.2**	**4.7**	**94.5**	**657.0**	**33.9**	**9.4**	**0.000403**	**8.9**	**30.66**	**1095.0**
									Total Limited PTE	**<25**	**<15**	**<10**	**3.8**	**<40**	**<100**	**33.5**	**<0.6**	**0.000403**	**8.9**	**30.66**	**1095.0**

Nominal throughput (tons/year) = (tons/hour capacity)*(8760 hours/year)
Uncontrolled Emissions (tons/yr) = Emission Factor (lb/ton)*Throughput (tons/hr)*8760 (hrs/yr)*2000(lbs/ton)
Uncontrolled Emissions for Indoor Charge Handling System (tons/yr) = Emission Factor (lb/hr)*8760 (hrs/yr)*2000(lbs/ton)
Total Limited PTE is based on PSD minor limits taken by the source. For details, please refer 'Permit Level Determination – PSD' section of this TSD.
The source of emission factors are listed below.

Source of Emission Factors

	Process	Emission Unit ID	Control	Stack ID	Existing Throughput	New Throughput	Change in Throughput	Throughput Unit	Emission Factor Unit	PM	PM10	PM2.5*	SO2	VOC	CO	NOX	lead	Be	Metallic HAPs	Organic HAPs	GHGs
Proposed Units	Induction Furnace	EU-N1	DC-N1A	S-N1	NA	10	10	tons of metal/hr	lb/ton of metal	AP 42 12.10	SCC# 30400303	PM2.5=PM10	-	SCC# 30400843	-	-	AP 42 12.10	source supplied data	AP 42 12.10	-	-
	Sand Handling	EU-N2A and EU-N2B	DC-N1B	S-N1	NA	75	75	tons of sand/hr	lb/ton of sand	AP 42 12.10	SCC# 30400350	PM10=PM2.5	-	-	-	-	-	-	-	-	-
	Pouring and Cooling	EU-N3 and EU-N4	DC-N2	S-N2	NA	15	15	tons of metal/hr	lb/ton of metal	AP 42 12.10	AP 42 12.10	AP 42 12.10	SCC# 30400320	SCC# 30400320	IDEM letter	SCC# 30400320	CERP Data	-	MACT Limit	CERP Data	AFS Paper
	Casting Shakeout	EU-N5	DC-N2	S-N2	NA	15	15	tons of metal/hr	lb/ton of metal	AP 42 12.10	AP 42 12.10	AP 42 12.10	-	SCC# 30400333		-	-	-	-	-	-
	Shot Blast Unit	EU-N6	DC-N2	S-N2	NA	15	15	tons of metal/hr	lb/ton of metal	AP 42 12.10	SPM NO. 139-22744-00011	SPM NO. 139-22744-00011	-	-	-	-	-	-	-	-	-
Existing Units	One (1) Indoor Charge Handling System	1000A	Uncontrolled	Vented Inside	10	20	10	tons of metal/hr	lb/hr	Part 70 Operating Permit No. T139-25610-00011	Part 70 Operating Permit No. T139-25610-00011	Assumption: 60% of PM10 are PM2.5	-	-	-	-	-	-	-	-	-
	Induction furnaces	1110	BH6010	6010	10	20	10	tons of metal/hr	lb/ton of metal	AP 42 12.10	SCC# 30400303	PM2.5=PM10	-	SCC# 30400843	-	-	AP 42 12.10	source supplied data	AP 42 12.10	-	-
	Pouring System	2000	BH6010	6010	10	20	10	tons of metal/hr	lb/ton of metal	AP 42 12.10	AP 42 12.10	AP 42 12.10	SCC# 30400320	SCC# 30400320	IDEM letter	SCC# 30400320	CERP Data	-	MACT Limit	CERP Data	AFS Paper
	Ductile Iron Conversion	EU1150	BH6010	6010	10	25	15	tons of metal/hr	lb/ton of metal	AP 42 12.10	PM=PM10=PM2.5	PM=PM10=PM2.5	-	SCC# 30400310	-	-	-	-	-	-	-
	Six (6) Bench Grinders	Cells 1, 2, 3, 4, 11 and 12	Fabric Filter	Vented Inside	NA	NA	5.5	tons of metal/hr	lb/ton of metal	SCC# 30400340	SCC# 30400340	PM10=PM2.5	-	-	-	-	-	-	-	-	-
	Core Production	P4, P5, P6 and P7	dust collector	stack No. 9	NA	NA	15	tons of metal/hr	lb/ton of metal	AP 42 12.10	SCC# 30400353	-	SCC# 30400351	-	-	SCC# 30400353	-		-	-	-
			dust collector	stack No. 9	NA	NA	2	tons of cores/hr	lb/ton of core	-	-	-	-	SPM NO. 139-22744-00011	-	-	-	-	-	-	-

Emission factors are from AP 42 Chapter 12.10 Gray Iron Foundries, FIRE and Proposed Emission rates by the source.
CO Emission factor is based on Self-Disclosure Opportunity letter issued to Foundry Industry in year 2006.

Appendix A: Emission Calculations

Controlled/Limited Emission Summary

Company Name: INTAT Precision, Inc.
Source Address: 2148 State Rd. 3 North, Rushville, IN 4617
Significant Source Modification No: 139-32540-00011
Significant Permit Modification No: 139-31528-00011
Reviewer: Mehul Sura

	Tons of metal per hour	Tons of metal per year		tons of sand per hour	tons of sand per year
Throughput	10	87600	Throughput	75	657000

Emission Factor

	Process	Emission Unit ID	Control	Stack ID	Existing Throughput	New Throughput	Limited Production tons/hr	Throughput Unit	Emission Factor Unit	PM	PM10	PM2.5*	SO2	VOC	CO	NOX	lead	Be	Metallic HAPs	Organic HAPs	GHGs
Proposed Units	Induction Furnace	EU-N1	DC-N1A	S-N1	NA	10	10	tons of metal/hr	lb/ton of meta	0.03	0.03	0.03	-	-	-	-	0.003	0.0000046	0.0004		-
	Sand Handling	EU-N2A and EU-N2B	DC-N1B	S-N1	NA	75	75	tons of sand/hr	lb/ton of sand	0.014	0.014	0.014	-	-	-	-	-	-	-		-
	Pouring and Cooling	EU-N3 and EU-N4	DC-N2	S-N2	NA	15	10	tons of metal/hr	lb/ton of metal	0.13	0.13	0.13	0.02	0.80	2.50	0.01	-	-	0.0008	0.28	10
	Casting Shakeou	EU-N5	DC-N2	S-N2	NA	15	10	tons of metal/hr	lb/ton of meta				-								
	Shot Blast Unit	EU-N6	DC-N2	S-N2	NA	15	10	tons of metal/hr	lb/ton of meta												
Existing Units	One (1) Indoor Charge Handling System	1000A	Uncontrolled	Vented Inside	10	20	10	tons of metal/hr	lb/hr	0.12	0.12	0.072	-	-	-	-	-	-	-		-
	Induction furnaces	1110	BH6010	6010	10	20	10	tons of metal/hr	lb/ton of meta	0.5	0.5	0.5	0.02	0.80	3.20	0.01	0.003	0.0000046	0.0004	0	-
	Pouring System	2000	BH6010	6010	10	20	10	tons of metal/hr	lb/ton of meta										0.0008	0.28	10
	Ductile Iron Conversion	EU1150	BH6010	6010	10	10	10	tons of metal/hr	lb/ton of meta	0.030	0.030	0.030	-	0.005	-	-	-	-	-		-
	Six (6) Bench Grinders	Cells 1, 2, 3, 4, 11 and 12	Fabric Filter	Vented Inside	NA	NA	10	tons of metal/hr	lb/ton of metal	0.020	0.020	0.02	-	-	-	-	-	-	-		-
	Core Production	P4, P5, P6 and P7	dust collector	stack No. 9	NA	NA	10	tons of metal/hr	lb/ton of meta	0.014	0.014	0.014	0.038	-	-	0.5	-	-	-		-
			dust collector	stack No. 9	NA	NA	2	tons of cores/hr	lb/ton of core	-	-	-	-	1.72	-	-	-	-	-	-	-

Controlled Emission Rate

	Process	**Emission Unit ID**	**Control**	**Stack ID**	**Existing Throughput**	**New Throughput**	**Limited Production tons/hr**	**Throughput Unit**	**Emission Factor Unit**	**PM**	**PM10**	**PM2.5***	**SO2**	**VOC**	**CO**	**NOX**	**lead**	**Be**	**Metallic HAPs**	**Organic HAPs**	**GHGs**
Proposed Units	Induction Furnace	EU-N1	DC-N1A	S-N1	NA	10	10	tons of metal/hr	lb/ton of meta	1.31	1.31	1.31	-	-	-	-	0.13	0.00	0.02		-
	Sand Handling	EU-N2A and EU-N2B	DC-N1B	S-N1	NA	75	75	tons of sand/hr	lb/ton of sand	4.60	4.60	4.60	-	-	-	-	-	-	-		-
	Pouring and Cooling	EU-N3 and EU-N4	DC-N2	S-N2	NA	15	10	tons of metal/hr	lb/ton of metal	5.69	5.69	5.69	0.88	35.04	109.50	0.44	-	-	0.04	12.26	438.00
	Casting Shakeou	EU-N5	DC-N2	S-N2	NA	15	10	tons of metal/hr	lb/ton of meta				-								
	Shot Blast Unit	EU-N6	DC-N2	S-N2	NA	15	10	tons of metal/hr	lb/ton of meta				-	-	-	-	-	-	-		-
Existing Units	One (1) Indoor Charge Handling System	1000A	Uncontrolled	Vented Inside	10	20	10	tons of metal/hr	lb/hr	0.53	0.53	0.32	-	-	-	-	-	-	-		-
	Induction furnaces	1110	BH6010	6010	10	20	10	tons of metal/hr	lb/ton of meta	21.90	21.90	21.90	0.88	35.04	140.16	0.44	0.13	0.00	0.02	0.00	-
	Pouring System	2000	BH6010	6010	10	20	10	tons of metal/hr	lb/ton of meta										0.04		
	Ductile Iron Conversion	EU1150	BH6010	6010	10	10	10	tons of metal/hr	lb/ton of meta	1.31	1.31	1.31	-	-	-	-	-	-	-		-
	Six (6) Bench Grinders	Cells 1, 2, 3, 4, 11 and 12	Fabric Filter	Vented Inside	NA	NA	10	tons of metal/hr	lb/ton of metal	0.88	0.88	0.88	-	-	-	-	-	-	-		-
	Core Production	P4, P5, P6 and P7	dust collector	stack No. 9	NA	NA	10	tons of metal/hr	lb/ton of meta	0.61	0.61	0.61	1.66	-	-	21.90	-	-	-		-
				stack No. 9	NA	NA	2	tons of cores/hr	lb/ton of core	-	-	-	-	15.07		-	-	-	-	-	-
										36.84	**36.84**	**36.63**	**3.42**	**85.15**	**249.66**	**22.78**	**0.26**	**0.00**	**0.11**	**12.26**	**438.00**

Controlled Emissions (tons/yr) = Emission Factor (ib/ton)*Throughput (tons/hr)*8760 (hrs/yr)*2000(lbs/to
One (1) Indoor Charge Handling System does not equiped with control, therefore, the uncontrolled emissions are listed in the above table for this opera

Source of Emission Factors

	Process	Emission Unit ID	Control	Stack ID	Existing Throughput	New Throughput	Limited Production tons/hr	Throughput Unit	Emission Factor Unit	PM	PM10	PM2.5*	SO2	VOC	CO	NOX	lead	Be	Metallic HAPs	Organic HAPs	GHGs
Proposed Units	Induction Furnace	EU-N1	DC-N1A	S-N1	NA	10	10	tons of metal/hr	lb/ton of metal	Proposed Emission Rate	Proposed Emission Rate	Proposed Emission Rate	-	-	-	-	Proposed Emission Rate	source supplied data	* *	-	-
	Sand Handling	EU-N2A and EU-N2B	DC-N1B	S-N1	NA	75	75	tons of sand/hr	lb/ton of sand	Proposed Emission Rate	Proposed Emission Rate	Proposed Emission Rate	-	-	-	-	-	-	-	-	-
	Pouring and Cooling	EU-N3 and EU-N4	DC-N2	S-N2	NA	15	10	tons of metal/hr	lb/ton of metal	Proposed Emission Rate	Proposed Emission Rate	Proposed Emission Rate	SCC# 30400320	Proposed Emission Rate	Proposed Emission Rate	SCC# 30400320	-	-	MACT Limit	CERP Data	AFS Paper
	Casting Shakeou	EU-N5	DC-N2	S-N2	NA	15	10	tons of metal/hr	lb/ton of metal				-				-	-	-	-	-
	Shot Blast Unit	EU-N6	DC-N2	S-N2	NA	15	10	tons of metal/hr	lb/ton of metal				-				-	-	-	-	-
Existing Units	One (1) Indoor Charge Handling System	1000A	Uncontrolled	Vented Inside	10	20	10	tons of metal/hr	lb/hr	Part 70 Operating Permit No. T139-25610-00011	Part 70 Operating Permit No. T139-25610-00011	Assumption: 60% of PM10 are PM2.5	-	-	-	-	-	-	-	-	-
	Induction furnaces	1110	BH6010	6010	10	20	10	tons of metal/hr	lb/ton of metal			PM10=PM2.5	-	-	-	-	Proposed Emission Rate	source supplied data	* *	-	-
	Pouring System	2000	BH6010	6010	10	20	10	tons of metal/hr	lb/ton of metal				SCC# 30400320	-	Part 70 Operating Permit No. T139-25610-00011	-	-	-	MACT Limit	CERP Data	AFS Paper
	Ductile Iron Conversion	EU1150	BH6010	6010	10	10	10	tons of metal/hr	lb/ton of metal	Proposed Emission Rate	Proposed Emission Rate	Proposed Emission Rate	-	SCC# 30400310	-	-	-	-	-	-	-
	Six (6) Bench Grinders	Cells 1, 2, 3, 4, 11 and 12	Fabric Filter	Vented Inside	NA	NA	10	tons of metal/hr	lb/ton of metal	Proposed Emission Rate	Proposed Emission Rate	Proposed Emission Rate	-	-	-	-	-	-	-	-	-
	Core Production	P4, P5, P6 and P7	dust collector	stack No. 9	NA	NA	10	tons of metal/hr	lb/ton of metal	Proposed Emission Rate	Proposed Emission Rate	Proposed Emission Rate	SCC# 30400351	-	-	SCC# 30400353	-	-	-	-	-
			dust collector	stack No. 9	NA	NA	2	tons of cores/hr	lb/ton of core	-	-	-	-	SPM NO. 139-22744-00011	-	-	-	-	-	-	-

Emission factors are from AP 42 Chapter 12.10 Gray Iron Foundries, FIRE and Proposed Emission rates by the sour

Indiana Department of Environmental Management
Office of Air Quality

Appendix B – Best Available Control Technology (BACT) Analyses

Source Background and Description

Source Name:	INTAT Precision, Inc.
Source Location:	2148 State Rd. 3 North, Rushville, IN 46173
County:	Rush
SIC Code:	3321 (Gray and Ductile Iron Foundries)
Operation Permit No.:	T139-25610-00011
Operation Permit Issuance Date:	November 19, 2009
Significant Source Modification No.:	139-32540-00011
Significant Permit Modification No.:	139-32559-00011
Permit Reviewer:	Mehul Sura

Proposed Expansion

On November 21, 2012, the Office of Air Quality (OAQ) received an application from INTAT Precision, Inc.(located at 2148 State Road 3 North, Rushville, Indiana) relating to installation of a new Iron Foundry Line, identified as Plant 2, Line 4. For detail list of equipment for this new Iron Foundry Line, please refer to the 'Description of Proposed Modification' section of this TSD.

Requirement for Best Available Control Technology (BACT)

326 IAC 8-1-6 (New facilities; general reduction requirements) requires a best available control technology (BACT) review to be performed on each facility which emits VOC and meets the following criteria:

(a) Facility is constructed after 1979;

(b) Facility has potential emissions of twenty-five (25) tons or more per year;

(c) Facility is located anywhere in the state; and

(d) Facility is not otherwise regulated by:

- (A) other provisions of article 8;
- (B) 326 IAC 20-48; or
- (C) 326 IAC 20-56.

The proposed Pouring (EU-N3), Cooling (EU-N4) and Casting Shakeout (EU-N5 and EU-N5A) operations of Plant 2 Ductile Iron Foundry Line 4 are subject to the requirements of 326 IAC 8-1-6, because these operations emits VOC and meets all of the above criteria (please refer TSD Appendix A for the PTE calculation detail). Therefore, BACT analyses for VOC were performed for EU-N3, EU-N4, EU-N5 and EU-N5A.

Summary of the Best Available Control Technology (BACT) Process

BACT is a mass emission limitation based on the maximum degree of pollution reduction of emissions, which is achievable on a case-by-case basis. BACT analysis takes into account the energy, environmental, and economic impacts on the source. These reductions may be determined through the application of available control techniques, process design, work practices, and operational limitations. Such reductions are necessary to demonstrate that the emissions remaining after application of BACT will not cause or contribute to air pollution, thereby protecting public health and the environment.

Federal guidance on BACT requires an evaluation that follows a “top down” process. In this approach, the applicant identifies the best-controlled similar source on the basis of controls required by regulation or permit, or controls achieved in practice. The highest level of control is then evaluated for technical feasibility.

The five (5) basic steps of a top-down BACT analysis are listed below:

Step 1: Identify Potential Control Technologies

The first step is to identify potentially “available” control options for each emission unit and for each pollutant under review. Available options should consist of a comprehensive list of those technologies with a potentially practical application to the emissions unit in question. The list should include lowest achievable emission rate (LAER) technologies and controls applied to similar source categories. There is no requirement in the State or Federal regulations to require innovative control to be used as BACT.

Step 2: Eliminate Technically Infeasible Options

The second step is to eliminate technically infeasible options from further consideration. To be considered feasible, a technology must be both available and applicable. It is important in this step that any presentation of a technical argument for eliminating a technology from further consideration be clearly documented based on physical, chemical, engineering, and source-specific factors related to safe and successful use of the controls. Innovative control means a control that has not been demonstrated in a commercial application on similar units. Innovative controls are normally given a waiver from the BACT requirements due to the uncertainty of actual control efficiency. Based on this, the OAQ will not evaluate or require any innovative controls for this BACT analysis. Only available and proven control technologies are evaluated. A control technology is considered available when there are sufficient data indicating that the technology results in a reduction in emissions of regulated pollutants.

Step 3: Rank the Remaining Control Technologies by Control Effectiveness

The third step is to rank the technologies not eliminated in Step 2 in order of descending control effectiveness for each pollutant of concern. The ranked alternatives are reviewed in terms of environmental, energy, and economic impacts specific to the proposed modification. If the analysis determines that the evaluated alternative is not appropriate as BACT due to any of the impacts, then the next most effective is evaluated. This process is repeated until a control alternative is chosen as BACT. If the highest ranked technology is proposed as BACT, it is not necessary to perform any further technical or economic evaluation, except for the environmental analyses.

Step 4: Evaluate the Most Effective Controls and Document the Results

The fourth step entails an evaluation of energy, environmental, and economic impacts for determining a final level of control. The evaluation begins with the most stringent control option and continues until a technology under consideration cannot be eliminated based on adverse energy, environmental, or economic impacts.

Step 5: Select BACT

The fifth and final step is to select as BACT the most effective of the remaining technologies under consideration for each pollutant of concern. For the technologies determined to be feasible, there may be several different limits that have been set as BACT for the same control technology. The permitting agency has to choose the most stringent limit as BACT unless the applicant demonstrates in a convincing manner why that limit is not feasible. The final BACT determination would be the technology with the most stringent corresponding limit that is economically feasible. BACT must, at a minimum, be no less stringent than the level of control required by any applicable New Source Performance Standard (NSPS) and National Emissions Standard for Hazardous Air Pollutants (NESHAP) or state regulatory standards applicable to the emission units included in the permits.

The Office of Air Quality (OAQ) makes BACT determinations by following the five steps identified above.

Summary of Similar Sources (SIC Major Group 33)

The table below summarizes existing sources with similar operations (SIC Major Group 33) that are listed in the U.S. EPA RACT/BACT/LAER (RBLC) Clearinghouse database and other resources, such as other permitting agencies websites. Sources are listed in alphabetical order.

Company Name	State	Operation
Ardmore Foundry Inc	OK	Pouring and Cooling
Asama Coldwater Manufacturing, Inc	MI	Melting and Pouring
Asama Coldwater Manufacturing, Inc	MI	Automated Mold Cooling Conveyor System and Shakeout Lines
Dalton Corporation, Warsaw Manufacturing Facility	IN	Casting Line
Harrison Steel Casting Company	IN	Casting Lines
INTAT Precision, Inc.	IN	Ductile Iron Foundry Line
Thyssen Krupp	WI	Pouring and Cooling
Thyssenkrupp Wapupaca, Inc.	IN	Casting Line
Waupaca Foundry, Inc.	TN	Mold Cooling and Shakeout
Waupaca Foundry, Inc. Plant 1	WI	Pouring and Cooling

Volatile Organic Compounds (VOCs) BACT - EU-N3, EU-N4, EU-N5 and EU-N5A

Step 1: Identify Potential Control Technologies

There are two categories of controls for volatile organic compounds (VOCs); destruction processes and reclamation processes. Destruction technologies reduce the VOC concentration by high temperature oxidation into carbon dioxide and water vapor. Reclamation is the capture of VOCs for reuse or disposal. There are also commercially available combinations of reclamation and destruction technologies.

(a) Adsorbers

(b) Wet Scrubber

(c) Refrigerated Condensers

(d) Alternative casting production methods

(e) Thermal Oxidizer

(f) Catalytic Oxidizer

(g) Flares

(h) Mold vent off gas ignition

(i) Advanced oxidation

(j) No control

Step 2: Eliminate Technically Infeasible Options

Adsorbers
Adsorption is a surface phenomenon where attraction between the carbon and the VOC molecules binds the pollutants to the carbon surface. Both carbon and VOC are chemically intact after adsorption. The VOCs may be removed, or desorbed, from the carbon and reclaimed or destroyed.

Carbon adsorption would not be technically feasible for use in foundry operations because the exhaust streams contain a number of organic and inorganic contaminants that would foul and clog the carbon surface. Therefore, Adsorbers are considered technically infeasible option for EU-N3, EU-N4, EU-N5 and EU-N5A.

Wet Scrubber
A wet packed bed scrubber is an absorption system in which a waste gas stream is interacted with a scrubbing liquid inside a contact chamber containing a bed of packing media in order to strip contaminant gases from the waste gas stream through the process of dissolution. Water is the most commonly used scrubbing liquid. Other solvents may be used depending on the components of the waste gas stream. Since the VOC is not destroyed in the scrubber, additional pollution control would be necessary. Wet scrubber is a feasible technical option when a significant amount of VOC can be removed and if the recovered VOC can be reused. It is usually not considered a feasible technical option when VOC concentration below 200-300 ppmv.

The VOC concentration in the exhaust gas from EU-N3, EU-N4, EU-N5 and EU-N5A are very low. Therefore, Wet Scrubber is considered technically infeasible option for EU-N3, EU-N4, EU-N5 and EU-N5A.

Refrigerated Condensers
Condensation is the process by which the temperature of the waste gas stream is lowered to below the dew points of the contaminants gases in waste gas. A refrigeration condenser normally provides a VOC control efficiency greater than 90%. Refrigerated condensers are used as air pollution control devices for treating emission streams with high VOC, concentrations (usually > 5,000 ppmv) in applications such as gasoline bulk terminals, storage, etc.

The VOC concentration in the exhaust gas from EU-N3, EU-N4, EU-N5 and EU-N5A are very low. Therefore, Refrigerated Condensers are considered technically infeasible option for EU-N3, EU-N4, EU-N5 and EU-N5A.

Alternative casting production methods

Casting line VOC emissions are generated by the pouring/mold cooling and shakeout operations when molten iron contacts the mold and core materials, burning the organic constituents. These organic constituents are an essential part of the casting process and are required to maintain casting quality. During the 1990's, the Wisconsin Department of Natural Resources established requirements for organic HAP under Chapter NR 445, Wis. Adm. Code. ThyssenKrupp Waupaca, Inc. conducted extensive investigation of alternative production methods with a potential to reduce emissions of these pollutants. To date, no alternative casting reduction methods have come available to the foundry industry which would provide predictable reductions in VOC emissions.

Based on the information reviewed for this BACT determination, IDEM, OAQ has determined that the use of alternative casting production methods is not a technically feasible option for the reduction of VOC from EU-N3, EU-N4, EU-N5 and EU-N5A.

Thermal Oxidizers

A thermal oxidizer controls VOC emissions by using incineration equipment to raise the exhaust gas temperature to the combustion temperature of VOC. A thermal oxidizer can be recuperative or regenerative. A regenerative thermal oxidizer uses a direct contact heat exchanger consisting of a bed of porous ceramic packing or other structured, high heat capacity media. A recuperative thermal incinerator controls VOC in gas stream pre-heated by exiting flue gas from the same system in a heat exchanger or recuperator. For the casting lines operations, baghouses would be required to pre-clean the exhaust gases in advance of the incineration control equipment. Although add-on controls such as thermal oxidizers are not used in practice on other green sand systems, thermal oxidizers are considered technically feasible to control VOC emissions from casting lines operations at foundries. A recuperative design is expected to be less sensitive to the residual contaminants leaving the baghouse system than the regenerative design.

Based on the information reviewed for this BACT determination, IDEM, OAQ has determined that the use of a recuperative thermal oxidizer is a technically feasible option for EU-N3, EU-N4, EU-N5 and EU-N5A.

Catalytic Oxidizers

A catalytic oxidizer is an add-on control device to control VOC emissions by using a bed of catalyst that facilitates the oxidation of combustible gases. The catalyst increases the reaction rate and allows the conversion of VOC at lower temperature than a thermal incinerator. Typical problems encountered when using a catalytic incinerator is that the contaminants in the exhaust stream can poison or foul the catalyst bed. Given the nature of foundry operations, this is a serious problem.

Based on the information reviewed for this BACT determination, IDEM, OAQ has determined that the use of a catalytic oxidizer is not a technically feasible option for EU-N3, EU-N4, EU-N5 and EU-N5A.

Flare

A flare is not technically feasible because the exhaust stream concentration must be high enough to sustain combustion, requiring a VOC inlet concentration of greater than 13,000 ppm, which is not feasible with the foundry's Casting line operations. They require a high heating value waste gas (in excess of 300 BTU/scf) or supplemental fuel.

Based on the information reviewed for this BACT determination, IDEM, OAQ has determined that the use of a flare is not a technically feasible option for EU-N3, EU-N4, EU-N5 and EU-N5A.

Mold Vent-Off Gas Ignition

After the molten iron is poured into the sand molds, the mold vent off gas spontaneously ignites, reducing the VOC generated during this operation. Mold vent-off gas ignition is a requirement in the final MACT rule for iron and steel foundries. This option is technically feasible and will be considered part of the BACT requirement for this line.

Based on the information reviewed for this BACT determination, IDEM, OAQ has determined that the use of mold vent off gas ignition is a technically feasible option for EU-N3, EU-N4, EU-N5 and EU-N5A.

Advanced oxidation
Advanced oxidation is an approach for reducing VOC emissions at the mold line by reducing the VOC emissions generated by the green sand molds. An advanced oxidation system works by treating the water used in the sand mixing, mulling, and the cooling operations with the goal of reducing VOC emissions when oxidants react with the green sand. The amount of reduction is dependent upon several factors, including core loading, coal/clay composition, and binder systems.

Based on the information reviewed for this BACT determination, IDEM, OAQ has determined that the use of Advanced oxidation is a technically feasible option for EU-N3, EU-N4, EU-N5 and EU-N5A.

Step 3: Rank the Remaining Control Technologies by Control Effectiveness

Based on the technical feasibility analysis in Step 2, the remaining control technologies may be ranked as follows:

(1) Recuperative thermal oxidation (98 to 99 % VOC Reduction)

(2) Sonoperoxone® system/Advanced oxidation (20 to 70 percent VOC Reduction)

(3) Mold Vent-Off Gas Ignition (50 % VOC Reduction)

The following table lists the proposed VOC BACT determination along with the existing VOC BACT determinations for casting lines. All data in the table is based on the information obtained from the permit application submitted by INTAT Precision, Inc., the U.S. EPA RACT/BACT/LAER Clearinghouse (RBLC), and electronic versions of permits available at the websites of other permitting agencies.

Recent BACT Determinations for VOC from Casting Lines

PROPOSAL					
BACT ID or Permit #	**Facility**	**Issued Date**	**Process Description**	**Limitation**	**Control /work practice method**
Draft Permit No. 139-32540-00011 Proposed Limits	*INTAT Precision, Inc., Plant 1, Line 4*	-	*Pouring, Cooling and Shakeout*	*0.8 lbs/ton* [(a)]	*comply with mold vent off gas ignition for Pouring only* *No control for Cooling and Shakeout*
COMPARABLE BACT DETERMINATIONS					
BACT ID or Permit #	**Facility**	**Issued Date**	**Process Description**	**Limitation**	**Control Method**
Permit No. 139-22701-00011	INTAT Precision, Inc. Plant 1, Casting Line 2	4-Dec-07	Pouring station, Cooling line, and Shakeout operations and Bad Heat Shakeout	1.2 pounds per ton and 20% VOC reduction efficiency	Advanced Oxidation (AO)
Permit No. 123-29490-00019	ThyssenKrupp Waupaca, Inc. Plant 5	5-May-11	Casting Lines 1 to 8 (pouring, Cooling and shakeout)	1.4 lbs/ton and 140 lbs/hr	Mold Vent-Off Gas Ignition
Permit No. 123-27047-00019	ThyssenKrupp Waupaca, Inc. Plant 5, Tell City, IN	17-Apr-09	Pouring/cooling/shakeout	1.9 lbs/ton and 112 lbs/hr	Mold Vent-Off Gas Ignition
MI-0385	Asama Coldwater Manufacturing, Inc.	4-Aug-08	Melting and Pouring	5.28 lbs/hr	None
MI-0385	Asama Coldwater Manufacturing, Inc.	4-Aug-08	Automated mold cooling conveyor system and shakeout lines	15.49 lbs/hr (20 ppm)	None
TX-0517	Mcwane Gray and Ductile Iron Foundry	21-Dec-05	Impact Molding Line	21.25 lbs/hr	None
Permit No. 085-18009-00003	Dalton Corporation, Warsaw, IN	9-Dec-03	Herman 3 Pouring Station, and Castings Cooling Process and Shakeout	0.36 lbs/ton for Pouring Station 0.36 lbs/ton for Castings Cooling Process 0.115 lbs/ton for Shakeout	Sonoperoxone® system or an equivalent system, sand system optimization, low VOC core resin binder materials, and automatic mold vent-off gas ignition [(b)]

(a) The proposed VOC BACT limit of 0.8 lb/ton of metal is comparable to the other BACT limits as shown in the above table. The proposed limit based on best available engineering data. One combined VOC limit is specified because the VOC emissions the Pouring, Cooling and Shakeout of Line 4 are all exhausting to a common stack (Stack S-N2).

(b) <u>Sonoperoxone® system or an equivalent system, sand system optimization, low VOC core resin binder materials</u>

In 2003, the approved VOC BACT limits for Dalton Corporation were:
0.36 lb/ton of iron for pouring,
0.36 lbs/ton of iron for cooling,
0.115 lbs/ton of iron and sand for shakeout.
(Total = 0.835 lb/ton)

Compliance tests in 2005 showed Dalton Corporation could not comply with the limit for the cooling operation. New tests were required every 2.5 years after issuance of the Title V permit for Dalton Corporation. Dalton Corporation has permit conditions that allow the VOC limitations to be increased if compliance tests are higher than specified in the permit. This supports the conclusion that it is difficult to predict the overall emission rate that could be achieved by Sonoperoxone® system or an equivalent system.

Due to insufficient compliance data to support the limit, IDEM does not consider this as BACT for the proposed Plant 2 line 4.

In addition if the individual limits are added and compared to the proposed VOC BACT limit for Plant 2 Line 4, the proposed VOC BACT limit is more stringent.

Sand system optimization

The mold sand system is designed to mix sand with other additives to achieve mold sand that will maintain its dimensional integrity during the casting process, will produce a suitable surface finish, and will result in castings that meet a number of physical and chemical specifications. As such, the sand system and its operation are at the heart of the casting process. The mold sand is most typically a mixture of sand and “bond” which is comprised of bentonite and a finely ground carbon source such as seacoal. It is the carbon source that forms the building block for the generation of VOCs and organic HAPs during the casting process. Water is also an important component in the “greensand” system, as it serves to “activate” the physical properties of the mold clays. The production of the mold sand is part batch process and part continuous process. The mold sand is mixed as a batch in a Muller. However, the entire system involves a continuous recycling of used sand from the process. Thus a single batch is comprised of used sand material (which contains a certain amount of sand, bentonite and seacoal), to which are added additional amounts of these materials and water to bring the mix to the desired ratio of materials. The “sand system” is therefore a dynamic system that needs to be “conditioned” over a period of time if changes in materials or process are introduced.

The principle change to the sand system materials evaluated at the CERP foundry involved the substitution of the seacoal with other sources of carbon. Testing of certain substitution materials did show as much as a 50% reduction (or better) reduction in emissions from a standard baseline with some of the substituted materials, and some of these materials are now being used in actual application. The one caution with these tests results is that the quality of the resultant castings were not quantitatively evaluated, and the degree of emission reduction achieved in the real world may vary as the system is adjusted to meet quality criteria.

Low VOC core resin binder materials

INTAT Precision, Inc. uses purchased Shell and Phenolic Urethane Cold Box (PUCB) Cores, as well as cores manufactured onsite in its existing coremaking operation. The shell cores are produced by heating a resin coated sand in a core machine. The cores retain the resins on the sands and these resins can degrade during the casting process into VOCs. The PUCB cores are formed by combining two separate resin parts with the core sand, forming the shape of the core in a core machine and passing a tertiary amine gas through the core to catalyze a polymerization reaction forming the Phenolic Urethane resin which holds the core

together. There are binder systems for both shell and PUCB core product that have been shown to reduce emissions of specific organic compounds. INTAT Precision, Inc. has not had the opportunity to evaluate these products as they would relate to the quality needs of their customers, compatibility with their production process or the specific level of VOC reductions that could be obtained.

Step 4: Evaluate the Most Effective Controls and Document the Results

Recuperative Thermal Oxidizer

Control Technology	Rank	Control Efficiency	Expected Emission Rate (tons per year)	Emission Reduction (tons per year)	Total Cost Effectiveness ($/ton)*
Recuperative Thermal Oxidizer	1	97%	88.04	85.4	$15,622 4

* Please refer Appendix C for the detailed analysis of Total Cost Effectiveness.

The estimated cost effectiveness for incineration is $15,622 per ton VOC controlled. This cost effectiveness is considered excessive so the use of incineration is considered economically infeasible.

Advanced oxidation
Advanced oxidation is an approach for reducing VOC emissions at the mold line by reducing the VOC emissions generated by the green sand molds. An advanced oxidation system works by treating the water used in the sand mixing, mulling, and the cooling operations with the goal of reducing VOC emissions when oxidants react with the green sand. Advanced oxidation systems have been installed at several foundries and these foundries (following sand system stabilization) have reported reductions in VOCs ranging from 20 to 75 percent. The amount of reduction is dependent upon several factors, including core loading, coal/clay composition, and binder systems.

INTAT Precision, Inc. contracted with Furness-Newburge, Inc. (FNI) to install an Advanced Oxidation system on its pouring, cooling and shakeout system on its Plant 1, Casting Line 2 operation, as required by SPM 139-22744-00011, issued December 20, 2007. While the recent stack test showed that the VOC emissions are well below the permit limit, the most recent stack test for the pouring, cooling and shakeout operations on INTAT's Plant 2 operations shows similar reduction in VOC emissions but this plant does not utilize an AO system. It is therefore difficult to predict the overall emission rate that could be achieved by AO system.

Mold Vent-Off Gas Ignition
Mold vent-off gas ignition is the remaining control alternative for EU-N3, EU-N4, EU-N5 and EU-N5A. This control method is used by the casting lines at ThyssenKrupp Waupaca, Inc. Plant 5. The VOC BACT proposed by INTAT Precision, Inc. is more stringent than VOC BACT limit for ThyssenKrupp Waupaca, Inc.

Environmental and Energy Impacts
Thermal oxidizer requires use of natural gas for combustion. The combustion of the natural gas will result in emissions of nitrogen oxides and other air pollutants.

Mold gases automatically ignite in Mold vent-off gas ignition system if they are combustible, therefore, no auxiliary fuel is needed. If mold gases are not self ignitable, then the use of natural

gas pilot flames is necessary for ignition purpose. However, the amount of the natural gas used for pilot flames is minimal.

Step 5: Select BACT

Pursuant to 326 IAC 8-1-6, IDEM, OAQ has established VOCs BACT for EU-N3, EU-N4, EU-N5 and EU-N5A as follows:

The combined VOC emissions from the EU-N3, EU-N4 and EU-N5 shall not exceed 0.8 pounds per ton of iron and the VOC emissions from EU-3 shall be controlled by a mold vent off gas ignition system.

One combined VOC limit is specified because the VOC emissions from the Pouring, Cooling and Shakeout of Line 4 are all exhausting to a common stack (Stack S-N2).

Compliance Determination and Monitoring Requirements

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

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

The compliance determination requirement applicable this BACT is specified in 'Compliance Determination and Monitoring Requirements' section of TSD.

Testing Requirements

In order to demonstrate the compliance with VOC BACT limit (0.8 pounds of VOC per ton of iron), no later than 180 days after the initial startup of Line 4, the Permittee shall perform VOC testing on EU-N3, EU-N4, EU-N5 and EU-N5A. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.

Appendix C: Cost Analysis for the 326 IAC 8-1-6 BACT
EU-N3, EU-N4, EU-N5 and EU-N5A

Company Name: INTAT Precision, Inc.
Source Address: 2148 State Rd. 3 North, Rushville, IN 46173
Significant Source Modification No: 139-32540-00011
Significant Permit Modification No: 139-31528-00011
Reviewer: Mehul Sura

		Recuperative Thermal Oxidizer		
	Volumetric Throughput 'Q' (SCFM) =	1,270,000.0		
Direct Costs	**Formula**			Note
Purchased equipment costs				
Incinerator + auxiliary equipment	A=Vendor Quote	2,604,748.0	$	
Instrumentation	0.1A	260,474.8	$	
Sales Tax	0.03A	78,142.4	$	
Freight	0.05A	130,237.4	$	
Purchased Equipment Costs	B	**3,073,602.6**	$	
Direct installation costs				
Foundations & Supports	0.08B	245,888.2	$	
Handling & erection	0.14B	430,304.4	$	
Electrical	0.04B	122,944.1	$	
Piping	0.02B	61,472.1	$	
Insulation for Ductwork	0.01B	30,736.0	$	
Painting	0.01B	30,736.0	$	
Direct installation costs	C	**922,080.8**	$	
Total Direct Cost	(B+C)	**3,995,683.4**	$	
Indirect Costs				
Engineering	0.10B	307,360.3	$	
Construction & field expenses	0.05B	153,680.1	$	
Contractor fees	0.1B	307,360.3	$	
Start-up	0.02B	61,472.1	$	
Performance Test	0.01B	30,736.0	$	
Contingencies	0.03B	92,208.1	$	
Total Indirect Cost	D	**952,816.8**	$	
TOTAL CAPITAL INVESTMENT	(B+C+D)	**4,948,500.3**	$	
Direct Annual Costs				
Operating labor - Operator	E=0.5 (hr/shift)*3(shift/day)*365 (days/yr)*15($/hr)*1.289(CPI)	16,548.2	$	1.5 hr/shift, 3 shift/day
Operating labor - Supervisor	F = 0.15C	2,482.2	$	
Maintenance - Labor	G=0.5 (hr/shift)*3(shift/day)*365 (days/yr)*14.95($/hr)*1.289(CPI)	16,014.4	$	1.5 hr/shift, 3 shift/day
Maintenance - Material	H=G	16,014.4	$	
Utilities - Natural gas	I=Source Supplied Information	319,590.0	$	
Utilities - Electricity	J=Source Supplied Information	28,231.0	$	
Total Direct Annual Cost	K=E+F+G+H+I	**398,880.2**	$	
Indirect Annual Costs				
Overhead	0.6(E+F+G+H)	30,635.5	$	
Administrative Charges	0.02(B+C+D)	98,970.0	$	
Property taxes	0.01(B+C+D)	49,485.0	$	
Insurance	0.01(B+C+D)	49,485.0	$	
Capital recovery	0.1428(B+C+D)	706,645.8	$	
Total Indirect Annual Cost	L	**935,221.3**	$	
TOTAL ANNUAL COST	(K+L)	**1,334,101.5**	$	
Uncontrolled Emission Rate	R=N*8760/2000	88.04	tons/year	
Overall Control Efficiency		97%		
VOC Removed	S	85.40	tons/year	
Annualized Cost	=(K+L)/S	**15,622.02**	$/ton of VOC removed	

Formulas are from EPA Air Pollution Control Cost Manual, Sixth Edition, EPA-452-02-001, January 2002.
Amounts are in dollars.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

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

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Brad Rist
INTAT Precision, Inc.
PO Box 488
Rushville, IN 46173

DATE: May 22, 2013

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

SUBJECT: Final Decision
Significant Source Modification
139-32540-00011

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:
DB Rist – Director of Operations
Erin Surinak – Environmental Resources Management (ERM)
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07

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May 22, 2013

TO: Rushville Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: INTAT Precision, Inc.
Permit Number: 139-32540-00011

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 11/30/07

Mail Code 61-53

IDEM Staff	GHOTOPP 5/22/2013 INTAT Precision, Inc. 139-32540-00011 Final			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Brad Rist INTAT Precision, Inc. PO Box 488 Rushville IN 46173 (Source CAATS) via confirmed delivery									
2		DB Rist Director of Operations INTAT Precision, Inc. PO Box 488 Rushville IN 46173 *(RO CAATS)*									
3		Rush County Commissioners 101 East Second Street Rushville IN 46173 *(Local Official)*									
4		Rush County Health Department Courthouse, Room 5 Rushville IN 46173-1854 *(Health Department)*									
5		Rushville Public Library 130 W 3rd St Rushville IN 46173-1899 *(Library)*									
6		Rushville Town Council 133 W. First St. Rushville IN 46173 *(Local Official)*									
7		Erin Surinak Environmental Resources Management (ERM) 11350 N Meridian Street Suite 320 Carmel IN 46032 *(Consultant)*									
8		Mrs. Bonnie Miller P.O. Box 15 Falmouth IN 46127 *(Affected Party)*									
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