



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

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

TO: Interested Parties / Applicant

DATE: July 20, 2012

RE: Metal Technologies Auburn, LLC/033-31731-00042

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. Jeffrey L. Turner  
Metal Technologies Auburn, LLC  
1401 Grandstaff Ave  
Auburn, IN 46706

July 20, 2012

Re: 033-31731-00042  
Significant Source Modification to  
Part 70 Operating Permit No.: T033-21760-  
00042

Dear Mr. Turner:

Metal Technologies Auburn, LLC was issued a Part 70 Operating Permit on August 29, 2008 for a gray iron foundry. A letter requesting changes to this permit was received on April 13, 2012. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

- (a) One (1) **gray** iron charging, melting, ladle metallurgy, holding and transfer system; identified as EU-2; constructed in 1995; a nominal capacity of 3630 tons of metal per hour; a maximum capacity of 45 tons of metal per hour; emissions controlled by baghouses DC-2 and DC-8; emissions exhaust to stacks S-2 & S-8. The transfer operations refer to the transfer of metal from the holding furnace to the ladle. The system consists of the following equipment/operations:
  - (1) One (1) furnace charging operation;
  - (2) Three (3) electric induction furnaces;
  - (3) One (1) ladle metallurgical station; and
  - (4) One (1) electric holding furnace.

The three (3) electric induction furnaces are considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.

- (b) One (1) Line 1 pouring and casting operation; identified as EU-3a1; constructed in 1995 and modified in 2008; a nominal capacity of 10 tons of metal and 55 tons of sand per hour; a maximum capacity of 44.25 **15** tons of metal and 62.5 **75** tons of sand per hour; particulate emissions controlled by baghouse DC-8; emissions exhaust to Stack S-8. EU-3a1 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.
- (c) One (1) Line 2 pouring and casting operation; identified as EU-3a2; constructed in 1995; modified in 2009, a nominal capacity of 10 tons of metal and 55 tons of sand per hour; a maximum capacity of 44.25 **15** tons of metal and 62.5 **75** tons of sand per hour; particulate emissions controlled by baghouse DC-2; emissions exhaust to stack S-2. EU-3a2 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.
- (d) One (1) Line 3 pouring and casting operation; identified as EU-3a3; constructed in 1995, **and to be modified in 2008 and approved for modification in 2012**; a nominal capacity

of ~~9~~ **11** tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; particulate emissions controlled by baghouse DC-8; emissions exhaust to stack S-8. EU- 3a3 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.

- (e) One (1) Line 4 pouring and casting operation; identified as EU-3a4; constructed in 1995 **and approved for modification in 2012**; a nominal capacity of ~~9~~ **11** tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; particulate emissions controlled by baghouse DC-8; emissions exhaust to stack S-8. EU-3a4 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.
- (f) One (1) Line 1 ~~casting mold~~ cooling operation; identified as EU-3b1; constructed in 1995; a nominal capacity of 10 tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; emissions exhaust to stack S-3b.
- (g) One (1) Line 2 ~~casting mold~~ cooling operation; identified as EU-3b2; constructed in 1995; a nominal capacity of ~~9~~ **10** tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; emissions exhaust to stack S-3b.
- (h) One (1) Line 3 ~~casting mold~~ cooling operation; identified as EU-3b3; constructed in 1995 **and approved for modification in 2012**; a nominal capacity of ~~9~~ **11** tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; emissions exhaust to stack S-3d.
- (i) One (1) Line 4 ~~casting mold~~ cooling operation; identified as EU-3b4; constructed in 1995 **and approved for modification in 2012**; a nominal capacity of ~~9~~ **11** tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; emissions exhaust to stack S-3d.
- (j) One (1) Line 3 and Line 4 shakeout/~~casting cooling~~ operation; identified as EU-4; constructed in 1995 **and approved for modification in 2012**; **consisting of the following equipment/operations:** ~~a nominal capacity of 18 tons of metal and 110 tons of sand per hour; a maximum capacity of 22.5 tons of metal and 125 tons of sand per hour; particulate emissions controlled by baghouses DC-4 and DC-8; emissions exhaust to stacks S-4 and S-8.~~
  - (1) **Line 3 shakeout/ casting cooling operation identified as EU-4a with a nominal capacity of 11 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour, particulate emissions controlled by baghouse DC-3 and exhausting to stacks S-15.**
  - (2) **Line 4 shakeout/ casting cooling operation identified as EU-4b with a nominal capacity of 11 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour, particulate emissions controlled by baghouse DC-4, emissions exhausting to stack S-4.**
- (k) One (1) shot reblast unit; identified as EU-6; constructed in 1997; a nominal capacity of 1.12 tons of iron castings per hour; a maximum capacity of 5 tons of iron castings per hour; emissions controlled by baghouse DC-8, which exhausts to stack S-8.

- (l) One (1) shot blast system; consisting of four (4) shot blast units; identified as EU-16 through EU-19; constructed in 1999 **and approved for modification in 2012**; a total nominal capacity of 27 tons of iron castings per hour; a total maximum capacity of 32 tons of iron castings per hour; with emissions controlled by baghouse DC-7~~3~~, which exhausts to stack S-~~8~~ 15.
- (m) One (1) ductile iron conversion process: **one** identified as EU-20; constructed in 2009, with a nominal capacity of ~~36~~ **30** tons of metal per hour, and a maximum capacity of ~~45~~ **35** tons of metal per hour; 58% of particulate emissions controlled by baghouse System 20 to stack S-20; Production limited to 95,000 tons per rolling 12-months period.
- (n) **One (1) Phenolic Urethane Cold Box (PUCB) core production process with a nominal capacity of 2.9 tons of cores per hour, approved for construction in 2012, consisting of the following units:**
  - 1. **Two (2) 65 ton core sand silos identified as EU-30a and EU-30b each controlled by a bin vent filter exhausting inside the building.**
  - 2. **One (1) Core sand mixer and sand transport system, identified as EU-30b, with a nominal capacity of 2.9 tons per hour, with emissions vented back to the core sand silo.**
  - 3. **One (1) PUCB core machine, identified as EU30c with a nominal capacity of 2.9 tons of cores/hour, each using a tertiary amine catalyst gas controlled by an acid scrubber, identified as SC-1 venting to stack SC-1.**
  - 4. **One (1) water based core wash; and**
  - 5. **One (1) 1.5 MMBtu per hr natural gas fired drying oven.**
- (o) **One (1) Warm Box Core production process with a nominal capacity of 2.9 tons cores per hour, approved for construction in 2012, consisting of the following units;**
  - (1) **One (1) 65 ton core sand silo, identified as EU-31a controlled by a bin vent filter exhausting inside the building; and**
  - (2) **One (1) warm box core machine, identified as EU31b with a nominal capacity of 2.9 tons of cores/hour and 0.6 MMBtu per hr of natural gas.**

#### **Insignificant Activities**

- (a) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations, which include the following: Two (2) enclosed grinding units controlled by fabric filters and exhausting inside the building; **and One (1) test sample blast machine; identified as EU-1b; constructed in 1995 controlled by fabric filters and exhausting inside the building.** [326 IAC 6-3-2]

The following construction conditions are applicable to the proposed project:

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.
4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), 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(l) 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.

This significant source modification authorizes construction of the new emission units. Operating conditions shall be incorporated into the Part 70 operating permit as a significant permit modification in accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12. Operation is not approved until the significant permit modification has been issued.

All other conditions of the permit shall remain unchanged and in effect. For your convenience, the entire Part 70 Operating Permit as modified will be provided at issuance.

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 Josiah Balogun, OAQ, 100 North Senate Avenue, MC 61-53, Room 1003, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for Josiah Balogun or extension (4-5257), or dial (317) 234-5257.

Sincerely,



Tripurari P. Sinha, Ph.D., Section Chief  
Permits Branch  
Office of Air Quality

Attachments:  
Updated Permit  
Technical Support Document  
PTE Calculations

JB

cc: File – DeKalb County  
DeKalb County Health Department  
U.S. EPA, Region V  
Northern Regional Office  
Compliance and Enforcement Branch



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## Significant Source Modification to a Part 70 Operating Permit OFFICE OF AIR QUALITY

**Metal Technologies Auburn, LLC**  
**1537 West Auburn Drive**  
**Auburn, Indiana 46706**

(herein known as the Permittee) is hereby authorized to construct 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. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-7-10.5, applicable to those conditions.

Significant Source Modification No. T 033-31731-00042	
Original by:  Tripurari P. Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: July 20, 2012

## TABLE OF CONTENTS

### 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)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]
- A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

### B. GENERAL CONDITIONS

- B.1 Definitions [326 IAC 2-7-1]
- 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)]
- B.3 Term of Conditions [326 IAC 2-1.1-9.5]
- B.4 Enforceability [326 IAC 2-7-7]
- B.5 Severability [326 IAC 2-7-5(5)]
- B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]
- B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]
- B.8 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]
- B.19 Annual Compliance Certification [326 IAC 2-7-6(5)]
- 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]
- B.11 Emergency Provisions [326 IAC 2-7-16]
- B.12 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]
- B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5] [326 IAC 2-7-10.5]
- B.14 Termination of Right to Operate [326 IAC 2-7-10] [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]
- B.16 Permit Renewal [326 IAC 2-7-3] [326 IAC 2-7-4] [326 IAC 2-7-8(e)]
- B.17 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]
- B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12(b)(2)]
- B.19 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]
- B.20 Source Modification Requirement [326 IAC 2-7-10.5]
- 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]
- B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]
- B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)] [326 IAC 2-1.1-7]
- B.25 Credible Evidence [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [62 FR 8314] [326 IAC 1-1-6]

### C. SOURCE OPERATION CONDITIONS

#### 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]
- C.2 Opacity [326 IAC 5-1]
- C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]
- C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]
- C.5 Fugitive Dust Emissions [326 IAC 6-4]
- C.6 Stack Height [326 IAC 1-7]
- C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

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

#### Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

- C.12 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.13 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]
- C.14 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]
- C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]  
[326 IAC 2-7-6]

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

- C.16 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]
- C.17 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2]  
[326 IAC 2-3]
- C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]  
[326 IAC 2-2]

**Stratospheric Ozone Protection**

- C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

**D.1 EMISSIONS UNIT OPERATION CONDITIONS - EU-2, EU-3a1 through EU-3a4, and EU-6  
Emission Limitations and Standards [326 IAC 2-7-5(1)]**

- D.1.1 Best Available Control Technology (BACT) for PM/PM<sub>10</sub> Emissions [326 IAC 2-2]
- D.1.2 Best Available Control Technology (BACT) for VOC Emissions [326 IAC 2-2]  
[326 IAC 8-1-6]
- D.1.3 Best Available Control Technology (BACT) for CO Emissions [326 IAC 2-2] [326 IAC 8-1-6]
- D.1.4 PSD Minor Limit - Lead Emissions [326 IAC 2-2]

**Compliance Determination Requirements**

- D.1.5 Particulate and VOC Control
- D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

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

- D.1.7 Visible Emissions Notations
- D.1.8 Baghouse Parametric Monitoring
- D.1.9 Broken or Failed Bag Detection

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

- D.1.10 Record Keeping Requirements
- D.1.11 Reporting Requirements

**D.2 EMISSIONS UNIT OPERATION CONDITIONS - EU-3b1 through EU-3b4**

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

- D.2.1 Best Available Control Technology (BACT) for PM/PM<sub>10</sub> Emissions [326 IAC 2-2]
- D.2.2 Best Available Control Technology (BACT) for VOC Emissions [326 IAC 2-2-3] [326 IAC 8-1-6]
- D.2.3 Best Available Control Technology (BACT) for CO Emissions [326 IAC 2-2-3]
- D.2.4 PSD Minor Limit - Lead Emissions [326 IAC 2-2]
- D.2.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

**Compliance Determination Requirements**

- D.2.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

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

- D.2.7 Record Keeping Requirements

**D.3 EMISSIONS UNIT OPERATION CONDITIONS - EU-4, EU-5a and EU-5bc**

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

- D.3.1 Best Available Control Technology (BACT) for PM/PM<sub>10</sub> Emissions [326 IAC 2-2-3]
- D.3.2 Best Available Control Technology (BACT) for VOC Emissions [326 IAC 2-2] [326 IAC 8-1-6]
- D.3.3 Best Available Control Technology (BACT) for CO Emissions [326 IAC 2-2] [326 IAC 8-1-6]

- D.3.4 Lead Emissions [326 IAC 2-2]
- D.3.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

**Compliance Determination Requirements**

- D.3.6 Particulate Control
- D.3.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

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

- D.3.8 Visible Emissions Notations
- D.3.9 Baghouse Parametric Monitoring
- D.3.10 Broken or Failed Bag Detection

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

- D.3.11 Record Keeping Requirements

**D.4 EMISSIONS UNIT OPERATION CONDITIONS - EU-7, EU-16 through EU-19 and EU-1a**

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

- D.4.1 Best Available Control Technology (BACT) for PM/PM<sub>10</sub> Emissions [326 IAC 2-2]
- D.4.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

**Compliance Determination Requirements**

- D.4.3 Particulate Control

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

- D.4.4 Visible Emissions Notations
- D.4.5 Baghouse Parametric Monitoring
- D.4.6 Broken or Failed Bag Detection

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

- D.4.7 Record Keeping Requirements

**D.5 EMISSIONS UNIT OPERATION CONDITIONS - Regulated Insignificant Activities**

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

- D.5.1 Particulate Emission Limitations from Manufacturing Processes [326 IAC 6-3-2]

**D.6 EMISSIONS UNIT OPERATION CONDITIONS - Ductile Iron Conversion Process**

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

- D.6.1 PSD Minor Limits [326 IAC 2-2]
- D.6.2 Particulate Emission Limitations from Manufacturing Processes [326 IAC 6-3-2]
- D.6.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

**Compliance Determination Requirements**

- D.6.4 Particulate Control
- D.6.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

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

- D.6.6 Parametric Monitoring
- D.6.7 Broken or Failed Bag Detection

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

- D.6.8 Record Keeping Requirements
- D.6.9 Reporting Requirements

**D.7 EMISSIONS UNIT OPERATION CONDITIONS**

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

- D.7.1 Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2][326 IAC 6-3-2]
- D.7.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

**Compliance Determination Requirements**

D.7.3 Particulate Control

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

D.7.4 Record Keeping Requirements

D.7.5 Reporting Requirements

**E.1 EMISSIONS UNIT OPERATION CONDITIONS - Units subject to 326 IAC 20-92**

E.1.1 General Provisions Relating to National Emissions Standards for Hazardous Air \  
Pollutants under 40 CFR Part 63 [326 IAC 20-1] [326 IAC 20-92] [40 CFR Part 63, Subpart A]

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

E.1.3 One Time Deadlines Relating to National Emissions Standards for Hazardous Air Pollutants  
(NESHAP): Iron and Steel Foundries

**Certification**

**Emergency Occurrence Report**

**Quarterly Reports**

**Quarterly Deviation and Compliance Monitoring Report**

**Attachment A – NESHAP Subpart EEEEE**

**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 iron foundry.

Source Address:	1537 West Auburn Drive, Auburn, Indiana 46706
General Source Phone Number:	(260) 925-4717
SIC Code:	3321
County Location:	DeKalb
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 PSD Source Categories

A.2 Emission Units & Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][26 IAC 2-7-5(15)]

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

(a) One (1) iron charging, melting, ladle metallurgy, holding and transfer system; identified as EU-2; constructed in 1995; a nominal capacity of 30 tons of metal per hour; a maximum capacity of 45 tons of metal per hour; emissions controlled by baghouses DC-2 and DC-8; emissions exhaust to stacks S-2 & S-8. The transfer operations refer to the transfer of metal from the holding furnace to the ladle. The system consists of the following equipment/operations:

- (1) One (1) furnace charging operation;
- (2) Three (3) electric induction furnaces;
- (3) One (1) ladle metallurgical station; and
- (4) One (1) electric holding furnace.

The three (3) electric induction furnaces are considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.

(b) One (1) Line 1 pouring and casting operation; identified as EU-3a1; constructed in 1995 and modified in 2008; a nominal capacity of 10 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour; particulate emissions controlled by baghouse DC-8; emissions exhaust to Stack S-8. EU- 3a1 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.

Before Modification 033-28412-00042

(c) One (1) Line 2 pouring and casting operation; identified as EU-3a2; constructed in 1995; a nominal capacity of 9 tons of metal and 55 tons of sand per hour; a maximum capacity of 11.25 tons of metal and 62.5 tons of sand per hour; particulate emissions controlled by baghouse DC-2; emissions exhaust to stack S-2. EU-3a2 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.

After Modification 033-28412-00042

- (c) One (1) Line 2 pouring and casting operation; identified as EU-3a2; constructed in 1995; modified in 2009, a nominal capacity of 10 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour; particulate emissions controlled by baghouse DC-2; emissions exhaust to stack S-2. EU-3a2 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.
- (d) One (1) Line 3 pouring and casting operation; identified as EU-3a3; constructed in 1995, and approved for modification in 2012; a nominal capacity of 11 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour; particulate emissions controlled by baghouse DC-8; emissions exhaust to stack S-8. EU-3a3 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.
- (e) One (1) Line 4 pouring and casting operation; identified as EU-3a4; constructed in 1995 and approved for modification in 2012; a nominal capacity of 11 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour; particulate emissions controlled by baghouse DC-8; emissions exhaust to stack S-8. EU-3a4 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.
- (f) One (1) Line 1 old cooling operation; identified as EU-3b1; constructed in 1995; a nominal capacity of 10 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour; emissions exhaust to stack S-3b.
- (g) One (1) Line 2 mold cooling operation; identified as EU-3b2; constructed in 1995; a nominal capacity of 10 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour; emissions exhaust to stack S-3b.
- (h) One (1) Line 3 mold cooling operation; identified as EU-3b3; constructed in 1995 and approved for modification in 2012; a nominal capacity of 11 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour; emissions exhaust to stack S-3d.
- (i) One (1) Line 4 mold cooling operation; identified as EU-3b4; constructed in 1995 and approved for modification in 2012; a nominal capacity of 11 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour; emissions exhaust to stack S-3d.
- (j) One (1) Line 3 and Line 4 shakeout/casting cooling operation; identified as EU-4; constructed in 1995 and approved for modification in 2012; consisting of the following equipment/operations:
  - (1) Line 3 shakeout/ casting cooling operation identified as EU-4a with a nominal capacity of 11 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour, particulate emissions controlled by baghouse DC-3 and exhausting to stacks S-15.
  - (2) Line 4 shakeout/ casting cooling operation identified as EU-4b with a nominal capacity of 11 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour, particulate emissions controlled by baghouse DC-4, emissions exhausting to stack S-4.
- (k) One (1) Line 1 and Line 2 shakeout/casting cooling operation; identified as EU-5a; constructed in 1995; a nominal capacity of 20 tons of metal and 110 tons of sand per hour; a maximum capacity of 30 tons of metal and 150 tons of sand per hour; particulate emissions controlled by baghouse DC-5; emissions exhaust to stack S-5.
- (l) One (1) return sand/waste sand system; identified as EU-5bc; constructed in 1995; a nominal capacity of 220 tons of sand per hour; a maximum capacity of 250 tons of sand per hour; emissions controlled by baghouse DC-5, which exhausts to stack S-5.

- (m) One (1) shot reblast unit; identified as EU-6; constructed in 1997; a nominal capacity of 1.12 tons of iron castings per hour; a maximum capacity of 5 tons of iron castings per hour; emissions controlled by baghouse DC-6, which exhausts to stack S-8.
- (n) One (1) shot blast system; consisting of four (4) shot blast units; identified as EU-16 through EU-19; constructed in 1999 and approved for modification in 2012; a total nominal capacity of 27 tons of iron castings per hour; a total maximum capacity of 32 tons of iron castings per hour; with emissions controlled by baghouse DC-7, which exhausts to stack S-8.
- (o) Sand handling system; identified as (EU-1a); constructed in 1995 and modified in 2011; a nominal capacity of 220 tons of sand per hour; a maximum capacity of 250 tons of sand per hour and exhausting to stack S-1 and stack S-10. The sand handling system is described as follows:
  - 1. Metal Separation controlled by baghouse DC-5
  - 2. Sand multi-cooler controlled by baghouse DC-5
  - 3. Return sand conveyor (no real collection)
  - 4. Return sand distribution conveyor controlled by baghouse DC-1
  - 5. Four (4) 250 ton return sand storage bins controlled by baghouse DC-1
  - 6. Four (4) sand mullors (Simpson 100B-250 Speedmullers) rated at 75 tons of sand per hour each and controlled by baghouse DC-10
- (p) One (1) ductile iron conversion process: one identified as EU-20; constructed in 2009, with a nominal capacity of 30 tons of metal per hour, and a maximum capacity of 35 tons of metal per hour; 58% of particulate emissions controlled by baghouse System 20 to stack S-20; Production limited to 95,000 tons per rolling 12-months period.
- (q) Eight (8) grinders; identified together as EU-7; constructed in 1999; a combined nominal capacity of 25 tons of iron castings per hour; a combined maximum capacity of 32 tons of iron castings per hour; emissions.
- (r) One (1) Phenolic Urethane Cold Box (PUCB) core production process with a nominal capacity of 2.9 tons of cores per hour, approved for construction in 2012, consisting of the following units:
  - 1. Two (2) 65 ton core sand silos identified as EU-30a and EU-30b each controlled by a bin vent filter exhausting inside the building.
  - 2. One (1) Core sand mixer and sand transport system, identified as EU-30b, with a nominal capacity of 2.9 tons per hour, with emissions vented back to the core sand silo.
  - 3. One (1) PUCB core machine, identified as EU30c with a nominal capacity of 2.9 tons of cores/hour, each using a tertiary amine catalyst gas controlled by an acid scrubber, identified as SC-1 venting to stack SC-1.
  - 4. One (1) water based core wash; and
  - 5. One (1) 1.5 MMBtu/hr natural gas fired drying oven.
- (s) One (1) Warm Box Core production process with a nominal capacity of 2.9 tons cores per hour, approved for construction in 2012, consisting of the following units;
  - (1) One (1) 65 ton core sand silo, identified as EU-31a controlled by a bin vent filter exhausting inside the building; and
  - (2) One (1) warm box core machine, identified as EU31b with a nominal capacity of 2.9 tons of cores/hour and 0.6 MMBtu per hr of natural gas.

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

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

- (a) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment cutting torches, soldering equipment, welding equipment [326 IAC 6-3-2].
- (b) One (1) test sample blast machine; identified as EU-1b; constructed in 1995; a nominal capacity of 150 pounds of metal per hour; emissions controlled by baghouse DC-1; exhausting to stack S-1. [326 IAC 6-3-2]
- (c) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 25 lb/day PM; 5 lb/hr or 25 lb/day SO<sub>2</sub>; 5 lb/hr or 25 lb/day NO<sub>x</sub>; 3 lb/hr or 15 lb/day VOC; 0.6 tons per year Pb; 1.0 ton/yr of a single HAP, or 2.5 ton/yr of any combination of HAPs: Scrap receiving operations: All metal scrap is received via truck and deposited into scrap storage bins within a building. A source of fugitive emissions.[326 IAC 6-4]
- (d) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]
- (e) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations, which include the following: Two (2) enclosed grinding units controlled by fabric filters and exhausting inside the building; and One (1) test sample blast machine; identified as EU-1b; constructed in 1995 controlled by fabric filters and exhausting inside the building. [326 IAC 6-3-2]
- (f) Eight (8) grinders; identified together as EU-7; constructed in 1999 and approved for modification in 2012; a combined nominal capacity of 25 tons of iron castings per hour; a combined maximum capacity of 32 tons of iron castings per hour; emissions controlled by individual dust collectors which have a gas flow rate of less than 4,000 cfm each, and which have a grain loading of less than or equal to (0.03) grains per actual cubic foot, and which exhaust indoors. [326 IAC 2-7-1(21)(G)(xxiii)]

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

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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]**

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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)]**

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- (a) This permit, T033-21760-00042, 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]**

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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]**

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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)]**

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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)]**

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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)]**

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- (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)]**

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- (a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:
  - (i) it contains a certification by a "responsible official", as defined by 326 IAC 2-7-1 (34), and

- (ii) the certification is based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, 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)]**

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- (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 the certification by the "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]**

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- (a) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90)

days after initial start-up, whichever is later, including the following information on each facility:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (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]

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- (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, and Northern Regional Office no later than 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 Section), or

Telephone Number: 317-233-0178 (ask for Compliance Section)

Facsimile Number: 317-233-6865

Northern Regional Office phone: (574) 245-4870; fax: (574) 245-4877.

- (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.

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

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- (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]**

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- (a) All terms and conditions of permits established prior to T033-21760-00042 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 combined permit, all previous registrations and permits are superseded by this combined new source review and part 70 operating permit.

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

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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]**

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

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- (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, 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 shall be certified by the "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.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]  
[326 IAC 2-7-12(b)(2)]

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- (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]

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

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- (a) A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.
- (b) Any modification at an existing major source is governed by the requirements of 326 IAC 2-2 (for sources located in attainment areas).

**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]**

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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]**

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

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- (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]**

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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(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. 326 IAC 4-1-3 (a)(2)(A) and (B) 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. 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 61-52 IGCN 1003  
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "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 Accredited Asbestos inspector is not federally enforceable.

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

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

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- (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.
- (d) The Permittee may request an extension of a deadline to conduct testing as provided by 40 CFR 60.8, 61.13 or 63.7.
- (e) In addition to any other testing required by this permit if at any time the Permittee replaces a control device that is used to comply with an emission limitation listed in Section D, then the Permittee shall conduct a performance test no later than one hundred eighty (180) days after installation of the replacement control device in accordance with this condition.

#### **Compliance Requirements [326 IAC 2-1.1-11]**

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

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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)]**

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

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- (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.12 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

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

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:  
  
Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
MC 61-53 IGCN 1003  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251  
  
within ninety (90) days after the date of issuance of this permit.  
  
The ERP does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) 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.13 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]**

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

**C.14 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]**

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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 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 necessarily limited to, the following:
  - (1) monitoring results;
  - (2) review of operation and maintenance procedures and records; and/or
  - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

**C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [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 of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require 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.16 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]**

In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), starting in 2010 and every three (3) years thereafter, the Permittee shall submit no later than 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:

- (a) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
- (b) 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.17 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2]  
[326 IAC 2-3]

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- (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(II)) 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:

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

- (1) A description of the project.
- (2) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
- (3) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
  - (A) Baseline actual emissions;
  - (B) Projected actual emissions;
  - (C) 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
  - (D) 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.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [326 IAC 2-3]

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- (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 within 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). 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 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 (c) 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).
- (f) 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 (c)(2) and (3) 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 deems fit to include in this report.

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.19 Compliance with 40 CFR 82 and 326 IAC 22-1**

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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:

## SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

### Emission Unit Description [326 IAC 2-7-5(15)]: Melting, Pouring and Casting Operations

(a) One (1) iron charging, melting, ladle metallurgy, holding and transfer system; identified as EU-2; constructed in 1995; a nominal capacity of 30 tons of metal per hour; a maximum capacity of 45 tons of metal per hour; emissions controlled by baghouses DC-2 and DC-8; emissions exhaust to stacks S-2 & S-8. The transfer operations refer to the transfer of metal from the holding furnace to the ladle. The system consists of the following equipment/operations:

- (1) One (1) furnace charging operation;
- (2) Three (3) electric induction furnaces;
- (3) One (1) ladle metallurgical station; and
- (4) One (1) electric holding furnace.

The three (3) electric induction furnaces are considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.

(b) One (1) Line 1 pouring and casting operation; identified as EU-3a1; constructed in 1995 and modified in 2008; a nominal capacity of 10 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour; particulate emissions controlled by baghouse DC-8; emissions exhaust to Stack S-8. EU- 3a1 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.

#### Before Modification 033-28412-00042

(c) One (1) Line 2 pouring and casting operation; identified as EU-3a2; constructed in 1995; a nominal capacity of 9 tons of metal and 55 tons of sand per hour; a maximum capacity of 11.25 tons of metal and 62.5 tons of sand per hour; particulate emissions controlled by baghouse DC-8; emissions exhaust to stack S-8. EU-3a2 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.

#### After Modification 033-28412-00042

(c) One (1) Line 2 pouring and casting operation; identified as EU-3a2; constructed in 1995; modified in 2009, a nominal capacity of 10 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour; particulate emissions controlled by baghouse DC-2; emissions exhaust to stack S-2. EU-3a2 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.

(d) One (1) Line 3 pouring and casting operation; identified as EU-3a3; constructed in 1995, and approved for modification in 2012; a nominal capacity of 11 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour; particulate emissions controlled by baghouse DC-8; emissions exhaust to stack S-8. EU- 3a3 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.

(e) One (1) Line 4 pouring and casting operation; identified as EU-3a4; constructed in 1995 and approved for modification in 2012; a nominal capacity of 11 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour; particulate emissions controlled by baghouse DC-8; emissions exhaust to stack S-8. EU-3a4 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.

(m) One (1) shot reblast unit; identified as EU-6; constructed in 1997; a nominal capacity of 1.12 tons of iron castings per hour; a maximum capacity of 5 tons of iron castings per hour; emissions controlled by baghouse DC-8 which exhausts to stack S-8.

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

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

**D.1.1 Best Available Control Technology (BACT) for PM/PM<sub>10</sub> Emissions [326 IAC 2-2-3]**

Pursuant to 326 IAC 2-2-3 (PSD – BACT) and PSD T033-21760-00042, the Permittee shall comply with the following:

- (a) PM/PM<sub>10</sub> emissions from the charging, melting, metallurgy, holding and transfer operations (EU-2) shall be controlled by a baghouse.
- (b) PM/PM<sub>10</sub> emissions from the pouring and casting operations (EU-3a1, EU-3a2, EU-3a3 and EU-3a4) shall be controlled by a baghouse.
- (c) The PM/PM<sub>10</sub> emissions from the following facilities are limited, as indicated in the table below:

Process/facility Description (ID)	Filterable PM/PM <sub>10</sub> Emissions		Filterable Plus Condensable PM <sub>10</sub> Emissions
	(gr/dscf)	(lb/hr)	(lb/ton iron produced)
Charging, melting, metallurgy, holding and transfer operations (EU-2)	0.003	3.6	0.06
Pouring and casting operations (EU-3a1, EU-3a2, EU-3a3 and EU-3a4)			
Shot reblast operation (EU-6)	0.003	0.15	–

- (d) The total iron production of the electric induction furnaces (comprising EU-2) shall not exceed 750 tons per day and 220,000 tons per twelve consecutive month period with compliance determined at the end of each month.
- (e) Visible emissions of the fugitive emissions from building openings shall not exceed twenty percent (20%) opacity, as determined by a six (6) minute average (24 readings taken in accordance with EPA Method 9, Appendix A); except for one 6-minute average per hour that does not exceed twenty seven percent (27%) opacity.

**D.1.2 Best Available Control Technology (BACT) for VOC Emissions [326 IAC 2-2-3] [326 IAC 8-1-6]**

Pursuant to 326 IAC 2-2-3 (PSD - BACT), 326 IAC 8-1-6, and PSD T033-21760-00042, VOC BACT for the pouring, cooling and shakeout operations (EU-3a1 through EU-3a4, EU-3b1 through EU-3b4, EU-4 and EU-5a) is as follows:

- (a) The Permittee shall use low emitting greensand binding materials and core resin binders.
- (b) The total VOC emissions from pouring, cooling and shakeout operations shall not exceed 0.8 pounds per ton of metal poured when using greensand molds without cores and 1.7 pounds of VOC per ton of metal poured when using greens and molds with cores as determined by validation testing in accordance with Condition D.1.6.

**D.1.3 Best Available Control Technology (BACT) for CO Emissions [326 IAC 2-2-3]**

Pursuant to 326 IAC 2-2-3 (PSD) and PSD T033-21760-00042, the CO emissions from the pouring and casting operations (EU-3a1, EU-3a2, EU-3a3 and EU-3a4, stack S-8), casting cooling operations (EU-3b1 and EU-3b2, stack S-3b; EU-3b3 and EU-3b4, stack S-3d) and

shakeout operations (EU-4, stack S-4 and EU-5a, stack S-5) shall not exceed 6.0 pounds per ton of metal.

#### D.1.4 PSD Minor Limit - Lead Emissions [326 IAC 2-2]

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The total lead emissions from the charging, melting, metallurgy, holding and transfer operations (EU-2, stacks S-2 & S-8) and pouring and casting operations (EU-3a1, EU-3a2, EU-3a3 and EU-3a4, stack S-8) shall not exceed 0.003 pounds per ton of iron produced.

Compliance with these limits and Conditions D.1.1(d), D.2.4 and D.3.4 will limit the source-wide lead emissions to less than 0.6 tons per twelve consecutive month period and render the requirements of 326 IAC 2-2 not applicable to the source.

### Compliance Determination Requirements

#### D.1.5 Particulate and VOC Control

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- (a) Pursuant to 326 IAC 2-2, and in order to ensure compliance with Conditions D.1.1 and D.1.4, baghouse DC-8, used to control particulate emissions, shall be in operation and control at all times EU-2, EU-3a1, EU-3a2, EU-3a3, and EU-3a4 are in operation.
- (b) Pursuant to 326 IAC 2-2, and in order to ensure compliance with Conditions D.1.1 and D.1.4, baghouse DC-2 and DC-8, used to control particulate emissions, shall be in operation and control at all times EU-2 is in operation.
- (c) Pursuant to 326 IAC 2-2 and 326 IAC 8-1-6, and in order to ensure compliance with Condition D.1.2, the greensand molding materials, percent loss on ignition (%LOI), shell and phenolic urethane cold box core resins and percent resin in the cores shall be consistent with the respective characteristics used during validation testing.

#### D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

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- (a) In order to demonstrate the compliance status with Condition D.1.1, the Permittee shall perform PM/PM<sub>10</sub> testing for EU-2, EU-3a1, EU-3a2, EU-3a3, EU-3a4, and EU-6 utilizing methods approved by the Commissioner. PM<sub>10</sub> includes filterable and condensable PM<sub>10</sub>. These tests shall be repeated at least once every five (5) years after completion of the most recent valid compliance stack test.
- (b) In order to demonstrate the compliance status with Condition D.1.3, the Permittee shall perform CO testing for EU-2, EU-3a1, EU-3a2, EU-3a3, EU-3a4, EU-3b1, EU-3b2, EU-3b3, EU-3b4, EU-4 and EU-5a utilizing methods approved by the Commissioner. These tests shall be repeated at least once every five (5) years after completion of the most recent valid compliance stack test.
- (c) In order to demonstrate the compliance status with Condition D.1.4, the Permittee shall perform lead testing for EU-2, EU-3a1, EU-3a2, EU-3a3 and EU-3a4 utilizing methods approved by the Commissioner. These tests shall be repeated at least once every five (5) years after completion of the most recent valid compliance stack test.
- (d) The Permittee shall submit a testing protocol for the VOC validation testing of the greensand and core materials used in the casting process. The test protocol shall identify the specific resins and resin content of the cores to be tested and the resin content of the cores as a % of the total core weight. The test protocol shall also identify the %LOI of the greensand molds, the casting weight and specific test pattern used in the validation testing. The validation testing for VOCs shall be performed on individual molds for both greensand molds only and for greensand molds with cores.
- (e) Validation testing of the materials currently in use at the facility shall be completed by August 1, 2008 for casting in greensand molds with either shell or phenolic urethane cold box cores.

- (f) Once the results of validation testing are available, the OAQ will evaluate those results and determine if the BACT requirements established in this condition must be revised. If revisions are needed, the OAQ will reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include revised requirements necessary to comply with 326 IAC 2-2 (PSD).

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

#### **D.1.7 Visible Emissions Notations**

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- (a) Visible emission notations of the stack exhaust from EU-6 shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Failure to take response steps shall be considered a deviation from this permit. Section C – Response to Excursions and Exceedances contains the Permittee's obligations with regard to responding to the reasonable response steps required by this condition.

#### **D.1.8 Baghouse Parametric Monitoring**

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- (a) The Permittee shall record the pressure drop across the baghouse used in conjunction with EU-6 at least once per day when the respective facilities are in operation.
- (b) When for any one reading, the pressure drop is outside the normal range of 1.5 to 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (c) The instrument used for determining the pressure drop shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### **D.1.9 Broken or Failed Bag Detection**

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- (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 process 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).
- (c) For multi-compartment units, If operations continue after bag failure is observed and it

will be 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.

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

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

### **D.1.10 Record Keeping Requirements**

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- (a) In order to document the compliance status with Condition D.1.1(d), the Permittee shall maintain records of the total metal production of the electric induction furnaces (comprising EU-2).
- (b) In order to document the compliance status with Condition D.1.2, the Permittee shall maintain records of the following:
  - (1) The resin content of the shell and phenolic urethane cold box cores, and
  - (2) The %LOI of the greensand mold system.
- (c) In order to document the compliance status with Condition D.1.6, the Permittee shall maintain records of the results from testing required by that condition.
- (d) In order to document the compliance status with Condition D.1.7, the Permittee shall maintain records of the visible emission notations required by that condition. 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) In order to document the compliance status with Condition D.1.8, the Permittee shall maintain records of the pressure drop readings required by that condition. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of pressure drop reading (e.g. the process did not operate that day).
- (f) For extended periods of time when visible emissions notations and daily parametric monitoring are not required (e.g., the units are venting indoors or during plant shutdown), IDEM, OAQ Compliance Branch has determined that it is sufficient to document the reason daily visible emissions notations and parametric monitoring will not be required on the first day of the period and document when the visible emissions notations and daily parametric monitoring requirement will resume.
- (g) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

### **D.1.11 Reporting Requirements**

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A quarterly summary of the information to document the compliance status with the twelve-month rolling limit in Condition D.1.1(d) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, no later than thirty (30) days after the end of the quarter being reported. 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.2**

**EMISSIONS UNIT OPERATION CONDITIONS**

**Emission Unit Description [326 IAC 2-7-5(15)]: Casting cooling operations**

- (f) One (1) Line 1 mold cooling operation; identified as EU-3b1; constructed in 1995; a nominal capacity of 10 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour; emissions exhaust to stack S-3b.
- (g) One (1) Line 2 mold cooling operation; identified as EU-3b2; constructed in 1995; a nominal capacity of 10 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour; emissions exhaust to stack S-3b.
- (h) One (1) Line 3 mold cooling operation; identified as EU-3b3; constructed in 1995 and approved for modification in 2012; a nominal capacity of 11 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour; emissions exhaust to stack S-3d.
- (i) One (1) Line 4 mold cooling operation; identified as EU-3b4; constructed in 1995 and approved for modification in 2012; a nominal capacity of 11 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour; emissions exhaust to stack S-3d.

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

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

**D.2.1 Best Available Control Technology (BACT) for PM/PM<sub>10</sub> Emissions [326 IAC 2-2-3]**

Pursuant to 326 IAC 2-2-3 (PSD – BACT) and PSD T033-21750-00042, the PM/PM<sub>10</sub> emissions from the following facilities are limited, as indicated in the table below:

Process/facility Description (ID)	Filterable PM/PM <sub>10</sub> Emissions		Filterable Plus Condensable PM <sub>10</sub> Emissions
	(gr/dscf)	(lb/hr)	(lb/ton iron produced)
Line 1 and Line 2 casting cooling operations (EU-3b1 and EU-3b2)	0.01	2.14	0.09
Line 3 and Line 4 casting cooling operations (EU-3b3 and EU-3b4)	0.01	2.14	0.09

**D.2.2 Best Available Control Technology (BACT) for VOC Emissions [326 IAC 2-2-3] [326 IAC 8-1-6]**

Pursuant to 326 IAC 2-2-3 (PSD – BACT), 326 IAC 8-1-6 and PSD T033-21760-00042, the Permittee shall comply with VOC BACT for the casting cooling operations (EU-3b1 through EU-3b4) in Condition D.1.2.

**D.2.3 Best Available Control Technology (BACT) for CO Emissions [326 IAC 2-2-3]**

Pursuant to 326 IAC 2-2-3 (PSD – BACT) and PSD T033-21760-00042, the Permittee shall comply with CO BACT for the casting cooling operations (EU-3b1 through EU-3b4) in Condition D.1.3.

**D.2.4 PSD Minor Limit - Lead Emissions [326 IAC 2-2]**

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- (a) The lead emissions from the Line 1 and Line 2 casting cooling operations (EU-3b1 and EU-3b2, stack S-3b) shall not exceed 0.0012 pounds per ton of iron processed.
- (b) The lead emissions from the Line 3 and Line 4 casting cooling operations (EU-3b3 and EU-3b4, stack S-3d) shall not exceed 0.0012 pounds per ton of iron processed.

Compliance with these limits and Conditions D.1.1(d), D.1.4 and D.3.4 will limit the source-wide lead emissions to less than 0.6 tons per twelve consecutive month period and render the requirements of 326 IAC 2-2 not applicable.

**D.2.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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

**Compliance Determination Requirements**

**D.2.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]**

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- (a) In order to demonstrate the compliance status with Condition D.2.1, the Permittee shall perform PM/PM<sub>10</sub> testing for EU-3b1, EU-3b2, EU-3b3, and EU-3b4 utilizing methods approved by the Commissioner. PM<sub>10</sub> includes filterable and condensable PM<sub>10</sub>. These tests shall be repeated at least once every five (5) years after completion of the most recent valid compliance stack test.
- (b) In order to demonstrate the compliance status with Condition D.2.2, the Permittee shall perform the VOC testing for EU-3b1, EU-3b2, EU-3b3, and EU-3b4 required by Condition D.1.6(d).
- (c) In order to demonstrate the compliance status with Condition D.2.3, the Permittee shall perform the CO testing for EU-3b1, EU-3b2, EU-3b3, and EU-3b4 required by Condition D.1.6(b).
- (d) In order to demonstrate the compliance status with Condition D.2.4, the Permittee shall perform lead testing for EU-3b1, EU-3b2, EU-3b3, and EU-3b4 utilizing methods approved by the Commissioner. These tests shall be repeated at least once every five (5) years after completion of the most recent valid compliance stack test.

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

**D.2.7 Record Keeping Requirements**

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- (a) In order to document the compliance status with Condition D.2.6, the Permittee shall maintain records of the results from testing required by that condition.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**SECTION D.3**

**EMISSIONS UNIT OPERATION CONDITIONS**

**Emission Unit Description [326 IAC 2-7-5(15)]:**

- (j) One (1) Line 3 and Line 4 shakeout/casting cooling operation; identified as EU-4; constructed in 1995 and approved for modification in 2012; consisting of the following equipment/operations:
  - (1) Line 3 shakeout/ casting cooling operation identified as EU-4a with a nominal capacity of 11 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour, particulate emissions controlled by baghouse DC-3 and exhausting to stacks S-15.
  - (2) Line 4 shakeout/ casting cooling operation identified as EU-4b with a nominal capacity of 11 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour, particulate emissions controlled by baghouse DC-4, emissions exhausting to stack S-4.
- (k) One (1) Line 1 and Line 2 shakeout/casting cooling operation; identified as EU-5a; constructed in 1995; a nominal capacity of 20 tons of metal and 110 tons of sand per hour; a maximum capacity of of 30 tons of metal and 150 tons of sand per hour; particulate emissions controlled by baghouse DC-5; emissions exhaust to stack S-5.
- (l) One (1) return sand/waste sand system; identified as EU-5bc; constructed in 1995; a nominal capacity of 220 tons of sand per hour; a maximum capacity of 250 tons of sand per hour; emissions controlled by baghouse DC-5 which exhausts to stack S-5.

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

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

**D.3.1 Best Available Control Technology (BACT) for PM/PM<sub>10</sub> Emissions [326 IAC 2-2-3]**

Pursuant to 326 IAC 2-2-3 (PSD – BACT) and PSD T033-21760-00042, the Permittee shall comply with the following:

- (a) PM/PM<sub>10</sub> emissions from the Line 3 and Line 4 shakeout operation (EU-4) shall be controlled by a baghouse.
- (b) PM/PM<sub>10</sub> emissions from the Line 1 and Line 2 shakeout operation (EU-5a) and return sand and waste sand system (EU-5bc) shall be controlled by a baghouse.
- (c) The PM/PM<sub>10</sub> emissions from the following facilities are limited, as indicated in the table below:

Process/facility Description (ID)	Filterable PM/PM <sub>10</sub> Emissions		Filterable Plus Condensable PM <sub>10</sub> Emissions (lb/ton iron produced)
	(gr/dscf)	(lb/hr)	
Line 3 and Line 4 shakeout operation (EU-4)	0.003	2.06	0.10

Line 1 and Line 2 shakeout operation (EU-5a) and return sand and waste sand system (EU-5bc)	0.003	3.34	0.12
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**D.3.2 Best Available Control Technology (BACT) for VOC Emissions [326 IAC 2-2] [326 IAC 8-1-6]**

Pursuant to 326 IAC 2-2-3 (PSD - BACT), 326 IAC 8-1-6 and PSD T033-21760-00042, the Permittee shall comply with VOC BACT for the shakeout operations (EU-4 and EU-5a) in Condition D.1.2.

**D.3.3 Best Available Control Technology (BACT) for CO Emissions [326 IAC 2-2] [326 IAC 8-1-6]**

Pursuant to 326 IAC 2-2-3 (PSD - BACT) and PSD T033-21760-00042, the Permittee shall comply with CO BACT for the shakeout operations (EU-4 and EU-5a) in Condition D.1.3.

**D.3.4 Lead Emissions [326 IAC 2-2]**

- (a) The lead emissions from the Line 3 and Line 4 shakeout operation (EU-4, stack S-4) shall not exceed 0.0012 pounds per ton of iron processed.
- (b) The lead emissions from the Line 1 and Line 2 shakeout operation (EU-5a, stack S-5) and return sand and waste sand system (EU-5bc, stack S-5) shall not exceed 0.0012 pounds per ton of iron processed.

Compliance with these limits and Conditions D.1.1(d), D.1.4, and D.2.4 will limit the source-wide lead emissions to less than 0.6 tons per twelve consecutive month period and render the requirements of 326 IAC 2-2 not applicable.

**D.3.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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

**Compliance Determination Requirements**

**D.3.6 Particulate Control**

- (a) Pursuant to 326 IAC 2-2, and in order to ensure compliance with Condition D.3.4(a), baghouse DC-4, used to control particulate emissions, shall be in operation and control at all times EU-4 is in operation.
- (b) Pursuant to 326 IAC 2-2, and in order to ensure compliance with Condition D.3.4(b), baghouse DC-5, used to control particulate emissions, shall be in operation and control at all times EU-5a and EU-5bc are in operation.

**D.3.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]**

- (a) In order to demonstrate the compliance status with Condition D.3.1, the Permittee shall perform PM/PM<sub>10</sub> testing for EU-4, EU-5a and EU-5bc utilizing methods approved by the Commissioner. PM<sub>10</sub> includes filterable and condensable PM<sub>10</sub>. These tests shall be repeated at least once every five (5) years after completion of the most recent valid compliance stack test.
- (b) In order to demonstrate the compliance status with Condition D.3.2, the Permittee shall perform the VOC testing for EU-4 and EU-5a required by Condition D.1.6(d).
- (c) In order to demonstrate the compliance status with Condition D.3.3, the Permittee shall perform the CO testing for EU-4 and EU-5a required by Condition D.1.6(b).
- (d) In order to demonstrate the compliance status with Condition D.3.4, the Permittee shall perform lead testing for EU-4 and EU-5a utilizing methods approved by the

Commissioner. These tests shall be repeated at least once every five (5) years after completion of the most recent valid compliance stack test.

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

#### **D.3.8 Visible Emissions Notations**

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- (a) Visible emission notations of the stack exhaust from EU-4, EU-5a and EU-5bc (stacks S-4 and S-5) 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. Failure to take response steps shall be considered a deviation from this permit. Section C – Response to Excursions or Exceedances contains the Permittee's obligations with regard to responding to the reasonable response steps required by this condition.

#### **D.3.9 Baghouse Parametric Monitoring**

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- (a) The Permittee shall record the pressure drop across the baghouses used in conjunction with EU-4, EU-5a and EU-5bc at least once per day when the respective facilities are in operation.
- (b) When for any one reading, the pressure drop is outside the normal range of 1.5 to 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (c) The instrument used for determining the pressure drop shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### **D.3.10 Broken or Failed Bag Detection**

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- (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 process 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).
- (c) For multi-compartment units, If operations continue after bag failure is observed and it will be 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.

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

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

### **D.3.11 Record Keeping Requirements**

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- (a) In order to document the compliance status with Condition D.3.7, the Permittee shall maintain records of the results from testing required by that condition.
- (b) In order to document the compliance status with Condition D.3.8, the Permittee shall maintain records of the visible emission notations required by that condition. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (c) In order to document the compliance status with Condition D.3.9, the Permittee shall maintain records of the pressure drop readings required by that condition. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of pressure drop reading (e.g. the process did not operate that day).
- (d) For extended periods of time when visible emissions notations and daily parametric monitoring are not required (e.g., the units are venting indoors or during plant shutdown), IDEM, OAQ has determined that it is sufficient to document the reason daily visible emissions notations and parametric monitoring will not be required on the first day of the period and document when the visible emissions notations and daily parametric monitoring requirement will resume.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**Before the operations of Baghouse DC-7 and Stack S-8**

**SECTION D.4**

**EMISSIONS UNIT OPERATION CONDITIONS**

**Emission Unit Description [326 IAC 2-7-5(15)]: Casting Finishing**

- (m) One (1) shot reblast unit; identified as EU-6; constructed in 1997; a nominal capacity of 1.12 tons of iron castings per hour; a maximum capacity of 5 tons of iron castings per hour; emissions controlled by baghouse DC-6 which exhausts to stack S-6.
- (n) One (1) shot blast system; consisting of four (4) shot blast units; identified as EU-16 through EU-19; constructed in 1999 and approved for modification in 2012; a total nominal capacity of 27 tons of iron castings per hour; a total maximum capacity of 32 tons of iron castings per hour; with emissions controlled by baghouse DC-7, which exhausts to stack S-8.
- (o) Eight (8) grinders; identified together as EU-7; constructed in 1999; a combined nominal capacity of 25 tons of iron castings per hour; a combined maximum capacity of 32 tons of iron castings per hour; emissions dust collectors; exhausting indoors.
- (p) Sand handling system; identified as (EU-1a); constructed in 1995 and modified in 2011; a nominal capacity of 220 tons of sand per hour; a maximum capacity of 250 tons of sand per hour and exhausting to stack S-1. The sand handling system is described as follows:
  - 1. Metal Separation controlled by baghouse DC-5
  - 2. Sand multi-cooler controlled by baghouse DC-5
  - 3. Return sand conveyor (no real collection)
  - 4. Return sand distribution conveyor controlled by baghouse DC-1
  - 5. Four (4) 250 ton return sand storage bins controlled by baghouse DC-1
  - 6. Four (4) sand mullors (Simpson 100B-250 Speedmullers) rated at 75 tons of sand per hour each and controlled by baghouse DC-10

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

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

**D.4.1 Best Available Control Technology (BACT) for PM/PM<sub>10</sub> Emissions [326 IAC 2-2-3]**

Pursuant to 326 IAC 2-2-3 (PSD – BACT) and PSD T033-21760-00042, the Permittee shall comply with the following:

- (a) PM/PM<sub>10</sub> emissions from the shot reblast unit (EU-6) shall be controlled by a baghouse.
- (b) PM/PM<sub>10</sub> emissions from the shot blast system (EU-16 through EU-19) shall be controlled by a baghouse.
- (c) PM/PM<sub>10</sub> emissions from the grinders (EU-7) shall be controlled by dust collectors and exhaust indoors.
- (d) PM/PM<sub>10</sub> emissions from the sand handling operations (EU-1a) shall be controlled by a baghouse.

The PM/PM<sub>10</sub> emissions from the following facilities are limited, as indicated in the table below:

Process/facility Description (ID)	PM/PM <sub>10</sub> Emissions	
	(gr/dscf)	(lb/hr)
Shot reblast unit (EU-6)	0.003	0.15
Shot blast system (EU-16 through EU-19)	0.003	0.95
Sand handling operations (EU-1a)	0.003	0.64
<u>Exhausts indoors:</u> Grinders (EU-7)	0.003	-

**D.4.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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

**Compliance Determination Requirements**

**D.4.3 Particulate Control**

- (a) Pursuant to 326 IAC 2-2, and in order to ensure compliance with Condition D.4.1, baghouse DC-6, used to control particulate emissions, shall be in operation and control at all times EU-6 is in operation.
- (b) Pursuant to 326 IAC 2-2, and in order to ensure compliance with Condition D.4.1, baghouse DC-3, used to control particulate emissions, shall be in operation and control at all times EU-16 through EU-19 are in operation.
- (c) Pursuant to 326 IAC 2-2, the dust collectors used in conjunction with EU-7, used to control particulate emissions, shall be in operation at all times EU-7 is in operation.
- (d) Pursuant to 326 IAC 2-2, baghouse DC-1, used to control particulate emissions, shall be in operation at all times EU-1a is in operation.

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

**D.4.4 Visible Emissions Notations [40 CFR 64]**

- (a) Visible emission notations of the stack exhaust from EU-6, EU-16 through EU-19 and EU-1a (stacks S-6, S-15 and S-1) 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. Failure to take response steps shall be considered a deviation from this permit. Section C – Response to Excursions or Exceedances contains the Permittee's obligations with regard to responding to the reasonable response steps required by this condition.

#### D.4.5 Baghouse Parametric Monitoring [40 CFR 64]

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- (a) The Permittee shall record the pressure drop across the baghouses used in conjunction with EU-6, EU-16 through EU-19, and EU-1a at least once per day when the respective facilities are in operation.
- (b) When for any one reading, the pressure drop is outside the normal range of 1.5 to 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (c) The instrument used for determining the pressure drop shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### D.4.6 Broken or Failed Bag Detection [40 CFR 64]

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- (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 process 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).
- (c) For multi-compartment units, If operations continue after bag failure is observed and it will be 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.

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

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

#### D.4.7 Record Keeping Requirements

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- (a) In order to document the compliance status with Condition D.4.4, the Permittee shall maintain records of the visible emission notations required by that condition. 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) In order to document the compliance status with Condition D.4.5, the Permittee shall maintain records of the pressure drop readings required by that condition. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of pressure drop reading (e.g. the process did not operate that day).
- (c) For extended periods of time when visible emissions notations and daily parametric monitoring are not required (e.g., the units are venting indoors or during plant shutdown), IDEM, OAQ Compliance Branch has determined that it is sufficient to document the reason daily visible emissions notations and parametric monitoring will not be required on the first day of the period and document when the visible emissions notations and daily parametric monitoring requirement will resume.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**Effective after the operations of Baghouse DC-7 and Stack S-8**

**SECTION D.4**

**EMISSIONS UNIT OPERATION CONDITIONS**

**Emission Unit Description [326 IAC 2-7-5(15)]: Casting Finishing**

- (n) One (1) shot blast system; consisting of four (4) shot blast units; identified as EU-16 through EU-19; constructed in 1999 and approved for modification in 2012; a total nominal capacity of 27 tons of iron castings per hour; a total maximum capacity of 32 tons of iron castings per hour; with emissions controlled by baghouse DC-7, which exhausts to stack S-8.
- (o) Sand handling system; identified as (EU-1a); constructed in 1995 and modified in 2011; a nominal capacity of 220 tons of sand per hour; a maximum capacity of 250 tons of sand per hour and exhausting to stack S-1. The sand handling system is described as follows:
  - 1. Metal Separation controlled by baghouse DC-5
  - 2. Sand multi-cooler controlled by baghouse DC-5
  - 3. Return sand conveyor (no real collection)
  - 4. Return sand distribution conveyor controlled by baghouse DC-1
  - 5. Four (4) 250 ton return sand storage bins controlled by baghouse DC-1
  - 6. Four (4) sand mullors (Simpson 100B-250 Speedmullers) rated at 75 tons of sand per hour each and controlled by baghouse DC-10

**Insignificant Activities**

- (f) Eight (8) grinders; identified together as EU-7; constructed in 1999 and approved for modification in 2012; a combined nominal capacity of 25 tons of iron castings per hour; a combined maximum capacity of 32 tons of iron castings per hour; emissions controlled by individual dust collectors which have a gas flow rate of less than 4,000 cfm each, and which have a grain loading of less than or equal to (0.03) grains per actual cubic foot, and which exhaust indoors. [326 IAC 2-7-1(21)(G)(xxiii)]

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

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

**D.4.1 Best Available Control Technology (BACT) for PM/PM<sub>10</sub> Emissions [326 IAC 2-2-3]**

Pursuant to 326 IAC 2-2-3 (PSD – BACT) and PSD T033-21760-00042, the Permittee shall comply with the following:

- (a) PM/PM<sub>10</sub> emissions from the shot blast system (EU-16 through EU-19) shall be controlled by a baghouse.
- (b) PM/PM<sub>10</sub> emissions from the grinders (EU-7) shall be controlled by dust collectors and exhaust indoors.
- (c) PM/PM<sub>10</sub> emissions from the sand handling operations (EU-1a) shall be controlled by a baghouse.

The PM/PM<sub>10</sub> emissions from the following facilities are limited, as indicated in the table below:

Process/facility Description (ID)	PM/PM <sub>10</sub> Emissions	
	(gr/dscf)	(lb/hr)
Shot blast system (EU-16 through EU-19)	0.003	0.95

Sand handling operations (EU-1a)	0.003	0.64
<u>Exhausts indoors:</u> Grinders (EU-7)	0.003	-

#### D.4.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

### Compliance Determination Requirements

#### D.4.3 Particulate Control

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- (a) Pursuant to 326 IAC 2-2, and in order to comply with Condition D.4.1, baghouse DC-3, used to control particulate emissions, shall be in operation and control at all times EU-16 through EU-19 are in operation.
- (b) Pursuant to 326 IAC 2-2, the dust collectors used in conjunction with EU-7, used to control particulate emissions, shall be in operation and control at all times EU-7 is in operation.
- (c) Pursuant to 326 IAC 2-2, baghouse DC-1, used to control particulate emissions, shall be in operation at all times EU-1a is in operation.

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

#### D.4.4 Visible Emissions Notations [40 CFR 64]

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- (a) Visible emission notations of the stack exhaust from EU-16 through EU-19 and EU-1a shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions and Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation from this permit.

#### D.4.5 Baghouse Parametric Monitoring [40 CFR 64]

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- (a) The Permittee shall record the pressure drop across the baghouses used in conjunction with EU-16 through EU-19, and EU-1a at least once per day when the respective facilities are in operation.
- (b) When for any one reading, the pressure drop is outside the normal range of 1.5 to 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances

contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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

#### **D.4.6 Broken or Failed Bag Detection [40 CFR 64]**

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- (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 process 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).
- (c) For multi-compartment units, If operations continue after bag failure is observed and it will be 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.

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

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

##### **D.4.7 Record Keeping Requirements**

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- (a) In order to document the compliance status with Condition D.4.4, the Permittee shall maintain records of the visible emission notations required by that condition. 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) In order to document the compliance status with Condition D.4.5, the Permittee shall maintain records of the pressure drop readings required by that condition. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of pressure drop reading (e.g. the process did not operate that day).
- (c) For extended periods of time when visible emissions notations and daily parametric monitoring are not required (e.g., the units are venting indoors or during plant shutdown), IDEM, OAQ Compliance Branch has determined that it is sufficient to document the reason daily visible emissions notations and parametric monitoring will not be required on the first day of the period and document when the visible emissions notations and daily parametric monitoring requirement will resume.

All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**SECTION D.5**

**EMISSIONS UNIT OPERATION CONDITIONS**

**Emission Unit Description [326 IAC 2-7-5(15)]: Specifically Regulated Insignificant Activities**

- (a) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment cutting torches, soldering equipment, welding equipment [326 IAC 6-3-2].
- (b) One (1) test sample blast machine; identified as EU-1b; constructed in 1995; a nominal capacity of 150 pounds of metal per hour; emissions controlled by baghouse DC-1; exhausting to stack S-1. [326 IAC 6-3-2]
- (c) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 25 lb/day PM; 5 lb/hr or 25 lb/day SO<sub>2</sub>; 5 lb/hr or 25 lb/day NO<sub>x</sub>; 3 lb/hr or 15 lb/day VOC; 0.6 tons per year Pb; 1.0 ton/yr of a single HAP, or 2.5 ton/yr of any combination of HAPs: Scrap receiving operations: All metal scrap is received via truck and deposited into scrap storage bins within a building. A source of fugitive emissions. [326 IAC 6-4]
- (d) Paved and unpaved roads and parking lots with public access [326 IAC 6-4].
- (e) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations, which include the following: Two (2) enclosed grinding units controlled by fabric filters and exhausting inside the building; and One (1) test sample blast machine; identified as EU-1b; constructed in 1995 controlled by fabric filters and exhausting inside the building. [326 IAC 6-3-2]

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

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

**D.5.1 Particulate Emission Limitations from Manufacturing Processes [326 IAC 6-3-2]**

Pursuant to 326 IAC 6-3-2, the particulate emissions from the insignificant grinding, brazing, soldering, and welding operations and test sample blast machine shall be limited by the following:

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

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

**SECTION D.6**

**EMISSIONS UNIT OPERATION CONDITIONS**

**Emission Unit Description [326 IAC 2-7-5(15)]: Ductile Iron Conversion Process**

- (p) One (1) ductile iron conversion process: one identified as EU-20; constructed in 2009, with a nominal capacity of 30 tons of metal per hour, and a maximum capacity of 35 tons of metal per hour; 58% of particulate emissions controlled by baghouse System 20 to stack S-20; Production limited to 95,000 tons per rolling 12-months period.

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

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

**D.6.1 PSD Minor Limits [326 IAC 2-2]**

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable to this modification, the following conditions shall apply:

- (a) The total melt rate for ductile iron production shall not exceed 95,000 tons per 12 consecutive month period with compliance determined at the end of each month.
- (b) The uncontrolled PM emissions from the DIC tundish shall not exceed 0.50652 lb/ton.
- (c) The uncontrolled PM<sub>10</sub> emissions from the DIC tundish shall not exceed 0.3024 lb/ton.
- (d) The PM emissions from EU-20, after the baghouse System 20, shall not exceed 0.014 lb/ton.
- (e) The PM<sub>10</sub> emissions from EU-20, after the baghouse System 20, shall not exceed 0.01 lb/ton.

Compliance with these limits shall limit the PM and PM<sub>10</sub> emissions to less than 25 and 15 tons per twelve consecutive month period, respectively, and render the requirements of 326 IAC 2-2 not applicable to this modification.

**D.6.2 Particulate Emission Limitations from Manufacturing Processes [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 ductile iron conversion process, identified as EU-20, shall not exceed 43.60 pounds per hour when operating at a process weight rate of 45 tons per hour. The pounds per hour limitation was calculated using the following equation:

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

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

**D.6.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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

## Compliance Determination Requirements

### D.6.4 Particulate Control

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- (a) In order to ensure compliance with Condition D.6.1, baghouse System 20 shall be in operation and control at all times when EU-20 is 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.

### D.6.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

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The Permittee shall perform inlet and outlet PM and PM<sub>10</sub> testing on baghouse System 20 controlling the ductile iron conversion (DIC) process (EU-20) using methods as approved by the Commissioner, in order to demonstrate the compliance status with the PM and PM<sub>10</sub> limits. PM<sub>10</sub> includes filterable and condensable emissions. These tests shall be repeated at least once every five (5) years after completion of the most recent valid compliance stack test. Testing shall be conducted in accordance with Section C - Performance Testing.

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

### D.6.6 Parametric Monitoring

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- (a) The Permittee shall determine the fan amperage from the most recent valid stack that demonstrates compliance with condition D.6.1, as approved by IDEM.
- (b) The fan amperage shall be observed at least once per day when the baghouse System 20 is in operation. On and after the date the approved stack test results are available, the fan amperage shall be maintained within the normal range as established in the most recent compliant stack test. When for any one reading the fan amperage is outside the range established in the most recent compliant stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A reading that is outside the range as established in the most recent compliant stack test 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.

### D.6.7 Broken or Failed Bag Detection

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- (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 process 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).
- (c) For multi-compartment units, If operations continue after bag failure is observed and it will be 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.

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

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

#### **D.6.8 Record Keeping Requirements**

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- (a) In order to document the compliance status condition D.6.1, the permittee shall maintain records of the total ductile iron produced each month (comprising EU-20).
- (b) In order to document the compliance status Condition D.6.5, the Permittee shall maintain records of the results from the testing required by that condition.
- (c) In order to document the compliance status Condition D.6.6, the Permittee shall maintain records of the fan amperage required by that condition. The Permittee shall include in its daily record when a fan amperage is not taken and the reason for the lack of a fan amperage (e.g. the process did not operate that day).
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### **D.6.9 Reporting Requirements**

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A quarterly summary of the information to document the compliance status with the twelve-month rolling limit in Condition D.6.1(a) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## SECTION D.7

## EMISSIONS UNIT OPERATION CONDITIONS

### Emission Unit Description [326 IAC 2-7-5(15)]: Phenolic Urethane Cold Box (PUCB)

- (p) One (1) Phenolic Urethane Cold Box (PUCB) core production process with a nominal capacity of 2.9 tons of cores per hour, approved for construction in 2012, consisting of the following units:
1. Two (2) 65 ton core sand silos identified as EU-30a and EU-30b each controlled by a bin vent filter exhausting inside the building.
  2. One (1) Core sand mixer and sand transport system, identified as EU-30b, with a nominal capacity of 2.9 tons per hour, with emissions vented back to the core sand silo.
  3. One (1) PUCB core machine, identified as EU30c with a nominal capacity of 2.9 tons of cores/hour, each using a tertiary amine catalyst gas controlled by an acid scrubber, identified as SC-1 venting to stack SC-1.
  4. One (1) water based core wash; and
  5. One (1) 1.5 MMBtu per hr natural gas fired drying oven.
- (q) One (1) Warm Box Core production process with a nominal capacity of 2.9 tons cores per hour, approved for construction in 2012, consisting of the following units:
- (1) One (1) 65 ton core sand silo, identified as EU-31a controlled by a bin vent filter exhausting inside the building; and
  - (2) One (1) warm box core machine, identified as EU31b with a nominal capacity of 2.9 tons of cores/hour and 0.6 MMBtu per hr of natural gas.

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

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

#### D.7.1 Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2][326 IAC 6-3-2]

The Permittee shall comply with the following limits:

- (a) The throughput of sand to the PUCB Core Production and the Warm Box Core Production, each, shall be less than 25,404 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) The total PM emissions from PUCB Core Production and the Warm Box Core Production, shall be less than 0.925 pound per ton of core throughput, each.
- (c) The total PM<sub>10</sub> emissions from PUCB Core Production and the Warm Box Core Production, shall be less than 0.52 pound per ton of core throughput, each.
- (d) The total PM<sub>2.5</sub> emissions from PUCB Core Production and the Warm Box Core Production, shall be less than 0.32 pound per ton of core throughput, each.

Compliance with these limits will ensure that the emissions from the PUCB Core Production and Warm Box Core Production for PM are less than 25 tons per year, PM10 emissions less than 15 tons per year and PM2.5 emissions are less than 10 tons per year, and render the requirements of 326 IAC 2-2 (PSD) not applicable to the 2012 modification.

Note: Complying with 326 IAC 2-2 (PSD) will satisfy for 326 IAC 6-3-2.

#### D.7.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

### **Compliance Determination Requirements**

#### D.7.3 Particulate Emissions Control

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In order to ensure compliance with Condition D.7.1, fabric bin vent filter for particulate control shall be in operation and control emissions from the Core Sand Silos and Core Sand Handling at all times that the associated emission unit are in operation.

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

#### D.7.4 Record Keeping Requirements

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- (a) To document compliance with Condition D.7.1(a), the Permittee shall maintain records of the sand throughput to the Core Production and the Warm Box Core Production for each month.
- (b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.

#### D.7.5 Reporting Requirements

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A quarterly summary of the information to document the compliance status with Condition D.7.1(a) shall be submitted, using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days following the end of each calendar quarter. 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 C - General Reporting Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

## SECTION E.1

## EMISSIONS UNIT OPERATION CONDITIONS

### **Emission Unit Description [326 IAC 2-7-5(15)]:**

The charging, melting, ladle metallurgy, holding and transfer system; identified collectively as EU-2 and listed in Section D.1.

The pouring and casting operations; identified as EU-3a1 through EU-3a4 and listed in Section D.1.

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

### **National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements – 40 CFR Part 63, Subpart EEEEE [326 IAC 2-7-5(1)]**

#### **E.1.1 General Provisions Relating to National Emissions Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [326 IAC 20-92] [40 CFR Part 63, Subpart A]**

- (a) Pursuant to 326 IAC 20-92 and 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 iron and steel foundry and all activities associated with the iron and steel foundry as specified in 40 CFR 63.7682(b), and in Table 1 of 40 CFR Part 63, Subpart EEEEE in accordance with schedule in 40 CFR Part 63, Subpart EEEEE.
- (b) Pursuant to 326 IAC 20-92 and 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

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

#### **E.1.2 National Emissions Standards for Hazardous Air Pollutants for Iron and Steel Foundries: Requirements [40 CFR Part 63, Subpart EEEEE]**

Except as specified in 40 CFR 63.7683(b), pursuant to 326 IAC 20-92 and 40 CFR 63.7683(a), the Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart EEEEE for the electric induction furnaces associated with facility EU-2, the pouring and casting operations (EU-3a1, EU-3a2, EU-3a3 and EU-3a4) and the fugitive emissions from foundry operations no later than April 23, 2007:

- (1) 40 CFR 63.7681
- (2) 40 CFR 63.7682
- (3) 40 CFR 63.7683 (a), (b), (f)
- (4) 40 CFR 63.7690 (a)(1), (a)(5), (a)(7)
- (5) 40 CFR 63.7700 (a), (b), (c)(1)(i), (c)(2), (c)(3)
- (6) 40 CFR 63.7710 (a), (b)(1), (b)(3) - (b)(6)
- (7) 40 CFR 63.7720
- (8) 40 CFR 63.7730 (a), (b)
- (9) 40 CFR 63.7731
- (10) 40 CFR 63.7732 (a), (b)(1), (b)(2), (b)(4), (c)(1), (c)(2), (c)(4), (d), (h)
- (11) 40 CFR 63.7733 (e), (f)
- (12) 40 CFR 63.7734 (a)(1), (a)(5), (a)(7)
- (13) 40 CFR 63.7735 (a), (b)
- (14) 40 CFR 63.7736 (c), (d)
- (15) 40 CFR 63.7740 (b), (f)
- (15) 40 CFR 63.7741 (b)(14)
- (16) 40 CFR 63.7742

- (17) 40 CFR 63.7743 (a)(1), (a)(5), (a)(7), (c)
- (18) 40 CFR 63.7744 (a)
- (19) 40 CFR 63.7745
- (20) 40 CFR 63.7746
- (21) 40 CFR 63.7747 (b) - (d)
- (22) 40 CFR 63.7750 (a), (b), (d), (e)
- (23) 40 CFR 63.7751
- (24) 40 CFR 63.7752
- (25) 40 CFR 63.7753
- (26) 40 CFR 63.7760
- (27) 40 CFR 63.7761
- (28) 40 CFR 63.7765
- (29) Table 1 of Subpart EEEEE

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: Metal Technologies Auburn, LLC  
Source Address: 1537 West Auburn Drive, Auburn, Indiana 46706  
Part 70 Permit No.: T033-21760-00042

**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: Metal Technologies Auburn, LLC  
Source Address: 1537 West Auburn Drive, Auburn, Indiana 46706  
Part 70 Permit No.: T 033-21760-00042

**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), no later than four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
  - The Permittee must submit notice in writing or by facsimile no later than 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 <sub>10</sub> , SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

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

**Part 70 Quarterly Report**

Source Name: Metal Technologies Auburn, LLC  
Source Address: 1537 West Auburn Drive, Auburn, Indiana 46706  
Part 70 Permit No.: T033-21760-00042  
Facility: Electric Induction Furnaces (comprising EU-2)  
Parameter: metal production  
Limit: The total iron production shall not exceed 220,000 tons per twelve consecutive month period with compliance determined at the end of each month.

QUARTER :

YEAR:

Month	Iron production	Iron production	Iron production
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.  
Deviation has been reported on:

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

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

**Part 70 Quarterly Report**

Source Name: Metal Technologies Auburn, LLC  
Source Address: 1537 West Auburn Drive, Auburn, Indiana 46706  
Part 70 Permit No.: T033-21760-00042  
Facility: Ductile Iron Conversion Process (EU-20)  
Parameter: Ductile Iron Production  
Limit: The total ductile iron production shall not exceed 95,000 tons per twelve consecutive month period with compliance determined at the end of each month.

QUARTER :

YEAR:

Month	Iron production	Iron production	Iron production
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.

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

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

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

**Part 70 Quarterly Report**

Source Name: Metal Technologies Auburn, LLC  
Source Address: 1537 West Auburn Drive, Auburn, Indiana 46706  
Part 70 Permit No.: T033-21760-00042  
Facility: PUCB Core and Warm Box Production  
Parameter: Sand Throughput  
Limit: Less than 25,404 tons per twelve consecutive month period with compliance determined at the end of each month, each.

QUARTER :

YEAR:

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

No deviation occurred in this quarter.

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

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

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

**PART 70 OPERATING PERMIT  
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Metal Technologies Auburn, LLC  
Source Address: 1537 West Auburn Drive, Auburn, Indiana 46706  
Part 70 Permit No.: T033-21760-00042

**Months:** \_\_\_\_\_ **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".	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

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

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

**Attachment A  
to a Part 70 Operating Permit**

**40 CFR 63, Subpart EEEEE—National Emission Standards for  
Hazardous Air Pollutants for Iron and Steel Foundries**

<b>Source Name:</b>	Metal Technologies Auburn, LLC
<b>Source Location:</b>	1537 West Auburn Drive, Auburn, IN 46706
<b>County:</b>	Dekalb
<b>SIC Code:</b>	3321
<b>Operation Permit No.:</b>	T033-21760-00042
<b>Operation Permit Issuance Date:</b>	August 29, 2008
<b>Permit Reviewer:</b>	Josiah Balogun

***Subpart EEEEE—National Emission Standards for Hazardous Air  
Pollutants for Iron and Steel Foundries***

**Source:** 69 FR 21923, Apr. 22, 2004, unless otherwise noted.

***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.

## **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:

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

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:

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

Where:

$EF_{\text{TMHAP}}$  = Emissions rate of total metal HAP, pounds of total metal HAP per ton (lb/ton) of metal charged;

$C_{\text{TMHAP}}$  = Concentration of total metal HAP measured during performance test run, gr/dscf;

$Q$  = Volumetric flow rate of exhaust gas, dscfm;

$M_{\text{charge}}$  = Mass of metal charged during performance test run, tons;

$t_{\text{test}}$  = 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:

$$E F_{\text{VOHAP}} = C_{\text{VOHAP}} \times \left( \frac{Q}{M_{\text{air}}} \right) \times \left( \frac{t_{\text{wet}}}{7,000} \right) \quad (\text{Eq. 2})$$

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

%O<sub>2</sub>= 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:

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

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:

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

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

$Q_i$  = 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 than 1/5 of 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:

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

Where:

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

$E_o$  = 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  $C_{wis}$  the flow-weighted average emissions limit for PM or total metal HAP in the exhaust stream, gr/dscf; and  $C_{iis}$  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  $E_{iis}$  the mass emissions rate of PM or total metal HAP at the control device inlet, lb/hr and  $E_{ois}$  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:

$$C_{released} = C_i \times \left( 1 - \frac{\% \text{reduction}}{100} \right) \quad (\text{Eq. 7})$$

Where:

$C_{released}$ = Calculated concentration of PM (or total metal HAP) predicted to be released to the atmosphere from the regulated emissions source, gr/dscf; and

$C_i$ = 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.

**§ 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 §63.7732(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 (knead 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  $\pm 0.1$ ; 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 than 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 through 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]

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**Indiana Department of Environmental Management  
Office of Air Quality**

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

**Source Description and Location**

Source Name:	<b>Metal Technologies Auburn, LLC</b>
Source Location:	<b>1537 West Auburn Drive, Auburn, IN 46706</b>
County:	<b>Dekalb</b>
SIC Code:	<b>3321</b>
Operation Permit No.:	<b>T033-21760-00042</b>
Operation Permit Issuance Date:	<b>August 29, 2008</b>
Significant Source Modification No.:	<b>033-31731-00042</b>
Significant Permit Modification No.:	<b>033-31732-00042</b>
Permit Reviewer:	<b>Josiah Balogun</b>

**Existing Approvals**

The source was issued Part 70 Operating Permit No. T033-21760-00042 on August 29, 2008. The source has since received the following approvals:

- (a) Interim Minor source Modification No. 033-268261-00042, issued on August 14, 2008;
- (b) Administrative Amendment No. 083-26953-00042, issued on October 21, 2008;
- (c) Significant Permit Modification No. 083-28001-00042, issued on January 30, 2009;
- (d) Minor Source Modification No. 083-27648-00042, issued on April 3, 2009;
- (e) Significant Permit Modification No. 083-27652-00042, issued on May 21, 2009;
- (f) Minor Source Modification No. 083-28412-00042, issued on October 15, 2009;
- (g) Minor Permit Modification No. 083-28467-00042, issued on December 11, 2009;
- (h) Significant Permit Modification No. 033-29247-00042, issued on July 12, 2010;
- (i) Significant Source Modification No. 033-30771-00042, issued on November 21, 2011; and
- (j) Significant Permit Modification No. 033-30795-00042, issued on December 8, 2011.

### County Attainment Status

The source is located in DeKalb County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Not designated.
<sup>1</sup> 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 PM <sub>2.5</sub> .	

- (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. DeKalb County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) **PM<sub>2.5</sub>**  
DeKalb County has been classified as attainment for PM<sub>2.5</sub>. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM<sub>2.5</sub> 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<sub>2.5</sub> significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct PM<sub>2.5</sub> and SO<sub>2</sub> 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**  
DeKalb County has been classified as attainment or unclassifiable in Indiana for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

### Fugitive Emissions

Since this source is classified as a secondary metal production plant, it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7. Therefore, fugitive emissions are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

**Source Status**

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 <sub>10</sub>	< 100
PM <sub>2.5</sub>	< 100
SO <sub>2</sub>	< 100
VOC	> 100
CO	> 100
NO <sub>x</sub>	< 100
GHGs as CO <sub>2</sub> e	-----
<b>HAPs</b>	
Single HAP	> 10
Total HAPs	> 25

- (a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).
- (b) These emissions are based upon Significant Permit Modification No. 033-30795-00042, issued on December 8, 2011.

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 Metal Technologies Auburn, LLC on November 29, 2011, relating to the addition of one warm box core machine, and a new cold box core process. The project also involves modification to the cooling lines and shakeout for Lines 3 and 4. The modification generally includes the followings:

MTA is planning to expand and modify the operations of this facility:

- The shakeout/casting cooling process for line 4 will be controlled by the DC-4 baghouse as it currently is, and line 3 shakeout/casting cooling will be controlled by DC-3 baghouse which is currently used to control the blast units.
- The blast units, including the modified unit (EU-19) will now be controlled by a new DC-7 collector and the exhaust will be vented to stack S-8.
- The grinding processes as modified will continue to be controlled by small internally vented dust collectors.

The following are the list of the proposed and modified) emission units and pollution control device(s):

- (a) One (1) **gray** iron charging, melting, ladle metallurgy, holding and transfer system;

identified as EU-2; constructed in 1995; a nominal capacity of ~~36~~**30** tons of metal per hour; a maximum capacity of 45 tons of metal per hour; emissions controlled by baghouses DC-2 and DC-8; emissions exhaust to stacks S-2 & S-8. The transfer operations refer to the transfer of metal from the holding furnace to the ladle. The system consists of the following equipment/operations:

- (1) One (1) furnace charging operation;
- (2) Three (3) electric induction furnaces;
- (3) One (1) ladle metallurgical station; and
- (4) One (1) electric holding furnace.

The three (3) electric induction furnaces are considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.

- (b) One (1) Line 1 pouring and casting operation; identified as EU-3a1; constructed in 1995 and modified in 2008; a nominal capacity of 10 tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; particulate emissions controlled by baghouse DC-8; emissions exhaust to Stack S-8. EU-3a1 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.
- (c) One (1) Line 2 pouring and casting operation; identified as EU-3a2; constructed in 1995; modified in 2009, a nominal capacity of 10 tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; particulate emissions controlled by baghouse DC-2; emissions exhaust to stack S-2. EU-3a2 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.
- (d) One (1) Line 3 pouring and casting operation; identified as EU-3a3; constructed in 1995, ~~and to be modified in 2008 and approved for modification in 2012~~; a nominal capacity of ~~9~~ **11** tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; particulate emissions controlled by baghouse DC-8; emissions exhaust to stack S-8. EU-3a3 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.
- (e) One (1) Line 4 pouring and casting operation; identified as EU-3a4; constructed in 1995 ~~and approved for modification in 2012~~; a nominal capacity of ~~9~~ **11** tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; particulate emissions controlled by baghouse DC-8; emissions exhaust to stack S-8. EU-3a4 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.
- (f) One (1) Line 1 ~~casting mold~~ cooling operation; identified as EU-3b1; constructed in 1995; a nominal capacity of 10 tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; emissions exhaust to stack S-3b.
- (g) One (1) Line 2 ~~casting mold~~ cooling operation; identified as EU-3b2; constructed in 1995; a nominal capacity of ~~9~~ **10** tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; emissions exhaust to stack S-3b.
- (h) One (1) Line 3 ~~casting mold~~ cooling operation; identified as EU-3b3; constructed in 1995 ~~and approved for modification in 2012~~; a nominal capacity of ~~9~~ **11** tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; emissions exhaust to stack S-3d.
- (i) One (1) Line 4 ~~casting mold~~ cooling operation; identified as EU-3b4; constructed in 1995

**and approved for modification in 2012**; a nominal capacity of ~~9~~ **11** tons of metal and 55 tons of sand per hour; a maximum capacity of ~~11.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; emissions exhaust to stack S-3d.

- (j) One (1) Line 3 and Line 4 shakeout/**casting cooling** operation; identified as EU-4; constructed in 1995 **and approved for modification in 2012**; **consisting of the following equipment/operations**: ~~a nominal capacity of 18 tons of metal and 110 tons of sand per hour; a maximum capacity of 22.5 tons of metal and 125 tons of sand per hour; particulate emissions controlled by baghouses DC-4 and DC-8; emissions exhaust to stacks S-4 and S-8.~~
- (1) **Line 3 shakeout/ casting cooling operation identified as EU-4a with a nominal capacity of 11 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour, particulate emissions controlled by baghouse DC-3 and exhausting to stacks S-15.**
- (2) **Line 4 shakeout/ casting cooling operation identified as EU-4b with a nominal capacity of 11 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour, particulate emissions controlled by baghouse DC-4, emissions exhausting to stack S-4.**
- (k) One (1) shot reblast unit; identified as EU-6; constructed in 1997; a nominal capacity of 1.12 tons of iron castings per hour; a maximum capacity of 5 tons of iron castings per hour; emissions controlled by baghouse DC-8, which exhausts to stack S-8.
- (l) One (1) shot blast system; consisting of four (4) shot blast units; identified as EU-16 through EU-19; constructed in 1999 **and approved for modification in 2012**; a total nominal capacity of 27 tons of iron castings per hour; a total maximum capacity of 32 tons of iron castings per hour; with emissions controlled by baghouse DC-3, which exhausts to stack S-845.
- (m) One (1) ductile iron conversion process: **one** identified as EU-20; constructed in 2009, with a nominal capacity of ~~36~~ **30** tons of metal per hour, and a maximum capacity of ~~45~~ **35** tons of metal per hour; 58% of particulate emissions controlled by baghouse System 20 to stack S-20; Production limited to 95,000 tons per rolling 12-months period.
- (n) **One (1) Phenolic Urethane Cold Box (PUCB) core production process with a nominal capacity of 2.9 tons of cores per hour, approved for construction in 2012, consisting of the following units:**
- 1. Two (2) 65 ton core sand silos identified as EU-30a and EU-30b each controlled by a bin vent filter exhausting inside the building.**
  - 2. One (1) Core sand mixer and sand transport system, identified as EU-30b, with a nominal capacity of 2.9 tons per hour, with emissions vented back to the core sand silo.**
  - 3. One (1) PUCB core machine, identified as EU30c with a nominal capacity of 2.9 tons of cores/hour, each using a tertiary amine catalyst gas controlled by an acid scrubber, identified as SC-1 venting to stack SC-1.**
  - 4. One (1) water based core wash; and**
  - 5. One (1) 1.5 MMBtu per hr natural gas fired drying oven.**

- (o) **One (1) Warm Box Core production process with a nominal capacity of 2.9 tons cores per hour, approved for construction in 2012, consisting of the following units;**
  - (1) **One (1) 65 ton core sand silo, identified as EU-31a controlled by a bin vent filter exhausting inside the building; and**
  - (2) **One (1) warm box core machine, identified as EU31b with a nominal capacity of 2.9 tons of cores/hour and 0.6 MMBtu per hr of natural gas.**

**Insignificant Activities**

- (a) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations, which include the following: Two (2) enclosed grinding units controlled by fabric filters and exhausting inside the building; **and One (1) test sample blast machine; identified as EU-1b; constructed in 1995 controlled by fabric filters and exhausting inside the building. [326 IAC 6-3-2]**

**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.

<b>Increase in PTE Before Controls of the Modification</b>	
<b>Pollutant</b>	<b>Potential To Emit (ton/yr)</b>
PM	1053.67
PM <sub>10</sub>	632.31
PM <sub>2.5</sub>	365.60
SO <sub>2</sub>	0.033
VOC	328.67
CO	1108.43
NO <sub>x</sub>	5.56
CO <sub>2e</sub>	8515.85
Pb	neg
Single HAPs	< 10
Total HAPs	< 25

This source modification is subject to 326 IAC 2-7-10.5(f)(4) and (7), because the potential to emit of PM, PM<sub>10</sub>, PM<sub>2.5</sub> and VOC are greater than twenty-five (25) tons per year, each and CO emission is greater than 100 tons per year, therefore this modification will be revised as a significant source modification. Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d), because it requires a case-by-case determination of an emission limitation.

**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.

<b>Past Actual to Future Projected Analysis for Modification</b>								
	<b>PM (tons)</b>	<b>PM<sub>10</sub> (Tons)</b>	<b>PM<sub>2.5</sub> (tons)</b>	<b>SO<sub>2</sub></b>	<b>VOC</b>	<b>NOx</b>	<b>CO</b>	<b>Lead</b>
Projected Act. for Modification	55.79	45.96	45.96	2.21	202.75	2.00	660.76	0.59
Baseline Act. emissions for Modification	44.62	36.46	36.46	1.79	151.95	0.89	536.31	0.48
Baseline Actual To Projected Actual emission for Modification	11.17	9.50	9.50	0.42	50.80	1.11	124.45	0.11
<b>Additional emissions that could have been accommodated</b>	9.89	8.17	8.17	0.41	35.05	0.21	123.69	0.11

<b>Net Emission for ATPA</b>	<b>1.28</b>	<b>1.33</b>	<b>1.33</b>	<b>0.01</b>	<b>15.75</b>	<b>0.9</b>	<b>0.76</b>	<b>0.00</b>
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Process/Emission Unit	Potential to Emit (ton/yr)								
	PM	PM <sub>10</sub>	PM <sub>2.5</sub> *	SO <sub>2</sub>	VOC	CO	NOx	Pb	GHGs as CO <sub>2e</sub>
<b>Total emission increase from ATPA (Existing Unit)</b>	1.28	1.33	1.33	0.01	15.75	0.76	0.9	0.00	---
<b>PUCB Core Production</b>	11.7	6.6	4.06	0	15.62	0	0	0	0
<b>PUCB DMIPA</b>	0	0	0	0	0.000079	0	0	0	0
<b>Warm Box Core Production</b>	11.7	6.6	4.06	0	0	0	0	0	0
<b>Natural Gas Combustion</b>	0.106	0.423	0.423	0.033	0.31	4.67	5.56	3E-05	6676.2
<b>Total Emission for the Modification</b>	24.79	14.95	9.87	0.04	31.68	5.43	6.46	neg	6676.2
<b>Significant Level</b>	25	15	10	40	40	100	40	40	75,000 CO <sub>2e</sub>

The Permittee completed an Actual to Projected test (pursuant to 326 IAC 2-2-2, and 326 IAC 2-1.1-5) for this modification at a major stationary source that indicates that the modification will not be major for Prevention of Significant Deterioration (PSD) (326 IAC 2-2) or Nonattainment NSR (326 IAC 2-1.1.5 ). IDEM, OAQ has not reviewed this information and will not be making any determination in this regard as part of this approval. The applicant will be required to keep records and report in accordance with 326 IAC 2-2-8 (Source Obligation).

This modification to an existing major stationary source is not major because the emissions increases are less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

<b>Federal Rule Applicability Determination</b>
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- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:
- (1) has a potential to emit before controls equal to or greater than the Part 70 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 new emission units have the potential to emit regulated pollutants (uncontrolled) less than the major source thresholds.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to any of the new units as part of this modification.

- (b) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.

- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) applicable to this proposed modification. The source is already subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) - Iron and Steel Foundries (326 IAC 20-92 and 40 CFR Part 63, Subpart EEEEE). Pursuant to 40 CFR 63.7681 and 40 CFR 63.7765, the source is a gray iron foundry and is a major source of HAPs (as defined by 40 CFR 63.2).

### State Rule Applicability Determination

#### **326 IAC 2-2 (Prevention of Significant Deterioration)**

This source is a major source for PSD because the potential to emit of one of the regulated pollutants are emitted at a rate greater than 100 tons per year is in 1 of 28 source categories. The uncontrolled potential to emit of this modification is greater than 25 tons per year for PM, greater than 15 tons per year for PM<sub>10</sub> and greater than 10 tons per year for PM<sub>2.5</sub>. In order to make the requirements of 326 IAC 2-2 (PSD) not applicable to the 2012 modification, the Permittee has taken the following limits:

- (a) The throughput of sand to the PUCB Core Production and the Warm Box Core Production, each, shall be less than 25,404 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) The total PM emissions from PUCB Core Production and the Warm Box Core Production, shall be less than 0.925 pound per ton of core throughput, each.
- (c) The total PM<sub>10</sub> emissions from PUCB Core Production and the Warm Box Core Production, shall be less than 0.52 pound per ton of core throughput, each.
- (d) The total PM<sub>2.5</sub> emissions from PUCB Core Production and the Warm Box Core Production, shall be less than 0.32 pound per ton of core throughput, each.

Compliance with these limits will ensure that the emissions from the PUCB Core Production and Warm Box Core Production for PM are less than 25 tons per year, PM<sub>10</sub> emissions less than 15 tons per year and PM<sub>2.5</sub> emissions are less than 10 tons per year, and render the requirements of 326 IAC 2-2 (PSD) not applicable to the 2012 modification.

#### **326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))**

The phenolic urethane cold box (PUCB) and the warm box core machines 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 do not apply to these emission units.

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

Pursuant to 326 IAC 6-3-2, the allowable particulate matter (PM) from the PUCB Core Production and the Warm Box Core Production shall not exceed 8.37 pounds per hour, each, when operating at a process weight rate of 2.9 tons per hour, each. This limit was calculated using the following equations:

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

$$E = 4.10 P^{0.67}$$

Where:

E = rate of emission in pounds per hour and  
P = process weight rate in tons per hour

#### **326 IAC 7-1.1(Sulfur Dioxide)**

Pursuant to 326 IAC 7-1.1-1, any unit with a potential to emit SO<sub>2</sub> greater than or equal to 25 tons of per year or 10 pounds per hour shall comply with the requirements of 326 IAC 7-1.1. The new and modified emission units in this project are not subject to the requirements of 326 IAC 7-1.1

because each unit has a PTE of less than 25 tons of SO<sub>2</sub> per year and less than 10 pounds per hour.

**326 IAC 8-1-6 (New Facilities; General Reduction Requirements)**

The uncontrolled VOC emissions from the PUCB Core Production and the Warm Box Core Production are less than 25 tons per year, each. Therefore, the requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) do not apply to the PUCB Core Production and the Warm Box Core Production for this modification.

**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.

There are no compliance determination and monitoring requirements applicable to this modification at this time.

**Proposed Changes**

The changes listed below have been made to Part 70 Operating Permit No. 033-21760-00042. Deleted language appears as ~~strike throughs~~ and new language appears in **bold**:

Change 1: The new emission units have been included in Section A.2 of the permit. The modified emission unit descriptions have been updated in the permit accordingly.

A.2 Emission Units & Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][26 IAC 2-7-5(15)]

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

- (a) One (1) **gray** iron charging, melting, ladle metallurgy, holding and transfer system; identified as EU-2; constructed in 1995; a nominal capacity of ~~3630~~ tons of metal per hour; a maximum capacity of 45 tons of metal per hour; emissions controlled by baghouses DC-2 and DC-8; emissions exhaust to stacks S-2 & S-8. The transfer operations refer to the transfer of metal from the holding furnace to the ladle. The system consists of the following equipment/operations:
  - (1) One (1) furnace charging operation;
  - (2) Three (3) electric induction furnaces;
  - (3) One (1) ladle metallurgical station; and
  - (4) One (1) electric holding furnace.

The three (3) electric induction furnaces are considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.

- (b) One (1) Line 1 pouring and casting operation; identified as EU-3a1; constructed in 1995 and modified in 2008; a nominal capacity of 10 tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; particulate emissions controlled by baghouse DC-8; emissions exhaust to Stack S-8. EU-3a1 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.
  - (c) One (1) Line 2 pouring and casting operation; identified as EU-3a2; constructed in 1995; modified in 2009, a nominal capacity of 10 tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; particulate emissions controlled by baghouse DC-2; emissions exhaust to stack S-2. EU-3a2 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.
  - (d) One (1) Line 3 pouring and casting operation; identified as EU-3a3; constructed in 1995, **and to be modified in 2008 and approved for modification in 2012**; a nominal capacity of ~~9~~ **11** tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; particulate emissions controlled by baghouse DC-8; emissions exhaust to stack S-8. EU-3a3 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.
  - (e) One (1) Line 4 pouring and casting operation; identified as EU-3a4; constructed in 1995 **and approved for modification in 2012**; a nominal capacity of ~~9~~ **11** tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; particulate emissions controlled by baghouse DC-8; emissions exhaust to stack S-8. EU-3a4 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.
  - (f) One (1) Line 1 **casting mold** cooling operation; identified as EU-3b1; constructed in 1995; a nominal capacity of 10 tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; emissions exhaust to stack S-3b.
  - (g) One (1) Line 2 **casting mold** cooling operation; identified as EU-3b2; constructed in 1995; a nominal capacity of ~~9~~ **10** tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; emissions exhaust to stack S-3b.
  - (h) One (1) Line 3 **casting mold** cooling operation; identified as EU-3b3; constructed in 1995 **and approved for modification in 2012**; a nominal capacity of ~~9~~ **11** tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; emissions exhaust to stack S-3d.
  - (i) One (1) Line 4 **casting mold** cooling operation; identified as EU-3b4; constructed in 1995 **and approved for modification in 2012**; a nominal capacity of ~~9~~ **11** tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; emissions exhaust to stack S-3d.
  - (j) One (1) Line 3 and Line 4 shakeout/**casting cooling** operation; identified as EU-4; constructed in 1995 **and approved for modification in 2012**; **consisting of the following equipment/operations:** a nominal capacity of ~~18~~ tons of metal and ~~110~~ tons of sand per hour; a maximum capacity of ~~22.5~~ tons of metal and ~~125~~ tons of sand per hour; particulate emissions controlled by baghouses DC-4 and DC-8; emissions exhaust to stacks S-4 and S-8.
- (1) **Line 3 shakeout/ casting cooling operation identified as EU-4a with a nominal capacity of 11 tons of metal and 55 tons of sand per hour; a**

**maximum capacity of 15 tons of metal and 75 tons of sand per hour, particulate emissions controlled by baghouse DC-3 and exhausting to stacks S-15.**

- (2) **Line 4 shakeout/ casting cooling operation identified as EU-4b with a nominal capacity of 11 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour, particulate emissions controlled by baghouse DC-4, emissions exhausting to stack S-4.**

\*\*\*\*\*

- (m) One (1) shot reblast unit; identified as EU-6; constructed in 1997; a nominal capacity of 1.12 tons of iron castings per hour; a maximum capacity of 5 tons of iron castings per hour; emissions controlled by baghouse DC-8, which exhausts to stack S-8.
- (n) One (1) shot blast system; consisting of four (4) shot blast units; identified as EU-16 through EU-19; constructed in 1999 **and approved for modification in 2012**; a total nominal capacity of 27 tons of iron castings per hour; a total maximum capacity of 32 tons of iron castings per hour; with emissions controlled by baghouse DC-7~~3~~, which exhausts to stack S-~~8~~ 45.
- (p) One (1) ductile iron conversion process: **one** identified as EU-20; constructed in 2009, with a nominal capacity of ~~36~~ **30** tons of metal per hour, and a maximum capacity of ~~45~~ **35** tons of metal per hour; 58% of particulate emissions controlled by baghouse System 20 to stack S-20; Production limited to 95,000 tons per rolling 12-months period.
- (r) **One (1) Phenolic Urethane Cold Box (PUCB) core production process with a nominal capacity of 2.9 tons of cores per hour, approved for construction in 2012, consisting of the following units:**
6. **Two (2) 65 ton core sand silos identified as EU-30a and EU-30b each controlled by a bin vent filter exhausting inside the building.**
  7. **One (1) Core sand mixer and sand transport system, identified as EU-30b, with a nominal capacity of 2.9 tons per hour, with emissions vented back to the core sand silo.**
  8. **One (1) PUCB core machine, identified as EU30c with a nominal capacity of 2.9 tons of cores/hour, each using a tertiary amine catalyst gas controlled by an acid scrubber, identified as SC-1 venting to stack SC-1.**
  9. **One (1) water based core wash; and**
  10. **One (1) 1.5 MMBtu per hr natural gas fired drying oven.**
- (s) **One (1) Warm Box Core production process with a nominal capacity of 2.9 tons cores per hour, approved for construction in 2012, consisting of the following units;**
- (1) **One (1) 65 ton core sand silo, identified as EU-31a controlled by a bin vent filter exhausting inside the building; and**
  - (2) **One (1) warm box core machine, identified as EU31b with a nominal capacity of 2.9 tons of cores/hour and 0.6 MMBtu per hr of natural gas.**

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, as defined in 326 IAC 2-7-1(21), which are specifically regulated:

- (e) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations, which include the following: Two (2) enclosed grinding units controlled by fabric filters and exhausting inside the building; **and One (1) test sample blast machine; identified as EU-1b; constructed in 1995 controlled by fabric filters and exhausting inside the building.** [326 IAC 6-3-2]

Change 2: The modified emission units have been included in Sections D.1, D.2, D.3, D.4, D.5 and D.6 of the permit accordingly.

**SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS**

**Emission Unit Description [326 IAC 2-7-5(15)]: Melting, Pouring and Casting Operations**

- (a) One (1) ~~gray~~ iron charging, melting, ladle metallurgy, holding and transfer system; identified as EU-2; constructed in 1995; a nominal capacity of ~~3630~~ tons of metal per hour; a maximum capacity of 45 tons of metal per hour; emissions controlled by baghouses DC-2 and DC-8; emissions exhaust to stacks S-2 & S-8. The transfer operations refer to the transfer of metal from the holding furnace to the ladle. The system consists of the following equipment/operations:

- (1) One (1) furnace charging operation;
- (2) Three (3) electric induction furnaces;
- (3) One (1) ladle metallurgical station; and
- (4) One (1) electric holding furnace.

The three (3) electric induction furnaces are considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.

- (b) One (1) Line 1 pouring and casting operation; identified as EU-3a1; constructed in 1995 and modified in 2008; a nominal capacity of 10 tons of metal and 55 tons of sand per hour; a maximum capacity of ~~11.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; particulate emissions controlled by baghouse DC-8; emissions exhaust to Stack S-8. EU- 3a1 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.

Before Modification 033-28412-00042

- (c) One (1) Line 2 pouring and casting operation; identified as EU-3a2; constructed in 1995; a nominal capacity of 9 tons of metal and 55 tons of sand per hour; a maximum capacity of 11.25 tons of metal and 62.5 tons of sand per hour; particulate emissions controlled by baghouse DC-8; emissions exhaust to stack S-8. EU-3a2 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.

After Modification 033-28412-00042

- (c) One (1) Line 2 pouring and casting operation; identified as EU-3a2; constructed in 1995;

modified in 2009, a nominal capacity of 10 tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; particulate emissions controlled by baghouse DC-2; emissions exhaust to stack S-2. EU-3a2 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.

(d) One (1) Line 3 pouring and casting operation; identified as EU-3a3; constructed in 1995, ~~and to be modified in 2008 and approved for modification in 2012~~; a nominal capacity of ~~9~~ **11** tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; particulate emissions controlled by baghouse DC-8; emissions exhaust to stack S-8. EU- 3a3 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.

(e) One (1) Line 4 pouring and casting operation; identified as EU-3a4; constructed in 1995 ~~and approved for modification in 2012~~; a nominal capacity of ~~9~~ **11** tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; particulate emissions controlled by baghouse DC-8; emissions exhaust to stack S-8. EU-3a4 is considered part of the affected source under 40 CFR Part 63, Subpart EEEEE.

(m) One (1) shot reblast unit; identified as EU-6; constructed in 1997; a nominal capacity of 1.12 tons of iron castings per hour; a maximum capacity of 5 tons of iron castings per hour; emissions controlled by baghouse DC-8 ~~6~~ which exhausts to stack S-8.

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

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**SECTION D.2**

**EMISSIONS UNIT OPERATION CONDITIONS**

**Emission Unit Description [326 IAC 2-7-5(15)]: Casting cooling operations**

- (f) One (1) Line 1 ~~casting mold~~ cooling operation; identified as EU-3b1; constructed in 1995; a nominal capacity of 10 tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; emissions exhaust to stack S-3b.
- (g) One (1) Line 2 ~~casting mold~~ cooling operation; identified as EU-3b2; constructed in 1995; a nominal capacity of ~~9~~ **10** tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; emissions exhaust to stack S-3b.
- (h) One (1) Line 3 ~~casting mold~~ cooling operation; identified as EU-3b3; constructed in 1995 **and approved for modification in 2012**; a nominal capacity of ~~9~~ **11** tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; emissions exhaust to stack S-3d.
- (i) One (1) Line 4 ~~casting mold~~ cooling operation; identified as EU-3b4; constructed in 1995 **and approved for modification in 2012**; a nominal capacity of ~~9~~ **11** tons of metal and 55 tons of sand per hour; a maximum capacity of ~~44.25~~ **15** tons of metal and ~~62.5~~ **75** tons of sand per hour; emissions exhaust to stack S-3d.

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

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**SECTION D.3**

**EMISSIONS UNIT OPERATION CONDITIONS**

**Emission Unit Description [326 IAC 2-7-5(15)]:**

- (j) One (1) Line 3 and Line 4 shakeout/**casting cooling** operation; identified as EU-4; constructed in 1995 **and approved for modification in 2012; consisting of the following equipment/operations:** a nominal capacity of 18 tons of metal and 110 tons of sand per hour; a maximum capacity of 22.5 tons of metal and 125 tons of sand per hour; particulate emissions controlled by baghouses DC-4 and DC-8; emissions exhaust to stacks S-4 and S-8.
  - (1) Line 3 shakeout/ casting cooling operation identified as EU-4a with a nominal capacity of 11 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour, particulate emissions controlled by baghouse DC-3 and exhausting to stacks S-15.
  - (2) Line 4 shakeout/ casting cooling operation identified as EU-4b with a nominal capacity of 11 tons of metal and 55 tons of sand per hour; a maximum capacity of 15 tons of metal and 75 tons of sand per hour, particulate emissions controlled by baghouse DC-4, emissions exhausting to stack S-4.

\*\*\*\*\*

- (l) One (1) return sand/waste sand system; identified as EU-5bc; constructed in 1995; a nominal capacity of 220 tons of sand per hour; a maximum capacity of 250 tons of sand per hour; emissions controlled by baghouse DC-5 which exhausts to stack S-5.

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

\*\*\*\*\*

**Before the operations of Baghouse DC-87 and Stack S-8**

**SECTION D.4**

**EMISSIONS UNIT OPERATION CONDITIONS**

**Emission Unit Description [326 IAC 2-7-5(15)]: Casting Finishing**

(m) One (1) shot reblast unit; identified as EU-6; constructed in 1997; a nominal capacity of 1.12 tons of iron castings per hour; a maximum capacity of 5 tons of iron castings per hour; emissions controlled by baghouse DC-6 which exhausts to stack S-6.

(n) One (1) shot blast system; consisting of four (4) shot blast units; identified as EU-16 through EU-19; constructed in 1999 **and approved for modification in 2012**; a total nominal capacity of 27 tons of iron castings per hour; a total maximum capacity of 32 tons of iron castings per hour; with emissions controlled by baghouse DC-73, which exhausts to stack S-8 ~~45~~.

\*\*\*\*\*

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

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

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**Effective after the operations of Baghouse DC-87 and Stack S-8**

**SECTION D.4**

**EMISSIONS UNIT OPERATION CONDITIONS**

**Emission Unit Description [326 IAC 2-7-5(15)]: Casting Finishing**

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**Insignificant Activities**

(f) Eight (8) grinders; identified together as EU-7; constructed in 1999 **and approved for modification in 2012**; a combined nominal capacity of 25 tons of iron castings per hour; a combined maximum capacity of 32 tons of iron castings per hour; emissions controlled by individual dust collectors which have a gas flow rate of less than 4,000 cfm each, and which have a grain loading of less than or equal to (0.03) grains per actual cubic foot, and which exhaust indoors. [326 IAC 2-7-1(21)(G)(xxiii)]

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

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

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**SECTION D.5 EMISSIONS UNIT OPERATION CONDITION**

**Emission Unit Description [326 IAC 2-7-5(15)]: Specifically Regulated Insignificant Activities**

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(e) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations, which include the following: Two (2) enclosed grinding units controlled by fabric filters and exhausting inside the building; **and One (1) test sample blast machine; identified as EU-1b; constructed in 1995 controlled by fabric filters and exhausting inside the building.** [326 IAC 6-3-2]

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

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**SECTION D.6 EMISSIONS UNIT OPERATION CONDITIONS**

**Emission Unit Description [326 IAC 2-7-5(15)]: Ductile Iron Conversion Process**

(p) One (1) ductile iron conversion process: **one** identified as EU-20; constructed in 2009, with a nominal capacity of **36 30** tons of metal per hour, and a maximum capacity of **45 35** tons of metal per hour; 58% of particulate emissions controlled by baghouse System 20 to stack S-20; Production limited to 95,000 tons per rolling 12-months period.

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

\*\*\*\*\*

Change 3: The new emission units and there conditions have been included in Section D.7 of the permit.

## SECTION D.7 EMISSIONS UNIT OPERATION CONDITIONS

### Emission Unit Description [326 IAC 2-7-5(15)]: Phenolic Urethane Cold Box (PUCB)

- (p) One (1) Phenolic Urethane Cold Box (PUCB) core production process with a nominal capacity of 2.9 tons of cores per hour, approved for construction in 2012, consisting of the following units:
1. Two (2) 65 ton core sand silos identified as EU-30a and EU-30b each controlled by a bin vent filter exhausting inside the building.
  2. One (1) Core sand mixer and sand transport system, identified as EU-30b, with a nominal capacity of 2.9 tons per hour, with emissions vented back to the core sand silo.
  3. One (1) PUCB core machine, identified as EU30c with a nominal capacity of 2.9 tons of cores/hour, each using a tertiary amine catalyst gas controlled by an acid scrubber, identified as SC-1 venting to stack SC-1.
  4. One (1) water based core wash; and
  5. One (1) 1.5 MMBtu per hr natural gas fired drying oven.
- (q) One (1) Warm Box Core production process with a nominal capacity of 2.9 tons cores per hour, approved for construction in 2012, consisting of the following units;
- (1) One (1) 65 ton core sand silo, identified as EU-31a controlled by a bin vent filter exhausting inside the building; and
  - (2) One (1) warm box core machine, identified as EU31b with a nominal capacity of 2.9 tons of cores/hour and 0.6 MMBtu per hr of natural gas.

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

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

#### D.7.1 Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2][326 IAC 6-3-2]

The Permittee shall comply with the following limits:

- (a) The throughput of sand to the PUCB Core Production and the Warm Box Core Production, each, shall be less than 25,404 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) The total PM emissions from PUCB Core Production and the Warm Box Core Production, shall be less than 0.925 pound per ton of core throughput, each.
- (c) The total PM<sub>10</sub> emissions from PUCB Core Production and the Warm Box Core Production, shall be less than 0.52 pound per ton of core throughput, each.
- (d) The total PM<sub>2.5</sub> emissions from PUCB Core Production and the Warm Box Core Production, shall be less than 0.32 pound per ton of core throughput, each.

**Compliance with these limits will ensure that the emissions from the PUCB Core Production and Warm Box Core Production for PM are less than 25 tons per year, PM10 emissions less than 15 tons per year and PM2.5 emissions are less than 10 tons per year, and render the requirements of 326 IAC 2-2 (PSD) not applicable to the 2012 modification.**

**Note: Complying with 326 IAC 2-2 (PSD) will satisfy for 326 IAC 6-3-2.**

**D.7.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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

**Compliance Determination Requirements**

**D.7.3 Particulate Emissions Control**

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**In order to ensure compliance with Condition D.7.1, fabric bin vent filter for particulate control shall be in operation and control emissions from the Core Sand Silos and Core Sand Handling at all times that the associated emission unit are in operation.**

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

**D.7.4 Record Keeping Requirements**

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- (a) To document compliance with Condition D.7.1(a), the Permittee shall maintain records of the sand throughput to the Core Production and the Warm Box Core Production for each month.**
- (b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.**

**D.7.5 Reporting Requirements**

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**A quarterly summary of the information to document the compliance status with Condition D.7.1(a) shall be submitted, using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days following the end of each calendar quarter. 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 C - General Reporting Requirements contains the Permittee's obligations with regard to the reporting required by this condition.**

Change 4: The section heading and the table heading have been updated as follows

**SECTION... FACILITY OPERATION CONDITIONS  
EMISSION UNIT OPERATION CONDITIONS**

<p><b>Facility Emission Unit Description [326 IAC 2-7-5(15)]:</b></p> <p>.....</p> <p>(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)</p> <p>.....</p>
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Change 5: The reporting form for the new emission units have been added to the permit.

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

**Part 70 Quarterly Report**

**Source Name:** Metal Technologies Auburn, LLC  
**Source Address:** 1537 West Auburn Drive, Auburn, Indiana 46706  
**Part 70 Permit No.:** T033-21760-00042  
**Facility:** PUCB Core and Warm Box Production  
**Parameter:** Sand Throughput  
**Limit:** Less than 25,404 tons per twelve consecutive month period with compliance determined at the end of each month, each.

**QUARTER :**

**YEAR:**

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

No deviation occurred in this quarter.

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

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

### Conclusion and Recommendation

The construction and the operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 033-31732-00042 Significant Permit Modification No 033-31732-00042. The staff recommends 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 Josiah Balogun at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5257 or toll free at 1-800-451-6027 extension 4-52-57.
- (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](http://www.idem.in.gov)

	Nominal tons/hour	Potential tons/year	Existing Limited Tons/day	Existing limited tons/year
Existing Melt	30	262800	875	319,375
New Melt	12	105120		
PCS Lines 1 & 2	20	175200	875	319,375
PCS Lines 3 & 4	22	192720		
Tons of Metal Finished (Blast and Grinding)	27	236520	525	191625
Tons of Mold Sand Used	220	1,314,000	4375	1596875
Tons of Waste Sand Material	220	262,800	4375	1596875
Total Tons of Ductile Iron (Both Plants)	12	95,000		95,000
PUCB Core Production	2.9	25,404		
Warm Box Core Production (2 machines)	3.0	26,280		
	MMBtu/hr	MMCF/year		
Natural Gas Fired Dryer	10	87.6		
Natural gas Fired Core Oven	1.5	13.14		
Warm Box NG Heat Input	1.2	10.512		
	lbs/hr	tons/year		
Part 1 and Part 2 PUCB Resins	713.4	3125		based on resin at 1.23% of core weight
DMIPA Catalyst Gas	1.798	7.88		based on DMIPA at 0.031% of core weight

**Basis for Factors**

- AP42/ FIRE
- Proposed permit limits
- MACT Limits
- CERP Data
- 40 CFR 98, Tables C-1 and C-3
- AFS Data (Variability Study)
- Mass balance

**Uncontrolled Emission Factor, lbs/unit**

Emission Unit	PM	PM10 filt	PM2.5 filt	Lead	CO	VOC	NOx	SO2	Metallic HAPs	Organic HAPs	Global Warming Potential			CO2e	Unit
											1	21	310		
Induction Melt Charging and Inoculation	0.9	0.86	0.86	0.0425					0.072						tons metal
Pouring	4.2	2.06	1		6	1.7	0.01	0.02	0.336	0.28	10.00	NA	NA	10.00	tons metal
Cooling															tons metal
Shakeout	3.2	2.24	1.34												tons metal
Sand Handling	3.6	0.54	0.54												tons sand
Shot Blast	17	1.7	1.7												tons metal
Re-Blast	17	1.7	1.7												tons metal
Grinding Operations	17	1.7	1.7												tons metal
Waste Sand Handling	3.6	0.54	0.54												tons sand
Ductile Iron Conversion	1.8	1.8	1.8												tons metal
PUCB Core Mixing	3.6	0.54	0.54												tons metal
PUCB Core making (DMIPA)						1.23			0.00031						
Warm Box Core Production	1.1	1.1	1.1												ton cores
NG Fired Dryer	1.9	7.6	7.6	5.00E-04	84	5.5	100	0.6			119910	2.3	0.2	120020.3	MMCF

**Uncontrolled Potential to Emit (Before Controls and at Rated Capacities)**

Emission Unit	PM (Filt)	PM10 (Filt + Cond)	PM2.5 (filt + Cond)	Lead	CO	VOC	NOx	SO2	Metallic HAPs	Organic HAPs	CO2	CH4	N2O	CO2e
Old Induction melt	118.26	113.00	113.00	5.58					9.46					
Existing Ductile Iron Conversion	236.52	236.52	236.52											
Pouring 1 & 2	367.92	180.46	87.60		525.60	148.92	0.88	1.75						
<b>Modified Shakeout 1/2</b>	280.32	196.22	117.38											
Pouring 3 & 4	404.71	198.50	96.36		578.16	163.81	0.96	1.93		51.51	1839.60			1839.60
<b>Modified Cooling 3 &amp; 4</b>	308.35	215.85	129.12											
Sand Handling (including waste sand handling)	3468.96	520.34	520.34											
Grinding Operations (IV)	2010.42	201.04	201.04											
<b>PUCB Core Production</b>	45.73	6.86	6.86											
<b>PUCB DMIPA</b>						15.6			3.94E-03					
<b>Warm Box Core Production</b>	14.45	14.45	14.45											
<b>Natural gas Combustion</b>	0.106	0.423	0.423	2.78E-05	4.673	0.306	5.563	0.033			6670	0.13	0.01	6676
<b>Plantwide Totals</b>	<b>7255.75</b>	<b>1883.67</b>	<b>1523.11</b>	<b>5.58</b>	<b>1108.43</b>	<b>328.67</b>	<b>7.40</b>	<b>3.71</b>	<b>9.46E+00</b>	<b>51.51</b>	<b>8510</b>	<b>0.13</b>	<b>0.01</b>	<b>8516</b>
									61.0	tons/year				
<b>Total from New and Modified Emission Units*</b>	<b>1053.67</b>	<b>632.31</b>	<b>364.60</b>	<b>0.00</b>	<b>1108.43</b>	<b>328.67</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>51.51</b>	<b>8509.71</b>	<b>0.13</b>	<b>0.01</b>	<b>8515.85</b>
<b>PSD Major Modification Thresholds</b>	<b>25</b>	<b>15</b>	<b>10</b>	<b>0.6</b>	<b>100</b>	<b>40</b>	<b>40</b>	<b>40</b>						<b>75000</b>

Emission Unit	Current Permit Limits				Modified / Proposed Permit Limits			
	Control	PM gr/dscf	PM lbs/hr	PM10 lbs/ton	Control	PM gr/dscf	PM lbs/hr	PM10 lbs/ton
Melt EU-2a	DC-2	0.003	3.6	0.06	DC-2	0.003	3.6	0.06
Melt EU-2a	DC-8	0.003			DC-8	0.003		
Pour 1 EU-3a1								
Pour 2 EU-3a2								
<b>Pour 3 EU-3a3</b>								
<b>Pour 4 EU3a4</b>								
Reblast EU-6		0.15	NA	0.15	NA			
Return Sand EU-5b	DC-5	0.003	3.34	0.12	DC-5	0.003	3.34	0.12
Waste Sand EU-5c								
Cast Cool1 EU-5a								
Cast Cool 2 EU-5a								
Shakeout 1EU-5a								
Shakeout 2 EU-5a								
<b>Shakeout 4 EU-4</b>	DC-4	0.003	2.06	0.1	DC-4	0.003	2.06	0.1
<b>Cast Cool 4 EU-4</b>								
<b>Shakeout 3 EU-4</b>					DC-3	0.003		
<b>Cast Cool3 EU-4</b>								
<b>Grinding Modified</b>								
<b>Blast 4 EU 19</b>	DC-3	0.003	0.95	NA	DC-7	0.003	0.95	NA
Blast 1 EU16								
Blast 2 EU17								
Blast 3 EU 18								
Grinding EU-7	SIVDC	0.003	NA	NA	SIVDC	0.003	NA	NA
Sample Blast	DC-1	Process Weight			SIVDC	Process Weight		
Sand System EU-1		0.003	0.64	NA	DC-1	0.003	0.64	NA
Sand System Mullers	DC-10				DC-10			
DIC Station EU-20	DC-20	Various			DC-20	Various		
Cool 1 EU-3b1	UC Stack S3b	0.01	2.14	0.09	UC Stack S3b	0.01	2.14	0.09
Cool 2 EU-3b2								
<b>Cool 3 EU-3b3</b>	UC Stack S3d	0.01	2.14	0.09	UC Stack S3d	0.01	2.14	0.09
<b>Cool 4 EU-3b4</b>								

	Baseline Actual Production	Future Projected Actual Annual Production	Production that could have been accomodated	Note
Tons of Iron melted	178,770	220,000	41,230	A
Tons of Metal Finished (Blast and Grinding)	107262	132,000	24,738	B
Tons of Mold Sand Used	893,850	1,100,000	206,150	C
Tons of Ductile Iron	80,057	95,000	14,943	A
PUCB Core Production	0	25404	0	D
Warm Box Core Production	0	25404	0	D
Natural Gas Usage for Core Production, MMCF	0	18.0	0	D
PUCB Resin usage (lbs)	0	624,938	0	E
DMIPA Catalyst Usage, lbs	0	15,750	0	F

**Basis for Emission Factors**

AP42/ FIRE
Mass balance
Current Permit Limits
New Permit Limits

**Baseline Actual Emission Factors, lbs/unit (Also Used for Emissions that Could have Been Accomodated)**

Emission Unit	PM (Filt)	PM10 (Filt + Cond)	PM2.5 (filt + Cond)	Lead	CO	VOC	NOx	SO2	Unit	Note
Induction melt + pouring + Reblast (DC-2 & DC-8)	0.06	0.06	0.06	0.0030	6	1.7	0.01	0.02	ton metal	
Mold Cooling 1 & 2 (S-3b)	0.09	0.09	0.09	0.0012			ton metal			
Mold Cooling 3 & 4 (S-3d)	0.09	0.09	0.09	0.0012			ton metal			
Shakeout / Casting Cooling 1/2, Return Sand System (DC-5)	0.12	0.12	0.12	0.0012			ton metal			
Shakeout/ Casting Cooling 3/4 (DC-4)	0.1	0.1	0.1	0.0012			ton metal			
Blast Units EU-16-19 (DC-3)	0.035	0.035	0.035						ton metal	G
Grinding Operations (Int. Vented)	0.17	0.085	0.085						ton metal	H
Sand Handling DC-1 and DC-10	0.0029	0.0029	0.0029						ton sand	I
Ductile Iron Station	0.227	0.137	0.137						ton metal	J

**Future Actual Emission Factors, lbs/unit**

Emission Unit	PM (Filt)	PM10 (Filt + Cond)	PM2.5 (filt + Cond)	Lead	CO	VOC	NOx	SO2	Unit	Note
Induction melt (DC-2)	0.035	0.035	0.035	0.0020	6	1.7	0.01	0.02	ton metal	K
Pouring & Reblast (DC-8)	0.025	0.025	0.025	0.001			ton metal			
Mold Cooling 1 & 2 (S-3b)	0.09	0.09	0.09	0.0012			ton metal			
Mold Cooling 3 & 4 (S-3d)	0.09	0.09	0.09	0.0012			ton metal			
Shakeout / Casting Cooling 1/2, Return Sand System (DC-5)	0.12	0.12	0.12	0.0012			ton metal			
Shakeout/ Casting Cooling 4 (DC-4)	0.1	0.1	0.1	0.0012	ton metal					
Shakeout Casting Cooling 3	0.1	0.1	0.1	0.0012	ton metal					
Blast Units EU-16-19 (DC-7)	0.035	0.035	0.035						ton metal	G
Grinding Operations (EU-7)	0.17	0.085	0.085						ton metal	H
Sand Handling DC-1 and DC-10	0.0029	0.0029	0.0029						ton sand	I
Ductile Iron Station	0.227	0.137	0.137						ton metal	J
Warm Box Core Production	0.05	0.05	0.05						ton cores	L
Cold Box Core Production (Sand handling )	0.05	0.05	0.05						ton cores	
Cold Box Core Resins						0.05			pound resin	M
Cold Box Catalyst Usage						0.01			pound DMIPA	N
Natural gas Combustion	1.9	7.6	7.6	5.00E-04	84	5.5	100	0.6	MMCF	

**Actual Baseline Emissions, tons/year**

Emission Unit	PM (Filt)	PM10 (Filt + Cond)	PM2.5 (filt + Cond)	Lead	CO	VOC	NOx	SO2	Note
Induction melt + pouring + Reblast (DC-2 & DC-8)	5.36	5.36	5.36	0.27	536.3	152.0	0.89	1.79	O
Mold Cooling 1 & 2 (S-3b)	4.02	4.02	4.02	0.05					
Mold Cooling 3 & 4 (S-3d)	4.02	4.02	4.02	0.05					
Shakeout / Casting Cooling 1/2, Return Sand System (DC-5)	5.36	5.36	5.36	0.05					
Shakeout/ Casting Cooling 3/4 (DC-4)	4.47	4.47	4.47	0.05					
Blast Units EU-16-19 (DC-3)	1.88	1.88	1.88						
Grinding Operations (IV)	9.12	4.56	4.56						
Sand Handling DC-1 and DC-10	1.30	1.30	1.30						
Ductile Iron Station	9.09	5.48	5.48						
<b>Plantwide Totals</b>	<b>44.62</b>	<b>36.46</b>	<b>36.46</b>	<b>0.48</b>	<b>536.31</b>	<b>151.95</b>	<b>0.89</b>	<b>1.79</b>	

**Projected Actual Emissions, tons/year**

Emission Unit	PM (Filt)	PM10 (Filt + Cond)	PM2.5 (filt + Cond)	Lead	CO	VOC	NOx	SO2	Note
Induction melt (DC-2)	3.85	3.85	3.85	0.22	660	187	1.10	2.20	O
Pouring & Reblast (DC-8)	2.75	2.75	2.75	0.11					
Mold Cooling 1 & 2 (S-3b)	4.95	4.95	4.95	0.07					
Mold Cooling 3 & 4 (S-3d)	4.95	4.95	4.95	0.07					
Shakeout / Casting Cooling 1/2, Return Sand System (DC-5)	6.60	6.60	6.60	0.07					
Shakeout/ Casting Cooling 4 (DC-4)	2.75	2.75	2.75	0.03					P
Shakeout Casting Cooling 3, (DC-3)	2.75	2.75	2.75	0.03					
Blast Units EU-16-19 (DC-7)	2.31	2.31	2.31						
Grinding Operations (EU-7b)	11.22	5.61	5.61						Q
Sand Handling DC-1 and DC-10	1.60	1.60	1.60						
Ductile Iron Station	10.78	6.51	6.51						
Warm Box Core Production	0.64	0.64	0.64						
Cold Box Core Production (Sand handling )	0.64	0.64	0.64						
Cold Box Core Resins						15.62			
Cold Box Catalyst Usage						0.08			
Natural gas Combustion	0.017	0.069	0.069	4.51E-06	0.757	0.050	0.902	0.005	
<b>Plantwide Totals</b>	<b>55.79</b>	<b>45.96</b>	<b>45.96</b>	<b>0.59</b>	<b>660.76</b>	<b>202.75</b>	<b>2.00</b>	<b>2.21</b>	

**Emissions that could have been accomodated, tons/year**

Emission Unit	PM (Filt)	PM10 (Filt + Cond)	PM2.5 (filt + Cond)	Lead	CO	VOC	NOx	SO2	Note
Induction melt + pouring + Reblast (DC-2 & DC-8)	1.24	1.24	1.24	0.062	123.7	35.0	0.206	0.412	O
Mold Cooling 1 & 2 (S-3b)	0.93	0.93	0.93	0.012					
Mold Cooling 3 & 4 (S-3d)	0.93	0.93	0.93	0.012					
Shakeout / Casting Cooling 1/2, Return Sand System (DC-5)	1.24	1.24	1.24	0.012					
Shakeout/ Casting Cooling 3/4 (DC-4)	1.03	1.03	1.03	0.012					
Blast Units EU-16-19 (DC-3)	0.43	0.43	0.43						
Grinding Operations (IV)	2.10	1.05	1.05						
Sand Handling DC-1 and DC-10	0.30	0.30	0.30						
Ductile Iron Station	1.70	1.02	1.02						
<b>Plantwide Totals</b>	<b>9.89</b>	<b>8.17</b>	<b>8.17</b>	<b>0.11</b>	<b>123.69</b>	<b>35.05</b>	<b>0.21</b>	<b>0.41</b>	

<b>Plantwide ATPA (Projected Actual - Baseline - Could Have Accomodated Emissions)</b>	<b>1.29</b>	<b>1.34</b>	<b>1.34</b>	<b>0.00</b>	<b>0.76</b>	<b>15.75</b>	<b>0.90</b>	<b>0.01</b>
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<b>PSD Major Modification Thresholds, tons/year</b>	<b>25</b>	<b>15</b>	<b>10</b>	<b>0.6</b>	<b>100</b>	<b>40</b>	<b>40</b>	<b>40</b>
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**Appendix A: Emissions Calculations**

**Emission Summary**

**Source Name:** Metal Technologies Auburn, LLC

**Source Location:** 1537 West Auburn Dr, Auburn, IN 46706

**Permit Number:** SSM 033-31731-00042

**Permit Reviewer:** Josiah Balogun

**Date:** 29-May-12

**Past Actual to Future Analysis for the whole Plant**

	<b>PM (tons/yr)</b>	<b>PM<sub>10</sub> (tons/yr)</b>	<b>PM<sub>2.5</sub> (tons/yr)</b>	<b>SO<sub>2</sub> (tons/yr)</b>	<b>VOC (tons/yr)</b>	<b>CO (tons/yr)</b>	<b>NOx (tons/yr)</b>	<b>Pb (tons/yr)</b>
<b>Emission Unit</b>								
Projected Act. Emissions for M-3 Pouring Line	55.79	45.96	45.96	2.21	202.75	660.76	2.0	0.59
Baseline Act. Emissions for M-3 Pouring Line	44.6	36.46	36.46	1.79	151.95	536.31	0.89	0.48
Baseline Act. Emissions for M-3 Pouring Line	<b>11.17</b>	<b>9.50</b>	<b>9.50</b>	<b>0.42</b>	<b>50.80</b>	<b>124.45</b>	<b>1.11</b>	<b>0.11</b>
Additional Emissions that could have been accommodated	9.89	8.17	8.17	0.41	35.05	123.69	0.21	0.11
<b>Net Emission for ATPA</b>	<b>1.28</b>	<b>1.33</b>	<b>1.33</b>	<b>0.01</b>	<b>15.75</b>	<b>0.76</b>	<b>0.90</b>	<b>0.00</b>

	Potential Annual Production	Note
Tons of Iron melted	220,000	A
Tons of Metal Finished (Blast and Grinding)	132,000	B
Tons of Mold Sand Used	1,100,000	C
Tons of Ductile Iron	95,000	A
PUCB Core Production	25404	D
Warm Box Core Production	25404	D
Natural Gas Usage for Core Production, MMCF	18.0	D
PUCB Resin usage (lbs)	624,938	E
DMIPA Catalyst Usage, lbs	15,750	F

**Basis for Emission Factors**

AP42/ FIRE
Mass balance
Current Permit Limits
New Permit Limits

**Emission Factors, lbs/unit, Curent and New Permit Limits**

Emission Unit	PM (Filt)	PM10 (Filt + Cond)	PM2.5 (filt + Cond)	Lead	CO	VOC	NOx	SO2	Unit	Note
Induction melt (DC-2)	0.035	0.035	0.035	0.0020	6	1.7	0.01	0.02	ton metal	K
Pouring & Reblast (DC-8)	0.025	0.025	0.025	0.001			ton metal			
Mold Cooling 1 & 2 (S-3b)	0.09	0.09	0.09	0.0012			ton metal			
Mold Cooling 3 & 4 (S-3d)	0.09	0.09	0.09	0.0012			ton metal			
Shakeout / Casting Cooling 1/2, Return Sand System (DC-5)	0.12	0.12	0.12	0.0012			ton metal			
Shakeout/ Casting Cooling 4 (DC-4)	0.1	0.1	0.1	0.0012			ton metal			
Shakeout Casting Cooling 3	0.1	0.1	0.1	0.0012	ton metal					
Blast Units EU-16-19 (DC-7)	0.035	0.035	0.035					ton metal	G	
Grinding Operations (EU-7)	0.17	0.085	0.085					ton metal	H	
Sand Handling DC-1 and DC-10	0.0029	0.0029	0.0029					ton sand	I	
Ductile Iron Station	0.227	0.137	0.137					ton metal	J	
Warm Box Core Production	0.05	0.05	0.05					ton cores	L	
Cold Box Core Production (Sand handling )	0.05	0.05	0.05					ton cores		
Cold Box Core Resins						0.05		pound resin	M	
Cold Box Catalyst Usage						0.01		pound DMIPA	N	
Natural gas Combustion	1.9	7.6	7.6	5.00E-04	84	5.5	100	0.6	MMCF	

**Limited Potential to Emit, tons/year, based on permit limited production and current and proposed emission limits**

Emission Unit	PM (Filt)	PM10 (Filt + Cond)	PM2.5 (filt + Cond)	Lead	CO	VOC	NOx	SO2	Note
Induction melt (DC-2)	3.85	3.85	3.85	0.22	660	187	1.10	2.20	
Pouring & Reblast (DC-8)	2.75	2.75	2.75	0.11					
Mold Cooling 1 & 2 (S-3b)	4.95	4.95	4.95	0.07					
Mold Cooling 3 & 4 (S-3d)	4.95	4.95	4.95	0.07					
Shakeout / Casting Cooling 1/2, Return Sand System (DC-5)	6.60	6.60	6.60	0.07					
Shakeout/ Casting Cooling 4 (DC-4)	2.75	2.75	2.75	0.03					
Shakeout Casting Cooling 3, (DC-3)	2.75	2.75	2.75	0.03					
Blast Units EU-16-19 (DC-7)	2.31	2.31	2.31						
Grinding Operations (EU-7b)	11.22	5.61	5.61						Q
Sand Handling DC-1 and DC-10	1.60	1.60	1.60						
Ductile Iron Station	10.78	6.51	6.51						
Warm Box Core Production	0.64	0.64	0.64						
Cold Box Core Production (Sand handling )	0.64	0.64	0.64						
Cold Box Core Resins						15.62			
Cold Box Catalyst Usage						0.08			
Natural gas Combustion	0.017	0.069	0.069	4.51E-06	0.757	0.050	0.902	0.005	
<b>Plantwide Totals</b>	<b>55.79</b>	<b>45.96</b>	<b>45.96</b>	<b>0.59</b>	<b>660.76</b>	<b>202.75</b>	<b>2.00</b>	<b>2.21</b>	
<b>Total for New and Modified Units</b>	<b>23.07</b>	<b>17.51</b>	<b>17.51</b>	<b>0.18</b>	<b>660.76</b>	<b>202.75</b>	<b>0.90</b>	<b>0.01</b>	

**Appendix A: Emissions Calculations**

**Emission Summary**

**Source Name:** Metal Technologies Auburn, LLC  
**Source Location:** 1537 West Auburn Dr, Auburn, IN 46706  
**Permit Number:** SSM 033-31731-00042  
**Permit Reviewer:** Josiah Balogun  
**Date:** 29-May-12

**Limited Potential to Emit**

	<b>PM (tons/yr)</b>	<b>PM<sub>10</sub> (tons/yr)</b>	<b>PM<sub>2.5</sub> (tons/yr)</b>	<b>SO<sub>2</sub> (tons/yr)</b>	<b>VOC (tons/yr)</b>	<b>CO (tons/yr)</b>	<b>NOx (tons/yr)</b>	<b>GHGs as CO<sub>2</sub>e (tons/yr)</b>	<b>Pb (tons/yr)</b>	<b>HAPs (tons/yr)</b>
<b>Emission Unit</b>										
<b>Total Emissions increase from ATPA</b>	<b>1.28</b>	<b>1.33</b>	<b>1.33</b>	<b>0.01</b>	<b>15.75</b>	<b>0.76</b>	<b>0.9</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
PUCB Core Production	11.7	6.6	4.06	0	15.62	0	0	0	0	0
PUCB DMIPA	0	0	0	0	0.000079	0	0	0	0	0
Warm Box Core Production	11.7	6.6	4.06	0	0	0	0	0	0	0
Natural Gas Combustion	0.11	0.42	0.42	0.033	0.31	4.67	5.56	6676.2	0.000027	0.1
Total Emissions	24.79	14.95	9.87	0.04	31.68	5.43	6.46	6676.20	0.00	Single HAP >10 Combined HAPs > 25

Limit is 220,000 Tons per 12-Month Period

	Tons Melted	Previous 11 mo.	12-Month Tons	% of Limit	24 month average
Aug-07	13,615		13,615		
Sep-07	12,240		25,855	11.75%	
Oct-07	13,888		39,743		
Nov-07	11,394		51,137		
Dec-07	10,451		61,589	27.99%	
Jan-08	13,258		74,846		
Feb-08	14,315		89,162		
Mar-08	14,646		103,807	47.19%	
Apr-08	14,888		118,695		
May-08	16,150		134,845		
Jun-08	14,663		149,508	67.96%	
Jul-08	13,107	149,508	162,615		
Aug-08	12,103	149,000	161,103	New permit issued 8/29/08	
Sep-08	13,862	148,864	162,725	73.97%	
Oct-08	11,759	148,837	160,596		
Nov-08	8,464	149,202	157,666		
Dec-08	7,801	147,215	155,015	70.46%	
Jan-09	6,847	141,757	148,604		
Feb-09	7,768	134,289	142,057		
Mar-09	10,122	127,411	137,534	62.52%	
Apr-09	10,219	122,646	132,865		
May-09	9,859	116,715	126,574		
Jun-09	12,003	111,911	123,914	56.32%	
Jul-09	9,217	110,807	120,024		141,320
Aug-09	11,619	107,921	119,540		140,321
Sep-09	13,594	105,678	119,272	54.21%	140,999
Oct-09	15,011	107,513	122,524		141,560
Nov-09	13,670	114,060	127,730		142,698
Dec-09	11,679	119,929	131,608	59.82%	143,312
Jan-10	14,442	124,761	139,203		143,904
Feb-10	14,415	131,436	145,851		143,954
Mar-10	16,058	135,728	151,786	68.99%	144,660
Apr-10	15,042	141,567	156,609	71.19%	144,737
May-10	15,582	146,750	162,332	73.79%	144,453
Jun-10	15,925	150,329	166,254	75.57%	145,084
Jul-10	14,616	157,037	171,653	78.02%	145,838
Aug-10	17,454	160,034	177,488	80.68%	148,514
Sep-10	11,075	163,894	174,969	79.53%	147,121
Oct-10	14,864	159,958	174,822	79.46%	148,673
Nov-10	14,063	161,152	175,215	79.64%	151,472
Dec-10	13,865	163,536	177,401	80.64%	154,505
Jan-11	17,350	162,959	180,309	81.96%	159,756
Feb-11	15,876	165,894	181,770	82.62%	163,810
Mar-11	17,985	165,712	183,697	83.50%	167,742
Apr-11	13,771	168,655	182,426	82.92%	169,518
May-11	15,964	166,844	182,808	83.09%	172,570

Jun-11	13,486	166,883	180,369	81.99%	173,312
Jul-11	11,380	165,753	177,133	80.52%	174,393
Aug-11	17,931	159,679	177,610	80.73%	177,549
Sep-11	15,320	166,535	181,855	82.66%	178,412
Oct-11	14,329	166,991	181,320	82.42%	178,071
Nov-11	12,172	167,257	179,429	81.56%	177,322
Dec-11	11,826	165,564	177,390	80.63%	177,396
Jan-12	17,191	160,040	177,231	80.56%	178,770
Feb-12	13,779	161,355	175,134	79.61%	178,452
					178,770

## Ductile Iron totals

*Limit is 95,000 tons per 12-month Period*

Tons Melted	Previous 11mo.	12-mo. Tons	% of limit	24 month average
1173	0	1,173	1.47%	
0	1,173	1,173	1.47%	
2907	1,173	4,080	5.10%	
4097	4,080	8,177	10.22%	
5489	8,177	13,666	17.08%	
6077	13,666	19,743	24.68%	
8402	19,743	28,145	35.18%	
7302	28,145	35,447	44.31%	
7241	35,447	42,688	53.36%	
7187	42,688	49,875	62.34%	
7042	49,875	56,917	71.15%	
5539	56,917	62,456	78.07%	
6590	61,283	67,873	84.84%	
8650	67,873	76,523	95.65%	
6388	73,616	80,004	84.21%	
8825	75,907	84,732	89.19%	
4303	79,243	83,546	87.94%	
5739	77,469	83,208	87.59%	
8658	74,806	83,464	87.86%	
7592	76,162	83,754	88.16%	
8518	76,513	85,031	89.51%	
7217	77,844	85,061	89.54%	
7342	78,019	85,361	89.85%	
5866	79,822	85,688	90.20%	
6259	79,098	85,357	89.85%	

4744	76,707	81,451	85.74%
4857	75,063	79,920	84.13%
6674	71,095	77,769	81.86%
6781	73,466	80,247	84.47%
7048	74,508	81,556	85.85%
4950	72,898	77,848	81.95%
4980	70,256	75,236	79.20%
8366	66,718	75,084	79.04%
6064	67,867	73,931	77.82%



80,057



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
**Governor**

*Thomas W. Easterly*  
**Commissioner**

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027  
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## **SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED**

**TO:** Jeffrey L. Turner  
Metal Technologies Auburn, LLC  
1401 Grandstaff Avenue  
Auburn, IN 46706

**DATE:** July 20, 2012

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

**SUBJECT:** Final Decision  
Significant Source Modification to Part 70  
033-31731-00042

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:  
Tom Rarick, Consultant  
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](mailto:jbrush@idem.IN.gov).

Final Applicant Cover letter.dot 11/30/07



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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July 20, 2012

TO: Eckhart Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**

**Applicant Name: Metal Technologies Auburn, LLC**  
**Permit Number: 033-31731-00042**

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	PWAY 7/20/2012 Metal Technologies Auburn, LLC 033-31731-00042 (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:  <b>CERTIFICATE OF MAILING ONLY</b>	

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2		Mr. Steve Christman NISWMD 2320 W 800 S, P.O. Box 370 Ashley IN 46705 (Affected Party)										
3		Ms. Karen Sponhower 803 S. Van Buren Auburn IN 46706 (Affected Party)										
4		DeKalb County Commissioners 100 South Main Street Auburn IN 46706 (Local Official)										
5		Ms. Diane Leroy 303 N. Jackson St. Auburn IN 46706 (Affected Party)										
6		Mr. Barry Fordanish R#3 1480 CR 66 Auburn IN 46706 (Affected Party)										
7		Mr. Dave Weilbaker 1423 Urban Ave Auburn IN 46706 (Affected Party)										
8		Auburn City Council and Mayors Office P.O. Box 506 Auburn IN 46706-0506 (Local Official)										
9		Dekalb County Health Department 220 E 7th St #110 Auburn IN 46706 (Health Department)										
10		Daniel & Sandy Trimmer 15021 Yellow River Road Columbia City IN 46725 (Affected Party)										
11		Brown & Sons Fuel Co. P.O. Box 665 Kendallville IN 46755 (Affected Party)										
12		Mr. Marty K. McCurdy 2550 County Road 27 Waterloo IN 46793 (Affected Party)										
13		Tom Rarick Environmental Resources Management (ERM) 11350 N Meridian Suite 320 Carmel IN 46032 (Consultant)										
14		Eckhart Public Library 603 South Jackson Street Auburn IN 46706 (Library)										
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