



*Mitchell E. Daniels, Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
(800) 451-6027  
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TO: Interested Parties / Applicant  
DATE: October 4, 2006  
RE: Iron Dynamics, Inc. / 033-12614-00076  
FROM: Nisha Sizemore  
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, 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 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204.

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

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

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

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

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

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

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

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

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

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



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell A. Daniels, Jr.
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Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204-2251
(317) 232-8603
(800) 451-6027
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PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

Iron Dynamics, Inc.
4500 County Road 59
Butler, Indiana 46721

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

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. 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 2-2 and 326 IAC 2-7-10.5, applicable to those conditions.

Table with permit details: Operation Permit No.: T033-12614-00076, Issued by: Nisha Sizemore, Branch Chief, Office of Air Quality, Issuance Date: October 4, 2006, Expiration Date: October 4, 2011.

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## SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1, A.2, A.3 and A.4 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)]

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The Permittee owns and operates a stationary Direct Reduced Iron (DRI) manufacturing operation at a steel minimill.

Responsible Official: Plant Manager designee as defined in 326 IAC 2-7-1(34) (A)  
Source Address: 4500 County Road 59, Butler, Indiana 46721  
Mailing Address: 4500 County Road 59, Butler, Indiana 46721  
Phone Number: 260-868-8000  
SIC Code: 3312  
County Location: DeKalb  
Source Location Status: Attainment for all criteria pollutants  
Source Status: Part 70 Permit Program  
Major Source under PSD Rules  
Minor Source, Section 112 of the Clean Air Act  
1 of 28 Source Categories

### A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]

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The source consists of:

- (a) Steel Dynamics, Inc., the primary operation, located at 4500 County Road 59, Butler, Indiana 46721; and
- (b) Iron Dynamics, Inc., the supporting operation, located at 4500 County Road 59, Butler, Indiana 46721.

Separate Part 70 permits will be issued to Steel Dynamics, Inc. (033-8068-00043) and Iron Dynamics, Inc. (033-12614-00076), solely for administrative purposes. For this permit, the Permittee is Iron Dynamics, Inc., the supporting operation.

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

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Iron Dynamics, Inc. consists of the following emission units and pollution control devices:

#### Rotary Hearth Furnace (RHF)

- (a) One (1) rotary hearth furnace (RHF) constructed in 1998 and modified in 2001 with an addition of ten (10) natural gas-fired low-NOx burners, having a total furnace nominal heat input of 376 MMBtu per hour. The RHF processes coal and iron ore to produce a nominal throughput of ninety-six (96) tons of direct reduced iron per hour. Emissions are controlled by an afterburner for CO and VOC, lime injection in the gas stream for SO<sub>2</sub>, selective non-catalytic reduction for NO<sub>x</sub>, and a baghouse for PM/PM<sub>10</sub> and calcium sulfate (formed during reaction of lime and SO<sub>2</sub>). Emissions exhaust through Stack 40.
- (b) Use of Electric Arc Furnace (EAF) baghouse dust and other iron bearing feedstock as a supplemental feed material for the RHF.

### **Rotary Hearth Furnace Additional Emission Points**

(a) RHF Fugitives

One (1) 40,000 dscfm air flow fugitive emissions baghouse, added in 2003, to control fugitive emissions from the Rotary Hearth Furnace (RHF), exhausting through Stack 77.

(b) RHF Briquetters

Two (2) enclosed RHF green briquetters, constructed in 2003, replacing the existing pelletizing equipment, with a nominal throughput of 160 tons per hour, exhausting through the RHF fugitive emissions baghouse, exhausting through Stack 77.

### **Submerged Arc Furnace (SAF)**

(a) Submerged Arc Furnace (SAF)

(1) One (1) submerged arc furnace (SAF), constructed in 1998, that processes direct reduced iron (DRI), coke and lime to produce a nominal throughput of 106 tons of liquid hot metal (pig iron) per hour. Emissions are exhausted through a hole in the stationary lid, with particulate controlled by a wet venturi scrubber and carbon monoxide (CO) controlled by a thermal oxidizer exhausting through Stack 58.

(2) One (1) desulfurization station, constructed in 1998, with a nominal capacity of 106 tons per hour, uses lime to remove sulfur in the pig iron produced at the SAF. Emissions from the desulfurization station, DRI bins, slag pots and tapping associated with the SAF are captured by canopy hoods and particulate matter is controlled by the desulfurization baghouse exhausting through Stack 58.

(b) RHF Discharge Chute

One (1) 60,000 dscfm airflow RHF Discharge Chute baghouse, added in 2003, to control fugitive emissions from the pan conveyor used to transport material from the Rotary Hearth Furnace to the Submerged Arc Furnace exhausting to Stack 58.

(c) Ladle Preheaters

Two (2) ladle preheaters each with a nominal heat input of 9 MMBtu per hour;

(d) Briquetters

Two (2) enclosed SAF hot briquetters, constructed in 2002, with a nominal throughput of 106 tons per hour, exhausting through Stack 58.

(e) Conveyors

(1) One (1) Hot Pan Conveyor, identified as Hot Pan Conveyor 1, constructed in 2000, with a nominal throughput rate of 106 tons per hour, and

(2) One (1) Hot Pan Conveyor, identified as Hot Pan Conveyor 2, constructed in 2003, with a nominal throughput rate of 106 tons per hour.

### **Coal and Iron Ore Unloading**

(a) One (1) receiving shed, constructed in 1998, with a particulate matter emissions exhaust

system controlled by a baghouse exhausting through Stacks 67 and 68.

- (b) One (1) rotary railcar dumper, constructed in 1998, with a nominal throughput of 2,500 tons per hour, with the particulate matter emissions captured by a side hood controlled by the shed baghouse exhausting through Stacks 67 and 68.

### **Coal Processing**

- (a) One (1) totally enclosed coal crusher identified as a double cone classifier (grinder), constructed in 1998, with the air from the coal collectors that is not recirculated, exhausts through the coal dryer Stack 75.
- (b) One (1) coal dryer, constructed in 1998, with a nominal heat capacity of 25 MMBtu per hour and processes a nominal 60 tons of coal per hour, with emissions exhausting through Baghouse B-75, then Stack 75.

### **Ore Dryer**

One (1) Ore Dryer, constructed in 1998, with a nominal heat capacity of 27 MMBtu per hour and processes a nominal 115 tons of ore per hour, with emissions exhausting through Baghouse B-76, then Stack 76.

### **Ore Processing**

One (1) Ore Preparation Process, constructed in 1998, consisting of a roll screener, ore press (grinder) and magnetic separators with particulate matter emissions controlled by a baghouse, exhausting to Stack 74.

### **Material Storage and Handling**

- (a) Silos and Bins

Fourteen (14) material storage silos and bins equipped with air bin vent filters to vent the displaced air for particulate matter emissions control, consisting of the following:

- (1) One (1) storage bin, constructed in 1998, with a nominal capacity of 8,000 cubic feet, exhausting through Stack 44.
- (2) One (1) EAF dust silo, constructed in 1998, with a nominal capacity of 7,970 cubic feet, exhausting through Stack 45.
- (3) One (1) carbon injection silo, constructed in 1998, with a nominal capacity of 2,300 cubic feet, exhausting through Stack 46.
- (4) Four (4) coal silos, constructed in 1998, with nominal capacities of 8,909, 23,420, 19,712 and 24,289 cubic feet respectively, exhausting through Stacks 47 through 50.
- (5) One (1) SAF bin, constructed in 1998, with a nominal capacity of 7,970 cubic feet, exhausting through Stack 86.
- (6) One (1) zinc silo, constructed in 2003, with a nominal throughput rate of 3.0 tons of recycled zinc per hour, controlled by one (1) filter, exhausting through Stack 80.

- (7) One (1) ash silo , constructed in 2003, with a nominal throughput rate of 3.0 tons of ash per hour, controlled by one (1) filter, exhausting into the building.
- (8) Four (4) storage bins, constructed in 1998.

(b) **Material Recycling and Unloading Systems**

- (1) One (1) SAF dust recycling system, constructed in 2003 with a nominal throughput rate of 3.0 tons of dust per hour, controlled by one (1) filter, exhausting into the building.
- (2) One (1) zinc silo, constructed in 2003 with a nominal throughput rate of 3.0 tons of recycled zinc per hour, controlled by one (1) filter, exhausting through Stack 80.
- (3) One (1) ash silo, constructed in 2003 with a nominal throughput rate of 3.0 tons of ash per hour, controlled by one (1) filter, exhausting into the building.
- (4) One (1) EAF dust unloading process, constructed in 2003 with a nominal throughput rate of 3.0 tons of dust per hour, controlled by one (1) filter, exhausting into the building.
- (5) One (1) vacuum system, constructed in 2003 with a nominal throughput rate of 3.0 tons of dust per hour, controlled by one (1) filter, exhausting into the building.
- (6) One (1) zinc silo unloading process, constructed in 2003 with a nominal throughput rate of 3.0 tons of zinc per hour, controlled by one (1) filter, exhausting into the building.
- (7) One (1) ash silo unloading process, constructed in 2003 with a nominal throughput rate of 3.0 tons of ash per hour, controlled by one (1) filter, exhausting into the building.

**Outdoor Storage and Handling**

- (a) One (1) coal and ore Stacker conveyer with a nominal capacity of 2,500 tons per hour. Fugitive emissions controlled as needed by water sprays, to control fugitive dust at transfer and discharge points.
- (b) One (1) storage pile of coal with a nominal storage capacity of 20,000 tons and nominal pile acreage of 1.0 acre and a nominal throughput of 300,000 tons per year.
- (c) One (1) storage pile of iron ore with a nominal storage capacity of 120,000 tons and nominal pile acreage of 5.7 acres and a nominal throughput of 900,000 tons per year.
- (d) One (1) storage pile of fluxstone (lime dolomite) with a storage capacity of 30,000 tons and a pile acreage of 0.5 acres and a nominal throughput of 80, 000 tons per year.
- (e) Above ground coal and iron ore reclaim hoppers used by the front end loaders to transport material from the storage piles to the conveying system.
- (f) Closed conveyers with a nominal capacity of 1,100 tons per hour to move coal and ore to storage silos or coal crusher.

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

Iron Dynamics, Inc. also includes the following insignificant activities, as follows:

1. Specifically regulated insignificant activities, as defined in 326 IAC 2-7-1(21):
  - (a) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment and welding equipment. [326 IAC 6-3-2]
  - (b) Bentonite railcar unloading. [326 IAC 6-3-2]
2. Other Insignificant activities:
  - (a) Space heaters, process heaters, or boilers using the following fuels:
    - (i) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
    - (ii) Propane or liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour.
  - (b) Combustion source flame safety purging on startup.
  - (c) The following VOC and HAP storage containers:
    - (i) Storage tanks with capacity less than or equal to one thousand (1,000) gallons and annual throughputs equal to or less than twelve thousand (12,000) gallons.
    - (ii) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
  - (d) Refractory storage not requiring air pollution control equipment.
  - (e) Equipment used exclusively for filling drums, pails, or other packaging containers with the following: Lubricating oils, Waxes and Greases.
  - (f) Application of: oils; greases; lubricants; and nonvolatile material; as temporary protective coatings.
  - (g) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
  - (h) Noncontact cooling tower systems with the following: Forced and induced draft cooling tower system not regulated under a NESHAP.
  - (i) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
  - (j) Stockpiled soils from soil remediation activities that are covered and waiting transport for disposal.
  - (k) Paved and unpaved roads and parking lots with public access.
  - (l) Covered conveyors for limestone conveying of less than or equal to seven thousand two hundred (7,200) tons per day for sources other than mineral processing plants constructed after August 31, 1983.
  - (m) Underground conveyors.

- (n) Coal bunker and coal scale exhausts and associated dust collector vents.
  - (o) Purging of gas lines and vessels that is related to routing maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
  - (p) Flue gas conditioning systems and associated chemicals such as the following: sodium sulfate; ammonia and sulfur trioxide.
  - (q) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
  - (r) On-site fire and emergency response training approved by the department.
  - (s) Purge double block and bleed valves.
  - (t) Filter or coalescer media changeout.
  - (u) A laboratory as defined in 326 IAC 2-7-1(21)(D).
  - (v) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
  - (w) Cleaners and solvents characterized as follows: Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38°C (100°F).
3. Other Activities less than significant level
- (a) Diesel generators

A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

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Iron Dynamics, Inc. 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)]**

- 
- (a) This permit, T033-12614-00076, 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, and 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. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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

---

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form or its equivalent, with each submittal requiring certification. One 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 Branch, Office of Air Quality  
100 North Senate Avenue  
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, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, 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 Branch, Office of Air Quality  
100 North Senate Avenue,  
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require the certification by the “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 the certification by the “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-base emission limitation, except as otherwise provided in this condition.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;

- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

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

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee promptly 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 promptly takes all reasonable steps to correct the emergency and minimize emissions.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

**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 T033-12614-00076 and issued pursuant to permitting programs approved into the state implementation plan have been either:
  - (1) incorporated as originally stated,
  - (2) revised under 326 IAC 2-7-10.5, or
  - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

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

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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 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]**

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- (a) Deviations from any permit requirements (for emergencies see Section B.11 - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. 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.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

**B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]**

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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 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:
  - (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-4] [326 IAC 2-7-8(e)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:
  - (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
  - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being

needed to process the application.

**B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]**

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

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

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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  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]  
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

**B.21 Source Modification Requirement [326 IAC 2-7-10.5] [326 IAC 2-2-2]**

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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 2-2-2.

**B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC 13-17-3-2] [IC13-30-3-1]**

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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 and the U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

**B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]**

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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 permit revision that allows for 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  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require the certification 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.24 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.25 Credible Evidence [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [62 FR 8314][326 IAC 1-1-6]

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

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

**C.1 Particulate Matter 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 5-1-3 (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 or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

**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 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]**

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to a fugitive dust plan submitted for approval by IDEM no later than ninety (90) days after issuance of this permit for approval by IDEM.

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

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

**C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]**

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The Permittee shall comply with the applicable requirements of 326 IAC 14-10, 326 IAC 18, and 40 CFR 61.140.

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

**C.9 Performance Testing [326 IAC 3-6]**

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- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
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 certification by the "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 certification by the "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 no 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 no later than five (5) days prior to the end of the initial forty-five (45) day period. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

**C.10 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.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

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Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented no later than ninety (90) days after permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated no later than ninety (90) days, 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 Branch, Office of Air Quality  
100 North Senate Avenue  
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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

**C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]**

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Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

**C.13 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.14 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 prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on August 16, 1998.
- (b) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

**C.15 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.16 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]**

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- (a) Upon detecting an excursion or exceedance, the Permittee shall 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 emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the

likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are 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 within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
- (1) monitoring results;
  - (2) review of operation and maintenance procedures and records;
  - (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 maintain the following records:
- (1) monitoring data;
  - (2) monitor performance data, if applicable; and
  - (3) corrective actions taken.

C.17 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.9 - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, no later than thirty (30) days after receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the corrective actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred twenty (120) days after submission to IDEM, OAQ of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and 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 not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]  
[326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11][326 IAC 2-2]**

C.18 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]

- (a) Pursuant to 326 IAC 2-6-3(a) (1), the Permittee shall submit no later than July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
  - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant which is used only for purposes of Section 19 of this rule") from the source, for purposes of Part 70 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,  
Indianapolis, Indiana 46204-2251

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The emission statement 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.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2]

- (a) Records of all required monitoring data 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, all record keeping requirements not already legally required shall be implemented no later than ninety (90) days after permit issuance.
- (c) If there is a reasonable possibility 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 Clean Unit, which is not part of a "major modification" (as defined in 326 IAC 2-2-1 (ee) and/or 326 IAC 2-3-1 (z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1 (rr) and/or 326 IAC 2-3-1 (mm)), the Permittee shall comply with following:
- (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, document and maintain the following records:

- (A) A description of the project.
  - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
  - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
    - (i) Baseline actual emissions;
    - (ii) Projected actual emissions;
    - (iii) Amount of emissions excluded under section; 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1(mm)(2)(A)(iii); and
    - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
- (2) 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
- (3) 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.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2]

- (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. This report shall be submitted no later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
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) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted no later than thirty (30) days after the end of the reporting period. All reports that require certification shall be signed by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) 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 months, quarters or years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

- (f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C.19- 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.19 - General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C.19 - 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.19 - General Record Keeping Requirements (c)(1)(C)(ii).
- (g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:
- (1) The name, address, and telephone number of the major stationary source.
  - (2) The annual emissions calculated in accordance with (c)(2) and (3) in Section C.19 - 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  
Air Compliance Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

- (h) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C.19 - 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.21 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:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

**Alternative Operating Scenario**

C.22 Alternative Operating Scenario

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The Permittee may use propane gas as an alternative fuel in place of natural gas during emergency situations.

## SECTION D.1 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]: Rotary Hearth Furnace Operations

#### Rotary Hearth Furnace (RHF)

- (a) One (1) rotary hearth furnace (RHF) constructed in 1998 and modified in 2001 with an addition of ten (10) natural gas-fired low-NO<sub>x</sub> burners, having a total furnace nominal heat input of 376 MMBtu per hour. The RHF processes coal and iron ore to produce a nominal throughput of ninety-six (96) tons of direct reduced iron per hour. Emissions are controlled by an afterburner for CO and VOC, lime injection in the gas stream for SO<sub>2</sub>, selective non-catalytic reduction for NO<sub>x</sub>, and a baghouse for PM/PM<sub>10</sub> and calcium sulfate (formed during reaction of lime and SO<sub>2</sub>). Emissions exhaust through Stack 40.
- (b) Use of Electric Arc Furnace (EAF) baghouse dust and other iron bearing feedstock as a supplemental feed material for the RHF.

(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 Particulate Matter (PM/PM<sub>10</sub>) - Best Available Control Technology (BACT)[326 IAC 2-2-3]

Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), the PM/PM<sub>10</sub> (where PM<sub>10</sub> includes both filterable and condensable components) emissions from the rotary hearth furnace process baghouse shall not exceed an air flow rate design of 310,000 dscfm (353,000 acfm) and 0.0052 grains per dscf through Stack 40. The total emissions shall not exceed 13.4 pounds per hour.

#### D.1.2 Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]

- (a) Pursuant to SSM 033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), the visible emissions discharged into the atmosphere from the rotary hearth furnace process baghouse Stack 40 shall not exceed three percent (3%) opacity in accordance with condition D.1.17, as determined by a six (6) minute average (24 readings taken in accordance with EPA Method 9, Appendix A).
- (b) Pursuant to CP-033-8091-00043, issued June 25, 1997 and 326 IAC 2-2-3, the visible emissions from vents, Stacks and building roof monitors, unless otherwise specified, shall not exceed three (3%) percent opacity. Visible emissions shall be determined by a six (6) minute average (24 readings taken in accordance with EPA Method 9, Appendix A) pursuant to 326 IAC 5-1-4.

#### D.1.3 Sulfur Dioxide (SO<sub>2</sub>) - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), the sulfur dioxide emissions from the rotary hearth furnace process baghouse Stack 40 shall be controlled by lime injection, wet scrubber and/or use of EAF dust as supplemental feedstock. The SO<sub>2</sub> emissions shall be limited as follows:

- (a) When using lime injection or wet scrubber as control, SO<sub>2</sub> emissions shall not exceed 0.75 pounds per ton of material charged into the furnace. The SO<sub>2</sub> emissions shall not exceed 78 pounds per hour.
- (b) When using at least 2 tons per hour of EAF dust as supplemental feedstock as control, SO<sub>2</sub> emissions shall not exceed 0.4 pounds per ton of material charged into the furnace.

The SO<sub>2</sub> emissions shall not exceed 39.0 pounds per hour

D.1.4 Volatile Organic Compounds (VOC) - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), except during periods of start up or shut down, the volatile organic compound emissions from the rotary hearth furnace process baghouse Stack 40 shall be controlled by an afterburner and operated at an average temperature of one thousand eight hundred sixty three (1863)<sup>o</sup>F and emissions shall not exceed 0.06 pounds per ton of material charged into the furnace. The total emissions shall not exceed 6.23 pounds per hour.

D.1.5 VOC General Reduction Requirements (BACT): New Facilities [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6, the Rotary Hearth Furnace Best Available Control Technology (BACT) requirements for 326 IAC 2-2-3 are equivalent to BACT requirements for this rule.

D.1.6 Carbon Monoxide (CO) - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), except during periods of start up or shut down, the carbon monoxide emissions from the rotary hearth furnace process bag house Stack 40 shall be controlled by afterburner and operated at an average temperature of one thousand eight hundred sixty three (1863)<sup>o</sup>F and emissions shall not exceed 100 ppm and 114,519 ug/m<sup>3</sup>. The total emissions shall not exceed 146.8 pounds per hour.

D.1.7 Nitrogen Oxides (NOx) - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), the nitrogen oxide(s) emissions from the rotary hearth furnace process baghouse Stack 40 shall be controlled by the use of low-NOx natural gas-fired burners and a selective non-catalytic reduction unit (SNCR). Except during periods of start up or shut down, the total emissions shall not exceed 1.25 pounds per ton of material charged into the furnace and 120 pounds per hour.

The SNCR system shall be operated in a manner recommended by the manufacturer and good work practices to minimize the NOx emissions and ammonia slip.

D.1.8 Lead Emissions - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), the lead emissions from the rotary hearth furnace process baghouse Stack 40 shall not exceed 0.00058 pounds per ton of material charged into the furnace and 0.0557 pounds per hour.

D.1.9 Startup and Shutdown Emissions - Best Available Control Technology [326 IAC 2-2-3]

- (a) Pursuant to SSM 033-15955-00076, issued on December 18, 2002 and 326 IAC 2-2-3, the startup is defined as the duration from the firing of the burners in the RHF to the time when the RHF exhaust gas temperature is within the optimum ranges of the operation control devices for NOx, CO and VOC emissions.
- (b) Shutdown is defined as the duration from first curtailment of fuel input to the RHF burners with the intent of full shutdown to the final complete stop of fuel input and complete cessation of combustion in the RHF.
- (c) The RHF shall be operated in a manner consistent with good air pollution control and work practices to minimize emissions during startup and shutdown by operating in accordance with written procedures developed and maintained by the Permittee, which shall include at a minimum the following measures:
  - (1) Review of operating parameters of the unit startup, or shutdown as necessary to make adjustments to reduce or eliminate excess emissions;

- (2) Operate emission control equipment as soon as the RHF exhaust gas temperature reaches the lower value of the optimum temperature range for the control equipment. This operation shall continue until the time the RHF shutdown sequence is initiated with the intention of shutdown of the unit; and
- (3) Implementation of the inspection and repair procedures for the RHF and the emissions control equipment prior to attempting startup to ensure proper operation.

**D.1.10 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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A Preventive Maintenance Plan, in accordance with Section B.10 - Preventive Maintenance Plan, of this permit, is required for the RHF and the following control devices: the rotary hearth furnace process baghouse, RHF selective non-catalytic reduction system, and thermal oxidizer.

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

**D.1.11 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]**

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- (a) Within thirty (30) months from the date of the latest compliance demonstration stack test and in order to demonstrate compliance with Condition D.1.1 and D.1.4, the Permittee shall perform PM/PM<sub>10</sub> and VOC testing on the RHF, utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years. PM<sub>10</sub> includes filterable and condensable components.
- (b) Within thirty (30) months from the date of the latest compliance demonstration stack test and in order to demonstrate compliance with Condition D.1.8, the Permittee shall analyze the EAF baghouse dust for the hazardous components. The Permittee shall calculate the hourly HAP emissions assuming 100% vaporization of the hazardous components identified previously for the Rotary Hearth Furnace process baghouse Stack 40, using the highest throughput rate in tons per hour of EAF baghouse dust achieved during this period. This mass balance computation shall be converted to annual emissions assuming 8760 hours of operation in a year, and used to establish that the single HAP emissions are less than 10 tons per year and the combination of HAPs emissions are less than 25 tons per year pursuant to 326 IAC 2-4.1-1. In the event that the HAP emissions exceed the threshold stated earlier, the Permittee shall inform the IDEM, OAQ about the same, and curtail the operation of the RHF in a manner, not to exceed the thresholds specified in this condition.

All testing (except testing of the EAF baghouse dust, which shall be tested in accordance with SW-846 or other approved methods) shall be conducted in accordance with Section C.9 - Performance Testing.

**D.1.12 Particulate Matter (PM/PM<sub>10</sub>) - Best Available Control Technology [326 IAC 2-2-3]**

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Pursuant to SSM033-15955-00076, issued on December 18, 2002, A-033-17732-00076, issued September 17, 2003 and 326 IAC 2-2-3 (Control Technology Review: Requirements) and in order to comply with conditions D.1.1 and D.1.8, the baghouse for PM/PM<sub>10</sub> control shall be in operation and control emissions from the rotary hearth furnace process baghouse Stack 40 at all times the rotary hearth furnace is in operation.

**D.1.13 Sulfur Dioxide (SO<sub>2</sub>) - Best Available Control Technology [326 IAC 2-2-3]**

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Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (Control Technology Review: Requirements) and in order to comply with condition D.1.3, the lime injection or wet scrubber unit for sulfur dioxide control shall be in operation and/or use of EAF dust as supplemental feedstock in the RHF to control emissions from the rotary hearth furnace process baghouse Stack 40 at all times the rotary hearth furnace is in operation, except as provided in D.1.9(c)(2).

**D.1.14 Carbon Monoxide (CO) and Volatile Organic Compounds (VOC) - Best Available Control Technology [326 IAC 2-2-3]**

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Pursuant to CP-033-8091-00043, issued on June 25, 1997 and 326 IAC 2-2-3 (Control Technology Review: Requirements and in order to comply with conditions, D1.4, and D.1.5, the afterburner for control of carbon monoxide and volatile organic compounds shall be in operation and control emissions from the rotary hearth furnace at all times the rotary hearth furnace is in operation except as provided in D.1.9(c)(2).

**D.1.15 Nitrogen Oxides (NOx) - Best Available Control Technology [326 IAC 2-2-3]**

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Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (Control Technology Review: Requirements) and in order to comply with condition D.1.7, except during periods of startup or shutdown, the selective non-catalytic reduction unit for NOx control shall be in operation and control emissions from the rotary hearth furnace process baghouse Stack 40 at all times the rotary hearth furnace is in operation.

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

**D.1.16 Continuous Emission Rate Monitoring [326 IAC 3-5]**

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- (a) Pursuant to 326 IAC 3-5-1(d), the Permittee shall calibrate, certify, operate, and maintain a continuous emissions monitoring systems (CEMS) for measuring SO<sub>2</sub>, CO, and NOx emissions rates in pounds per hour from the rotary hearth furnace process baghouse Stack 40, in accordance with 326 IAC 3-5-2 through 326 IAC 3-5-7.
- (b) The Permittee shall record the output of the system and shall perform the required record keeping, pursuant to 326 IAC 3-5-6, and reporting, pursuant to 326 IAC 3-5-7.
- (c) In the event that a breakdown of the SO<sub>2</sub>, CO, and/or NOx continuous emission monitoring system (CEMS) occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (d) Whenever the SO<sub>2</sub> CEMS is malfunctioning or will be down for calibration, maintenance, or repairs for a period of six (6) hours, the Permittee shall monitor the lime injection rate into the gas stream.
- (e) Whenever the NOx CEMS is malfunctioning or will be down for calibration, maintenance, or repairs for a period of six (6) hours, the Permittee shall monitor the ammonia injection rate into the Selective Non-Catalyst Reduction Unit.
- (f) When ever the CO continuous emissions monitoring system is malfunctioning or down for maintenance or repair for a period of six (6) hours, the Permittee shall monitor the thermal oxidizer temperature, so it is maintained at the temperature achieved during the last compliant stack test.
- (g) A calibrated backup SO<sub>2</sub>, NOx and/or CEMS shall be brought online no later than seventy-two (72) hours of shutdown of the primary CEMS, and shall be operated until such time as the primary CEMS is back in operation.
- (h) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 2-2.

**D.1.17 Opacity Monitoring on the Rotary Hearth Furnace**

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The Permittee shall demonstrate compliance with Condition D.1.2 by using any of the following methods:

- (a) Opacity Readings by certified opacity observer:
- (1) Opacity from the rotary hearth furnace process baghouse Stack 40 shall be performed at least once per day during normal daylight operations. A certified opacity observer shall observe the opacity when the rotary hearth furnace is in operation.
  - (2) These observations shall be taken in accordance with 40 CFR 60 Appendix A, Method 9 for at least two six (6) minute averages.
  - (3) 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.
  - (4) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C.16 – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C.16 – Response to Excursions or Exceedances shall be considered a deviation from this permit.
  - (5) Conditions (1) through (3) above are not applicable should a continuous opacity monitor be installed which meets 40 CFR 60, Appendix B, Performance Specification or a bag leak detector is installed as provided in this condition.
- (b) Continuous Opacity Monitoring System (COMs)
- (1) Calibrate, certify, operate and maintain a continuous opacity monitoring system in accordance with 40 CFR 60 Appendix B, Performance Specification for measuring opacity from the rotary hearth furnace process baghouse Stack 40, in accordance with 326 IAC 3-5-2 through 326 IAC 3-5-7.
  - (2) In the event that a breakdown of a COMS occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
  - (3) Whenever a COM is malfunctioning or is down for maintenance, or repairs for a period of twenty-four (24) hours or more, and a backup COMS is not online within twenty-four (24) hours of shutdown or malfunction of the primary COMS, the Permittee shall provide a certified opacity reader, who may be an employee of the Permittee or an independent contractor, to self-monitor the emissions from the emission unit stack.
    - (A) Visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.
    - (B) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least twice per day during daylight operations, with at least four (4) hours between each set of readings, until a COMS is online.
    - (C) Method 9 readings may be discontinued once a COMS is online.
    - (D) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.

- (4) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5 and 40 CFR 60.
- (c) Bag Leak Detection System
- (1) Operation of a bag leak detection system. If bag leak detection system is installed, then condition D.1.18 shall not be applicable.
  - (2) In the event the bag leak detection system is inoperable, the Permittee shall substitute Condition D.1.17(a) and D.1.18 to show compliance, until the bag leak detection system is operable.
  - (3) The baghouse leak detection system shall meet the following criteria:
    - (A) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 0.0052 grains per dry standard cubic foot or less.
    - (B) The bag leak detection system sensor must provide output of relative particulate matter loading.
    - (C) The bag leak detection system must be equipped with an alarm system that will alarm when an increase in relative particulate loading is detected over a preset level established or verified during a Stack test.
    - (D) The bag leak detection system shall be installed and operated in a manner consistent with available written guidance from the US Environmental Protection Agency or, in the absence of such written guidance, the manufacturer's written specifications and recommendations for installation, operation, and adjustment of the system.
    - (E) The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the devices, and establishing the alarm set points and the alarm delay time.
    - (F) In no event shall the sensitivity be increased by more than 100 percent or decreased by more than 50 percent over a 326 day period unless such adjustment follows a complete baghouse inspection which demonstrates the baghouse is in good operating condition.
    - (G) The bag leak detection system sensors must be inspected monthly and build-up must be removed from probe and insulator.
    - (H) The Permittee shall perform monthly QA checks including response tests and electronics drift checks and opacity readings to confirm the operation of the baghouse is in order.
    - (I) The bag detector must be installed downstream of the baghouse.
    - (J) In the event a bag leak detection system alarm is triggered and 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.

- (K) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C.16 – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C.16 – Response to Excursions or Exceedances shall be considered a deviation from this permit.

#### D.1.18 Parametric Monitoring

- (a) The Permittee shall record the pressure drop across the baghouse used in conjunction with the rotary hearth furnace, at least once per day when the RHF is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 and 10.0 inches of water or a range established during the latest Stack test, the Permittee shall take reasonable response steps in accordance with Section C.16 – Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C.16 – Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C.13 - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

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

#### D.1.19 Record Keeping Requirements

- (a) To document compliance with Condition D.1.16 and D.1.17(b) (if applicable) the Permittee shall maintain records as required under 326 IAC 3-5-6 at the source in a manner such that they may be inspected by IDEM, OAQ or U.S. EPA, as requested.
- (b) To document compliance with Condition D.1.16(c) through (g), the Permittee shall maintain records of CEMS down time, the lime injection rate, the ammonia injection rate and/or thermal oxidizer temperature during the CEMS down time.
- (c) To document compliance with Condition D.1.17(a) (if applicable), the Permittee shall maintain records of the once per day opacity readings of the rotary hearth furnace process baghouse Stack 40.
- (d) To document compliance with Condition D.1.18 (if applicable), the Permittee shall maintain records of the once per day pressure drop during normal operation.
- (e) To document compliance with condition D1.17(c)(3) (if applicable), the Permittee shall maintain records of opacity readings of the dates and times of all bag leak detection system alarms, the cause of each alarm, and an explanation of all corrective actions taken and records of preventive maintenance required by D.1.17(c)(3)(G) and (H).
- (f) All records shall be maintained in accordance with Section C.19 - General Record Keeping Requirements, of this permit.

#### D.1.20 Reporting Requirements

The Permittee shall submit on a quarterly basis records of excess opacity, SO<sub>2</sub>, CO and NO<sub>x</sub> emissions (defined in 326 3-5-7 and 40 CFR Part 60.7) from the continuous emissions monitoring

system and the opacity readings taken (if applicable). These reports shall be submitted no later than thirty (30) days after the end of each calendar quarter and in accordance with Section C.20-General Reporting Requirements of this permit. The report submitted by the Permittee does require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## SECTION D.2 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]: Rotary Hearth Furnace Additional Emission Points

(a) RHF Fugitives

One (1) 40,000 dscfm air flow baghouse to control fugitive emissions from the Rotary Hearth Furnace (RHF), exhausting through Stack 77.

(b) RHF Briquetters

Two (2) enclosed RHF green briquetter, constructed in 2003, replacing the existing pelletizing equipment, with a nominal throughput of 160 tons per hour, exhausting through the one (1) 40,000 dscfm air flow baghouse, added in 2003, exhausting through Stack 77.

(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 Particulate Matter (PM/PM<sub>10</sub>) - Best Available Control Technology (BACT)[326 IAC 2-2-3]

Pursuant to A-033-17732-00076, issued September 17, 2003 and 326 IAC 2-2-3 (BACT), the PM/PM<sub>10</sub> (where PM<sub>10</sub> includes both filterable and condensable components) emissions from the rotary hearth furnace fugitives' baghouse and briquetter baghouse shall not exceed a total air flow rate design of 100,000 dscfm and 0.0052 grains per dscf through Stack 77. The total emissions shall not exceed 4.46 pounds per hour.

#### D.2.2 Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to A033-17732-00076, issued September 17, 2003 and 326 IAC 2-2-3 (BACT), the visible emissions discharged into the atmosphere from rotary hearth furnace fugitives baghouse and briquetter baghouse Stack 77 shall not exceed three percent (3%) opacity, as determined by a six (6) minute average (24 readings taken in accordance with EPA Method 9, Appendix A).

#### D.2.3 Lead Emissions - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to A-033-17732-00076, issued September 17, 2003 and 326 IAC 2-2-3 (BACT), the lead emissions from the rotary hearth furnace fugitive emissions and briquetter baghouses Stack 77 shall not exceed 0.019 pounds per hour.

#### D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B.10 - Preventive Maintenance Plan, of this permit, is required for the RHF control devices: RHF fugitives baghouse and RHF briquetters baghouse.

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

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

Within thirty (30) months from the date of the latest compliance demonstration Stack test and in order to demonstrate compliance with Condition D.2.1, the Permittee shall perform PM/PM<sub>10</sub> testing on the RHF fugitives baghouse and briquetter baghouse Stack 77, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every two and one half (2½) years from the date of the most recent valid compliance demonstration Stack test. PM<sub>10</sub> includes filterable and condensable components. Testing shall be conducted in accordance with Section C.9 - Performance Testing.

**D.2.6 Particulate Matter (PM/PM<sub>10</sub>) - Best Available Control Technology) [326 IAC 2-2-3]**

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Pursuant to SSM 033-15955-00076, issued on December 18, 2002, A-033-17732-00076, issued September 17, 2003 and 326 IAC 2-2-3 (Best Available Control Technology Review: Requirements) and in order to comply with condition D.2.1 and D.2.3, the baghouses for PM/PM<sub>10</sub> control shall be in operation and control emissions from the rotary hearth furnace fugitives and briquetters at all times the rotary hearth furnace and briquetters are in operation.

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

**D.2.7 Opacity Monitoring on the Rotary Hearth Furnace**

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The Permittee shall demonstrate compliance with Condition D.2.2 by using any of the following methods:

- (a) Opacity Readings by certified opacity observer:
  - (1) Opacity from the RHF fugitives and briquetter baghouse stack 77 shall be performed at least once per day during normal daylight operations. A certified opacity observer shall observe the opacity when the rotary hearth furnace is in operation.
  - (2) These observations shall be taken in accordance with 40 CFR 60 Appendix A, Method 9 for at least two six (6) minute averages.
  - (3) 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.
  - (4) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C.16 – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C.16 – Response to Excursions or Exceedances shall be considered a deviation from this permit.
  - (5) Conditions (1) through (3) above are not applicable should a continuous opacity monitor be installed which meets 40 CFR 60, Appendix B, Performance Specification or a bag leak detector is installed as provided in this condition.
- (b) Continuous Opacity Monitoring System (COMs)
  - (1) Calibrate, certify, operate and maintain a continuous opacity monitoring system in accordance with 40 CFR 60 Appendix B, Performance Specification for measuring opacity from the RHF fugitives and briquetters baghouse stack 77, in accordance with 326 IAC 3-5-2 through 326 IAC 3-5-7.
  - (2) In the event that a breakdown of a COMS occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
  - (3) Whenever a COM is malfunctioning or is down for maintenance, or repairs for a period of twenty-four (24) hours or more, and a backup COMS is not online within twenty-four (24) hours of shutdown or malfunction of the primary COMS, the Permittee shall provide a certified opacity reader, who may be an employee of the Permittee or an independent contractor, to self-monitor the emissions from the emission unit stack.

- (A) Visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.
  - (B) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least twice per day during daylight operations, with at least four (4) hours between each set of readings, until a COMS is online.
  - (C) Method 9 readings may be discontinued once a COMS is online.
  - (D) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.
- (4) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5 and 40 CFR 60.
- (c) Bag Leak Detection System
- (1) Operation of a bag leak detection system. If bag leak detection system is installed, then condition D.2.8 shall not be applicable.
  - (2) In the event the bag leak detection system is inoperable, the Permittee shall substitute Condition D.2.7(a) and D.2.8 to show compliance, until the bag leak detection system is operable.
  - (3) The baghouse leak detection system shall meet the following criteria:
    - (A) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 0.0052 grains per dry standard cubic foot or less.
    - (B) The bag leak detection system sensor must provide output of relative particulate matter loading.
    - (C) The bag leak detection system must be equipped with an alarm system that will alarm when an increase in relative particulate loading is detected over a preset level established or verified during a Stack test.
    - (D) The bag leak detection system shall be installed and operated in a manner consistent with available written guidance from the US Environmental Protection Agency or, in the absence of such written guidance, the manufacturer's written specifications and recommendations for installation, operation, and adjustment of the system.
    - (E) The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the devices, and establishing the alarm set points and the alarm delay time.
    - (F) In no event shall the sensitivity be increased by more than 100 percent or decreased by more than 50 percent over a 326 day period unless

such adjustment follows a complete baghouse inspection which demonstrates the baghouse is in good operating condition.

- (G) In the event a bag leak detection system alarm is triggered and 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.
- (H) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C.16 – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C.16 – Response to Excursions or Exceedances shall be considered a deviation from this permit.

#### D.2.8 Parametric Monitoring

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- (a) The Permittee shall record the pressure drop across the baghouses used in conjunction with the rotary hearth furnace fugitives and briquetters, at least once per day when the RHF is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 and 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C.16- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C.16- Response to Excursions or Exceedances shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C.13 - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

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

#### D.2.9 Record Keeping Requirements

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- (a) To document compliance with Condition D.2.7(b) (if applicable) the Permittee shall maintain records as required under 326 IAC 3-5-6 at the source in a manner such that they may be inspected by IDEM, OAQ or U.S. EPA as requested.
- (b) To document compliance with Condition D.2.7(a) (if applicable), the Permittee shall maintain records of once per day opacity readings of the RHF fugitives and RHF briquette baghouses stack 77 exhausts.
- (c) To document compliance with Condition D.2.8 (if applicable), the Permittee shall maintain records of the once per day pressure drop during normal operation.
- (d) To document compliance with condition D.2.7(c)(3) (if applicable), the Permittee shall maintain records of opacity readings of the dates and times of all bag leak detection system alarms and the cause of each alarm.
- (e) All records shall be maintained in accordance with Section C.19 - General Record Keeping Requirements, of this permit.

#### D.2.10 Reporting Requirements

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The Permittee shall submit on a quarterly basis records of excess opacity, emissions (defined in 326 IAC 3-5-7 and 40 CFR Part 60.7) from the continuous emissions monitoring system and the opacity readings taken (if applicable). These reports shall be submitted no later than thirty (30) days after the end of each calendar quarter and in accordance with Section C.20- General Reporting Requirements of this permit. The report submitted by the Permittee does require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

### SECTION D.3 FACILITY OPERATION CONDITIONS

#### Facility Description [326 IAC 2-7-5(15)]:

##### Submerged Arc Furnace (SAF)

(a) Submerged Arc Furnace (SAF)

- (1) One (1) submerged arc furnace (SAF), constructed in 1998, that processes direct reduced iron (DRI), coke and lime to produce a nominal throughput of one hundred six (106) tons of liquid hot metal (pig iron) per hour. Emissions are exhausted through a hole in the stationary lid, with particulate controlled by a wet venturi scrubber and carbon monoxide (CO) controlled by a thermal oxidizer exhausting through Stack 58.
- (2) One (1) desulfurization station, constructed in 1998 with a nominal capacity of 106 tons per hour, uses lime to remove sulfur in the pig iron produced at the SAF. Emissions from the desulfurization station, DRI bins, slag pots and tapping associated with the SAF are captured by canopy hoods and particulate matter is controlled by the desulfurization baghouse exhausting through Stack 58.

(b) RHF Discharge Chute

One (1) 60,000 dscfm airflow RHF Discharge Chute baghouse, added in 2003, to control fugitive emissions from the pan conveyor used to transport material from the Rotary Hearth Furnace to the Submerged Arc Furnace exhausting to Stack 58.

(c) Ladle Preheaters

Two (2) ladle preheaters each with a nominal heat input of 9 MMBtu per hour;

(d) Briquetters

Two (2) enclosed SAF hot briquetters, constructed in 2002, with a nominal throughput of 106 tons per hour, exhausting through Stack 58.

(e) Conveyors

- (1) One (1) Hot Pan Conveyor, identified as Hot Pan Conveyor 1, constructed in 2000, with nominal throughput rate of 106 tons per hour, and
- (2) One (1) Hot Pan Conveyor, identified as Hot Pan Conveyor 2, constructed in 2003, with a nominal throughput rate of 106 tons per hour.

(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 Particulate Matter (PM/PM<sub>10</sub>) - Best Available Control Technology [326 IAC 2-2-3]

- (a) Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3, the PM/PM<sub>10</sub> emissions from the submerged arc furnace (SAF) Stack 58 shall not exceed 0.0032 grains per dry standard cubic foot (dscf). At a maximum air flow rate of 300,000 dry standard cubic feet per minute (dscfm), this limit is equivalent to 8.23 pounds of PM/PM<sub>10</sub> per hour.

- (b) Pursuant to CP-033-9187-00043, issued March 24, 1998 and 326 IAC 2-2-3, the PM/PM<sub>10</sub> emissions from the desulfurization station, DRI bins, slag pots and tapping associated with the SAF shall be captured by canopy hoods and exhausted to the SAF baghouse.

D.3.2 Particulate (PM/PM<sub>10</sub>) (Particulate Emissions Limitations for Manufacturing Processes) [326 IAC 6-3-2]

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Pursuant to exemption 033-17200-00076, issued August 6, 2003 and 326 IAC 6-3-2 (Particulate Emissions Limitations for Manufacturing Processes), particulate emissions from each hot pan conveyor transfer point shall not exceed 51.9 pounds per hour when operating at a nominal process weight rate of 106 tons per hour.

Interpolation and extrapolation 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:

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

D.3.3 Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]

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- (a) Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the visible emissions from the submerged arc furnace (SAF) Stack 58 shall not exceed three percent (3%) opacity determined by a six (6) minute average.
- (b) Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the visible emissions from any building opening, shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 readings taken in accordance with EPA Method 9, Appendix A).

D.3.4 Sulfur Dioxide (SO<sub>2</sub>) - Best Available Control Technology [326 IAC 2-2-3]

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Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the sulfur dioxide emissions from the submerged arc furnace Stack 58 shall not exceed 0.084 pounds per ton. At a maximum process throughput of 106 tons per hour, this limit is equivalent to 1.6 pounds of SO<sub>2</sub> per hour.

D.3.5 Volatile Organic Compounds (VOC) - Best Available Control Technology [326 IAC 2-2-3]

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Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the volatile organic compound emissions from the submerged arc furnace Stack 58 shall not exceed 0.035 pounds per ton. At a maximum process throughput of 106 tons per hour, this limit is equivalent to 3.7 pounds of VOC per hour.

D.3.6 Carbon Monoxide (CO) - Best Available Control Technology [326 IAC 2-2-3]

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Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the carbon monoxide emissions from the submerged arc furnace Stack 58 shall not exceed 1.26 pounds per ton. At a maximum process throughput of 106 tons per hour, this limit is equivalent to 133.5 pounds of CO per hour.

D.3.7 Carbon Monoxide (CO) [326 IAC 9-1]

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Pursuant to CP033-9187-00043, issued March 24, 1998 and 326 IAC 9-1, the Permittee shall not allow the discharge of CO from the Submerged Arc Furnace unless the waste gas stream is controlled by a thermal oxidizer.

**D.3.8 Nitrogen Oxides (NOx) - Best Available Control Technology [326 IAC 2-2-3]**

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Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the nitrogen oxide(s) emissions from the submerged arc furnace Stack 58 shall not exceed 0.117 pounds per ton. At a maximum process throughput of 106 tons per hour, this limit is equivalent to 12.4 pounds of NOx per hour.

**D.3.9 Applicability [326 IAC 2-1.1-3]**

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Pursuant to Exemption 033-17200-00076, issued August 6, 2003 and 326 IAC 2-1.1-3, the SAF briquetters and conveyors provided in the description information above are classified as exempt from air pollution permit requirements.

**D.3.10 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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A Preventive Maintenance Plan, in accordance with Section B.10 - Preventive Maintenance Plan, of this permit, is required for the RHF discharge chute baghouse, Submerged Arc Furnace, desulfurization station and the associated baghouses.

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

**D.3.11 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]**

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Within 60 days from start up of the Submerged Arc Furnace and in order to comply with conditions D.3.1, D.3.4, D.3.5, D.3.6 and D.3.8 the Permittee shall perform PM/PM<sub>10</sub>, SO<sub>2</sub>, VOC, CO and NOx testing on the SAF Stack 58, utilizing testing methods approved by the Commissioner. The tests shall be repeated every two and one-half (2.5) years from the date of the most recent valid compliance demonstration. PM10 includes both filterable and condensable components. Testing shall be conducted in accordance with Section C.9 - Performance Testing.

**D.3.12 Particulate Matter (PM/PM<sub>10</sub>) - Best Available Control Technology [326 IAC 2-2-3] [326 IAC 2-7-6(6)]**

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- (a) Pursuant to CP-033-9187-00043, issued on March 24, 1998, and in order to comply with D.3.1(a), the wet venturi scrubber for particulate control shall be in operation and control emissions from the Submerged Arc Furnace at all times the Submerged Arc Furnace is in operation.
- (b) Pursuant to 326 IAC 2-2-3, Best Available Control Technology, and in order to comply with D.3.1(a), the RHF discharge chute baghouse for particulate control shall be in operation and control emissions from the RHF discharge chute at all times the RHF is in operation.
- (c) Pursuant to SSM033-15955-00043, issued on December 18, 2002, and in order to comply with D.3.1(b), the desulfurization baghouse for particulate control shall be in operation and control emissions from the desulfurization station, DRI bins, slag pots and tapping associated with the SAF at all times the desulfurization station, DRI bins, slag pots and tapping are in operation.
- (d) 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.3.13 Carbon Monoxide (CO) Best Available Control Technology [326 IAC 2-2-3]**

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Pursuant to CP-033-9187-00043, issued on March 24, 1998, and in order to comply with D.3.6 and D.3.7, the thermal oxidizer for carbon monoxide control shall be in operation and control CO

emissions from the Submerged Arc Furnace at all times the Submerged Arc Furnace is in operation.

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

#### **D.3.14 Continuous Emissions Rate Monitoring [326 IAC 3-5]**

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Pursuant to 326 IAC 3-5-1(d) and CP-033-9187-00043, issued March 24, 1998, the Permittee shall either:

- (a) Calibrate, operate and maintain a continuous monitoring system for measuring opacity at the exhaust from the SAF Stack 58 in accordance with 326 IAC 3-5 and 40 CFR 60, Appendix B. The Permittee shall record the output of the system and provide record keeping and reporting pursuant to 326 IAC 3-5;

or

- (b) The Permittee shall do the following:

- (1) Have a certified visible emission observer observe opacity of the visible emissions from the SAF Stack 58 at least once per day when the SAF is operating. These observations shall be taken accordance with 40 CFR 60, Appendix A, Method 9 for at least three six minute averages. Records will be maintained of the visible emission observations;

and

- (2) Install, calibrate, operate and maintain continuous monitoring systems for measuring and recording:

- (A) The pressure loss through the venturi constriction of the SAF scrubber.
- (B) The water supply pressure to the SAF scrubber. The monitoring device's pressure sensor or pressure tap must be located close to the water discharge point. The OAQ, Compliance Data Section must be consulted for approval in advance of selecting alternative locations for the pressure sensor or tap.

All scrubber monitoring devices shall use the continuous electronic recording to monitor the scrubber performance.

#### **D.3.15 Thermal Oxidizer Temperature**

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- (a) A continuous monitoring system shall be calibrated, maintained and operated on the thermal oxidizer for measuring operating temperature. The output of this system shall be recorded as a three (3) hour average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C.16 – Response to Excursions or Exceedances whenever the (3) hour average temperature of the thermal oxidizer is below 1650°F. A three (3) hour average temperature that is below 1650°F is not a deviation from this permit. Failure to take response steps in accordance with Section C.16 - Response to Excursions or Exceedances shall be considered a deviation from this permit.
- (b) The Permittee shall determine the hourly average temperature from the most recent valid stack test that demonstrates compliance in condition D.3.6.
- (c) On and after the date the approved Stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C.16 - Response to

Excursions or Exceedances whenever the three (3) hour average temperature of the thermal oxidizer is below the three (3) hour average temperature as observed during the compliant Stack test. A three (3) hour average temperature that is below the three (3) hour average temperature as observed during the compliant Stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C.16 - Response to Excursions or Exceedances shall be considered a deviation of this permit.

#### D.3.16 Parametric Monitoring

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- (a) If the Permittee elects to do continuous emission monitoring under D.3.14(b), then, the Permittee shall record the pressure drop and flow rate of scrubber used in conjunction with the submerged arc furnace at least once per day when the SAF is in operation. When for any one reading, the pressure drop across the scrubber is outside the normal range of 40 to 60 inches of water or a range established during the latest Stack test and the flow rate of the scrubber is below the minimum of 40 gallons per minute or a minimum rate established during the latest Stack test, the Permittee shall take reasonable response steps in accordance with Section C.16 - Response to Excursions or Exceedances. A pressure drop or flow rate reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C.16 - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) The Permittee shall record the pressure drop across the baghouse used in conjunction with the desulfurization station, DRI bins, slag pots and tapping associated with the SAF at least once per day when the desulfurization station, DRI bins, slag pots and tapping associated with the SAF are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 and 10.0 inches of water or a range established during the latest Stack test, the Permittee shall take reasonable response steps in accordance with Section C.16 - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C.16 - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (c) The Permittee shall record the pressure drop across the baghouse used in conjunction with the RHF discharge chute at least once per day, when for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 and 10.0 inches of water or a range established during the latest Stack test, the Permittee shall take reasonable response steps in accordance with Section C.16 - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C.16 - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (d) The instruments used for determining the pressure, flow rate, fan amperage and duct velocity shall comply with Section C.13- 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.3.17 Scrubber Failure Detection

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In the event, a scrubber failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have 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.11 - Emergency Provisions).

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

### **D.3.18 Record Keeping Requirements**

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- (a) To document compliance with Condition D.3.14(a), (if selected), the Permittee shall maintain records of the readings of the continuous opacity monitoring system of the Submerged Arc Furnace (SAF) Stack 58.
- (b) To document compliance with Condition D.3.14(b)(1), (if selected), the Permittee shall maintain the records of the observed opacity readings of the SAF Stack 58 at least once per day.
- (c) To document compliance with D.3.14(b)(2)(A) and (B), (if selected), the Permittee shall maintain records of the SAF continuous electronic recording of the pressure differential through the venturi constriction and water supply pressure of the SAF scrubber.
- (d) To document compliance with Condition D.3.15, the Permittee shall maintain records of the thermal oxidizer temperature on a continuous basis.
- (e) To document compliance with Condition D.3.16(a), the Permittee shall maintain records of the pressure drop and flow rate of the SAF scrubber, at least once per day.
- (f) To document compliance with Condition D.3.16(b), the Permittee shall maintain records of the pressure drop of the SAF desulfurization station baghouse at least once per day.
- (g) To document compliance with Condition D.3.16(c), the Permittee shall maintain records of the pressure drop of the RHF discharge chute baghouse at least once per day.
- (h) All records shall be maintained in accordance with Section C.19 - General Record Keeping Requirements, of this permit.

### **D.3.19 Reporting Requirements**

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The Permittee shall submit on a quarterly basis records of excess opacity readings (defined in 326 IAC 3-5-7 and 40 CFR Part 60.7). These reports shall be submitted no later than thirty (30) calendar days after the end of each calendar quarter and in accordance with Section C.20- General Reporting Requirements. The report submitted by the Permittee does require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## SECTION D.4 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]: Coal and Iron Ore Processing

#### Coal and Iron Ore Unloading

- (a) One (1) receiving shed, constructed in 1998, with a particulate matter emissions exhaust system controlled by a baghouse exhausting through Stacks 67 and 68.
- (b) One (1) rotary railcar dumper, constructed in 1998, with a nominal throughput of 2,500 tons per hour, with the particulate matter emissions captured by a side hood controlled by the shed baghouse exhausting through Stacks 67 and 68.

(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 Particulate Matter (PM/PM<sub>10</sub>) - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to CP-033-9187-00043, issued March 24, 1998, 326 IAC 2-2-3, the coal and iron ore receiving shall be conducted in a shed. Pressure in the shed shall be maintained at a level to ensure the particulate material does not escape through the doors. The drop point and shed shall each have capture systems for particulate matter which are exhausted to one (1) baghouse for control. Particulate emissions shall not exceed 0.5 pounds per hour from Stacks 67 and 68.

#### D.4.2 Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to CP-033-9187-00043, issued March 24, 1998 and 326 IAC 2-2-3, the visible emissions from the receiving shed building opening or rotary car dumper Stacks 67 and 68 shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 readings taken in accordance with EPA Method 9 Appendix A).

#### D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B.10 - Preventive Maintenance Plan, of this permit, is required for the receiving shed and associated baghouse.

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

#### D.4.4 Particulate (PM/PM<sub>10</sub>) Control

Pursuant to CP-033-9187-00043, issued March 24, 1998, the baghouse for particulate control shall be in operation and control emissions from the receiving shed and railcar dumper at all times the railcar dumper is in operation.

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

#### D.4.5 Visible Emission Notations

- (a) Visible emission notations of the receiving shed and railcar dumper Stacks 67 and 68, exhaust shall be performed once per day during normal daylight operations when exhausting to the atmosphere. 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.16 - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C.16 - Response to Excursions or Exceedances shall be considered a deviation from this permit.

#### D.4.6 Parametric Monitoring

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- (a) The Permittee shall record the pressure drop across the Railcar Unloading Shed Baghouse used in conjunction with the Railcar Unloading Shed and Rail Car Dumper, at least once per day when the Railcar Unloading Shed and Rail Car Dumper are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 to 5.0 inches of water or a range established during the latest Stack test, the Permittee shall take reasonable response steps in accordance with Section C.16 – Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C.16 – Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C.13 - 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.4.7 Broken or Failed Bag Detection

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In the event that bag failure has been observed:

- (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.11 - 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 receiving shed. 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.11 - Emergency Provisions).

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

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

#### D.4.8 Record Keeping Requirements

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- (a) To document compliance with Condition D.4.5, the Permittee shall maintain records of the once per day visible emission notations of the shed and railcar dumper Stacks 67 and 68 exhaust.

- (b) To document compliance with Condition D.4.6, the Permittee shall maintain records of the once per day pressure drop during normal operation.
- (c) All records shall be maintained in accordance with Section C.19 - General Record Keeping Requirements of this permit.

## Section D.5 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]:

#### Coal Processing

- (a) One (1) totally enclosed coal crusher identified as a double cone classifier (grinder), constructed in 1998, with the air from the coal collectors that is not recirculated is exhausted through the coal dryer Stack 75.
- (b) One (1) coal dryer, constructed in 1998, with a nominal heat capacity of 25 MMBtu per hour and processes a nominal 60 tons of coal per hour, with emissions exhausting through Baghouse (B-75) then Stack 75.

(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 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

Pursuant to SSM033-12992-00076, issued May 15, 2002, the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 60, Subpart Y.

#### D.5.2 NSPS Coal Preparation Plant [40 CFR 60, Subpart Y] [326 IAC 12-1]

- (a) Pursuant to SSM033-12992-00076, 326 IAC 12-1 and 40 CFR 60, Subpart Y (Coal Preparation Plant), the particulate matter emissions from the thermal coal dryer 75 shall not exceed 0.031 grains per dscf through Stack 75.
- (b) Pursuant to SSM033-12992-00076, 326 IAC 12-1 and 40 CFR 60, Subpart Y (Coal Preparation Plant), the visible emissions from the thermal coal dryer Stack 75 shall not exceed 20%.

#### D.5.3 Particulate Matter (PM/PM<sub>10</sub>) - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to SSM033-19160-00076, issued April 13, 2005 and 326 IAC 2-2-3, the PM/PM<sub>10</sub> (where PM<sub>10</sub> includes both filterable and condensable components) emissions from the Coal Dryer baghouse B-75 shall not exceed a PM/PM<sub>10</sub> emission rate of 0.01 grains per dscf through Stacks 75. The PM/PM<sub>10</sub> shall not exceed 0.5 lb per hour from Coal Dryer Stack 75.

#### D.5.4 Particulate (PM/PM<sub>10</sub>) (Particulate Emissions Limitations for Manufacturing Processes) [326 IAC 6-3-2]

Pursuant to SSM033-12992 -00076, issued May 15, 2002 and 326 IAC 6-3-2, the particulate matter (PM) from the Coal Dryer shall be limited as follows:

Process	Process Weight (Lbs/hr)	PM Emission Limit (Lbs/hr)
Coal Dryer	120,000	46.3

This limit was calculated as follows:

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

$$E = 55.0 P^{0.11} - 40$$

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

**D.5.5 Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]**

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- (a) Pursuant to SSM033-12992 -00076, issued on May 15, 2002 and 326 IAC 2-2-3, the visible emissions discharged into the atmosphere from the coal dryer Stack 75 shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 readings taken in accordance with EPA Method 9, Appendix A), pursuant to 326 IAC 5-1-4.
- (b) Pursuant to SSM033-12992 -00076, issued on May 15, 2002 and 326 IAC 2-2-3, the visible emissions discharged into the atmosphere from the vents and openings in the buildings housing the coal dryer shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 readings taken in accordance with EPA Method 9, Appendix A) pursuant to 326 IAC 5-1-4.

**D.5.6 Sulfur Dioxide (SO<sub>2</sub>) - Best Available Control Technology [326 IAC 2-2-3]**

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Pursuant to SSM033-12992 -00076, issued May 15, 2002 and 326 IAC 2-2-3, the sulfur dioxide emissions from the Coal Dryer shall not exceed 0.00059 pounds per MMBtu of heat input. The SO<sub>2</sub> emissions shall not exceed 0.015 pounds per hour from the Coal Dryer Stack 75.

**D.5.7 Volatile Organic Compounds (VOC) - Best Available Control Technology [326 IAC 2-2-3]**

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Pursuant to SSM 033-12992-00076, issued May 15, 2002 and 326 IAC 2-2-3, the volatile organic compound emissions from the Coal Dryer shall not exceed 0.0053 pounds per MMBtu of heat input. The VOC emissions shall not exceed 0.14 pounds per hour from the Coal Dryer Stack 75.

**D.5.8 Carbon Monoxide (CO) - Best Available Control Technology [326 IAC 2-2-3]**

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Pursuant to SSM033-12992 -00076, issued May 15, 2002 and 326 IAC 2-2-3, the carbon monoxide emissions from the Coal Dryer shall not exceed 0.082 pounds per MMBtu of heat input. The CO emissions shall not exceed 2.1 pounds per hour from Coal Dryer Stack 75.

**D.5.9 Nitrogen Oxides (NO<sub>x</sub>) - Best Available Control Technology [326 IAC 2-2-3]**

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Pursuant to SSM 033-12992-00076, issued May 15, 2002 and 326 IAC 2-2-3, the nitrogen oxide(s) emissions from the Coal Dryer shall be controlled by the use of low-NO<sub>x</sub> natural gas-fired burners and shall not exceed 0.049 pounds per MMBtu of heat input. The NO<sub>x</sub> emissions shall not exceed 1.25 pounds per hour from the Coal Dryer Stack 75.

**D.5.10 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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A Preventive Maintenance Plan, in accordance with Section B.10 Preventive Maintenance Plan, of this permit, is required for the coal crusher, coal dryer and the associated baghouse.

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

**D.5.11 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11] [40 CFR 60 Subpart Y]**

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Within five (5) years from February 19, 2004 and in order to demonstrate compliance with Condition D.5.1, D.5.2 and D.5.3, the Permittee shall perform PM/PM<sub>10</sub> testing on the coal dryer baghouse Stack 75, utilizing testing methods as approved by the Commissioner in accordance with Section C.9- Performance Testing. These tests shall be repeated at least once every five (5) years. PM<sub>10</sub> includes filterable and condensable components.

**D.5.12 Particulate (PM/PM<sub>10</sub>) - Best Available Control Technology [326 IAC 2-2-3]**

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- (a) Pursuant to CP033-8091-00043, issued on June 25, 1997, the baghouse for particulate control shall be in operation and control emissions from the coal crusher at all times the coal crusher is in operation.

- (b) Pursuant to SSM033-12992 -00076, issued May 15, 2002, the baghouse for particulate control shall be in operation and control emissions from the coal dryer at all times the coal dryer is in operation.

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

#### **D.5.13 Visible Emission Notations**

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- (a) Visible emission notations of the Coal Dryer Stack 75, exhaust shall be performed once per day during normal daylight operations when exhausting to the atmosphere. 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.16 - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C.16 - Response to Excursions or Exceedances shall be considered a deviation from this permit.

#### **D.5.14 Broken or Failed Bag Detection**

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In the event that bag failure has been observed:

- (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.11 - 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 coal dryer and crusher. 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.11 - Emergency Provisions).

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

#### **D.5.15 Monitoring of Operations [40 CFR 60.253 Subpart Y]**

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- (a) The Permittee shall install, calibrate, maintain and continuously operate a monitoring device for the measurement of the temperature of the gas stream at the exit of the thermal dryer on a continuous basis. The monitoring device is to be certified by the manufacturer to be accurate within  $\pm 3^{\circ}$  Fahrenheit.
- (b) The monitoring device under paragraph (a) shall be recalibrated annually in accordance with the procedure under 40 CFR 60.13(b).

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

**D.5.16 Record Keeping Requirements**

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- (a) To document compliance with Condition D.5.13, the Permittee shall maintain records of the once per day visible emission notations of the Coal Dryer Stack 75 exhaust.
- (b) All records shall be maintained in accordance with Section C.19 - General Record Keeping Requirements of this permit.

## SECTION D.6 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]:

#### Ore Dryer

One (1) Ore Dryer, constructed in 1998, with a nominal heat capacity of 27MMBtu per hour and processes a nominal 115 tons of ore per hour, with emissions exhausting through Baghouse B-76, then Stack 76.

(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 Particulate Matter (PM/PM<sub>10</sub>) - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to SSM033-19160-00076, issued April 13, 2005 and 326 IAC 2-2-3, the PM/PM<sub>10</sub> (where PM<sub>10</sub> includes both filterable and condensable components) emissions from the Ore Dryer baghouse B-76 shall not exceed a PM/PM<sub>10</sub> emission rate of 0.01 grains per dscf through Stack 76. The PM/PM<sub>10</sub> shall not exceed 1.1 lb per hour from Ore Dryer Stack 76.

#### D.6.2 Particulate (PM/PM<sub>10</sub>) (Particulate Emissions Limitations for Manufacturing Processes) [326 IAC 6-3-2]

Pursuant to SSM033-12992 -00076, issued May 15, 2002 and 326 IAC 6-3-2, the particulate matter (PM) from the Ore Dryer shall be limited as follows:

Process	Process Weight (Lbs/hr)	PM Emission Limit (Lbs/hr)
Ore Dryer	230,000	52.7

This limit was calculated as follows:

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

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

#### D.6.3 Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]

- (a) Pursuant to SSM033-12992-00076, issued on May 15, 2002 and 326 IAC 2-2-3, the visible emissions discharged into the atmosphere from the ore dryer Stack 76 shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 readings taken in accordance with EPA Method 9, Appendix A) pursuant to 326 IAC 5-1-4.
- (b) Pursuant to SSM033-12992 -00076, issued on May 15, 2002 and 326 IAC 2-2-3, the visible emissions discharged into the atmosphere from the vents and openings in the buildings housing the ore dryer shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 readings) taken in accordance with EPA Method 9, Appendix A) pursuant to 326 IAC 5-1-4.

**D.6.4 Sulfur Dioxide (SO<sub>2</sub>) - Best Available Control Technology [326 IAC 2-2-3]**

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Pursuant to SSM033-12992-00076, issued May 15, 2002 and 326 IAC 2-2-3, the sulfur dioxide emissions from the Ore Dryer shall not exceed 0.00059 pounds per MMBtu of heat input. The SO<sub>2</sub> emissions shall not exceed 0.016 pounds per hour from the Ore Dryer Stack 76.

**D.6.5 Volatile Organic Compounds (VOC) - Best Available Control Technology [326 IAC 2-2-3]**

---

Pursuant to SSM033-12992-00076, issued May 15, 2002 and 326 IAC 2-2-3, the volatile organic compound emissions from the Ore Dryer shall not exceed 0.0053 pounds per MMBtu of heat input. The VOC emissions shall not exceed 0.15 pounds per hour from Ore Dryer Stack 76.

**D.6.6 Carbon Monoxide (CO) - Best Available Control Technology [326 IAC 2-2-3]**

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Pursuant to SSM033-12992-00076, issued May 15, 2002 and 326 IAC 2-2-3, the carbon monoxide emissions from the Ore Dryer shall not exceed 0.082 pounds per MMBtu of heat input. The CO emissions shall not exceed 2.3 pounds per hour from Ore Dryer Stacks 76.

**D.6.7 Nitrogen Oxides (NO<sub>x</sub>) - Best Available Control Technology [326 IAC 2-2-3]**

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Pursuant to SSM033-12992-00076, issued May 15, 2002 and 326 IAC 2-2-3, the nitrogen oxide(s) emissions from the Ore Dryer shall be controlled by the use of low-NO<sub>x</sub> natural gas-fired burners and shall not exceed 0.049 pounds per MMBtu of heat input. The NO<sub>x</sub> emissions shall not exceed 1.35 pounds per hour from Ore Dryer Stacks 76.

**D.6.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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A Preventive Maintenance Plan, in accordance with Section B.10 - Preventive Maintenance Plan, of this permit, is required for the ore dryer and associated baghouse.

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

**D.6.9 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]**

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Within five (5) years from February 19, 2004 and in order to demonstrate compliance with Condition D.6.1, D.6.2 and D.6.3, the Permittee shall perform PM/PM<sub>10</sub> testing on the coal dryer baghouse Stack 75, utilizing testing methods as approved by the Commissioner in accordance with Section C. 10- Performance Testing. These tests shall be repeated at least once every five (5) years. PM<sub>10</sub> includes filterable and condensable components.

**D.6.10 Particulate (PM/PM<sub>10</sub>) Best Available Control Technology [326 IAC 2-2-3]**

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Pursuant to SSM033-12992-00076, issued May 15, 2002, the baghouse for particulate control shall be in operation and control emissions from the ore dryer at all times the ore dryer is in operation.

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

**D.6.11 Visible Emission Notations**

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- (a) Visible emission notations of the Ore Dryer Stack 76, exhaust shall be performed once per day during normal daylight operations when exhausting to the atmosphere. 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.16 - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C.16 - Response to Excursions or Exceedances shall be considered a deviation from this permit.

#### D.6.12 Broken or Failed Bag Detection

---

In the event that bag failure has been observed:

- (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.11 - 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 coal dryer and crusher. 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.11 - Emergency Provisions).

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

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

#### D.6.13 Record Keeping Requirements

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- (a) To document compliance with Condition D.6.11, the Permittee shall maintain records of the once per day visible emission notations of the ore dryer Stack 76 exhaust.
- (b) All records shall be maintained in accordance with Section C.19 - General Record Keeping Requirements of this permit.

## SECTION D.7 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]:

Ore Processing

One (1) One (1) Ore Preparation Process, constructed in 1998, consisting of a roll screener, ore press (grinder) and magnetic separators with particulate matter emissions controlled by a baghouse, exhausting to Stack 74.

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

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

#### D.7.1 Particulate (PM/PM<sub>10</sub>) (Particulate Emissions Limitations for Manufacturing Processes) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the PM from the Ore Preparation Process 74, shall not exceed the pound per hour emission rate established as E in the following formula:

Process	Process Weight (Lbs/hr)	PM Emission Limit (Lbs/hr)
Ore Prep Process	230,000	52.7

This limit was calculated as follows:

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

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

#### D.7.2 Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to CP-033-8091-00043, issued on June 25, 1997 and 326 IAC 2-2-3, the visible emissions from vents, Stacks and building roof monitors, unless otherwise specified, shall not exceed three (3%) percent opacity. Visible emissions shall be determined by a six (6) minute average (24 readings taken in accordance with EPA Method 9, Appendix A) pursuant to 326 IAC 5-1-4.

#### D.7.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B.10- Preventive Maintenance Plan, of this permit, is required for the ore preparation process baghouse.

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

#### D.7.4 Particulate (PM/PM<sub>10</sub>) - Best Available Control Technology [326 IAC 2-2-3]

The ore preparation baghouse for particulate control shall be in operation and control emissions from the ore preparation process at all times the ore preparation process is in operation.

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

### **D.7.5 Visible Emission Notations**

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- (a) Visible emission notations of the ore preparation Stack 74, exhaust shall be performed once per day during normal daylight operations when exhausting to the atmosphere. 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.16 - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C.16 - Response to Excursions or Exceedances shall be considered a deviation from this permit.

### **D.7.6 Parametric Monitoring**

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- (a) The Permittee shall record the pressure drop across the baghouse used in conjunction with the ore preparation process at least once per day when the ore preparation process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 and 10.0 inches of water or a range established during the latest Stack test, the Permittee shall take reasonable response steps in accordance with Section C.16 - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C-16 - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C.13 - 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.7.7 Broken or Failed Bag Detection**

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In the event that bag failure has been observed:

- (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.11 - 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 coal dryer and crusher. 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.11 - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with

abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

**D.7.8 Record Keeping Requirements**

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- (a) To document compliance with Condition D.7.5 the Permittee shall maintain records of the once per day visible emission notations of the ore preparation Stack 74 exhaust.
- (b) To document compliance with Condition D.7.6 the Permittee shall maintain records of the once per day pressure drop during normal operation.
- (c) All records shall be maintained in accordance with Section C.19 - General Record Keeping Requirements, of this permit.

## SECTION D.8 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]:

#### Material Storage and Handling

##### (a) Silos and Bins

Fourteen (14) material storage silos and bins equipped with air bin vent filters to vent the displaced air for particulate matter emissions control, consisting of the following:

- (1) One (1) storage bin, constructed in 1998, with a nominal capacity of 8,000 cubic feet, exhausting through Stack 44.
- (2) One (1) EAF dust silo, constructed in 1998, with a nominal capacity of 7,970 cubic feet, exhausting through Stack 45.
- (3) One (1) carbon injection silo, constructed in 1998, with a nominal capacity of 2,300 cubic feet, exhausting through Stack 46.
- (4) Four (4) coal silos, constructed in 1998, with a nominal capacities of 8,909, 23,420, 19,712 and 24,289 cubic feet respectively, exhausting through Stacks 47 through 50.
- (5) One (1) SAF bin, constructed in 1998, with a nominal capacity of 7,970 cubic feet, exhausting through Stack 86.
- (6) One (1) zinc silo, constructed in 2003, with a maximum throughput rate of 3.0 tons of recycled zinc per hour, controlled by one (1) filter, exhausting through Stack 80.
- (7) One (1) ash silo, constructed in 2003, with a maximum throughput rate of 3.0 tons of ash per hour, controlled by one (1) filter, exhausting into the building.
- (8) Four (4) storage bins, constructed in 1998.

##### (b) Material Recycling and Unloading Systems

- (1) One (1) SAF dust recycling system, 79, constructed in 2003 with a nominal throughput rate of 3.0 tons of dust per hour, controlled by one (1) filter, exhausting into the building.
- (2) One (1) zinc silo 80, , constructed in 2003 with a nominal throughput rate of 3.0 tons of recycled zinc per hour, controlled by one (1) filter, exhausting through Stack 80.
- (3) One (1) ash silo 81 and constructed in 2003 with a nominal throughput rate of 3.0 tons of ash per hour, controlled by one (1) filter, and exhausting into the building.
- (4) One (1) EAF dust unloading process 82 and constructed in 2003 with a nominal throughput rate of 3.0 tons of dust per hour, controlled by one (1) filter, and exhausting into the building.
- (5) One (1) vacuum system, constructed in 2003 with a nominal throughput rate of 3.0 tons of dust per hour, controlled by one (1) filter, exhausting into the building.

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

**Facility Description [326 IAC 2-7-5(15)]:** Material Storage and Handling (continued)

- (6) One (1) zinc silo unloading process, constructed in 2003 with a nominal throughput rate of 3.0 tons of zinc per hour, controlled by one (1) filter, exhausting into the building.
- (7) One (1) ash silo unloading process, constructed in 2003 with a nominal throughput rate of 3.0 tons of ash per hour, controlled by one (1) filter, exhausting into the building.

(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.8.1 Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]**

- (a) Pursuant to CP-033-8091-00043, issued on June 25, 1997, and 326 IAC 2-2-3, the visible emissions discharged into the atmosphere from the silos storing coal, iron ore, lime, and rotary hearth furnace dust shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 readings taken in accordance with EPA Method 9, Appendix A) pursuant to 326 IAC 5-1-4.
- (b) Pursuant to CP-033-8091-00043, issued on June 25, 1997, and 326 IAC 2-2-3, the fugitive particulate emissions into the atmosphere from the coal, iron ore and rotary hearth furnace dust handling system shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 readings taken accordance with EPA method 9, Appendix A) pursuant to 326 IAC 5-1-4.

**D.8.2 Particulate (PM/PM<sub>10</sub>) (PSD) [326 IAC 2-2]**

Pursuant to MSM033-17936-00076, issued October 9, 2003 and 326 IAC 2-2, the PM/PM<sub>10</sub> emissions from units 79 through 85 shall not exceed the emissions limits listed in the table below:

Unit ID	Unit Description	PM Emission Limit (lb/hr)	PM <sub>10</sub> Emission Limit (lb/hr)
79	SAF dust recycling system	0.015	0.15
80	zinc silo	0.08	0.08
81	ash silo	0.08	0.08
82	EAF dust unloading process	0.21	0.21
83	vacuum system	0.02	0.02
84	zinc silo unloading system	0.02	0.02
85	ash silo unloading system	0.02	0.02

This is equivalent to 2.54 tons per year of PM/PM<sub>10</sub> emissions from these units. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

**D.8.3 Part 70 Minor Source Modification [326 IAC 2-7-10.5(d)(5)]**

Pursuant to MSM033-17936-00076, issued October 9, 2003 and 326 IAC 2-7-10.5(d)(5) (Part 70 Minor Source Modification), filters equipped with units 79 through 85 shall comply with the following limits when in operation:

- (a) At least 99% control efficiency, and
- (b) No visible emissions.

**D.8.4 Particulate (PM/PM<sub>10</sub>) (Particulate Matter Emissions Limitations for Manufacturing Processes) [326 IAC 6-3-2]**

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Pursuant to MSM 033-17936-00076, issued October 9, 2003 and 326 IAC 6-3-2 Particulate Matter Emissions Limitations for Manufacturing Processes, particulate matter from each of the units 79 through 85 shall not exceed 8.56 pounds per hour when operating at a process weight rate of 3.0 tons per hour.

The pound per hour limitation was calculated with the following equation:

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:

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

**D.8.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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A Preventive Maintenance Plan, in accordance with Section B.10- Preventive Maintenance Plan, of this permit, is required for the silo bin vents, units 79, 82 through 85 and their filters used as control devices.

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

**D.8.6 Particulate (PM/PM<sub>10</sub>) Control**

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- (a) In order to comply with Condition D.8.1, the bin vent filters for particulate control shall be in operation and control emissions from the silos at all times the silos are being loaded or unloaded.
- (b) In order to comply with Conditions D.8.2, D.8.3 and D.8.4, the filters for PM/PM10 control shall be in operation and control emissions from units 79 through 85 at all times that these units are in operation.

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

**D.8.7 Visible Emission Notations**

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- (a) Visible emission notations of the Stack 80, exhaust shall be performed once per day during normal daylight operations when exhausting to the atmosphere. 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 ~~is~~ are observed, the Permittee shall take reasonable response steps in accordance with Section C.16 - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C.16 - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

**D.8.8 Record Keeping Requirements**

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- (a) To document compliance with Condition D.8.7, the Permittee shall maintain records of the once per day visible emission notations of the ore preparation Stack 80 exhaust.
- (b) All records shall be maintained in accordance with Section C.19 - General Record Keeping Requirements, of this permit.

## SECTION D.9

### FACILITY OPERATION CONDITIONS

#### Facility Description [326 IAC 2-7-5(15):

##### Outdoor Storage and Handling

- (a) One (1) coal and ore Stacker conveyer with a nominal capacity of 2,500 tons per hour. Fugitive emissions controlled as needed by water sprays, to control fugitive dust at transfer and discharge points.
- (b) One (1) storage pile of coal with a nominal storage capacity of 20, 000 tons and a nominal pile acreage of 1.0 acre and a nominal throughput of 300,000 tons per year,
- (c) One (1) storage pile of iron ore with a nominal storage capacity of 120,000 tons and a nominal pile acreage of 5.7 acres and a nominal throughput of 900,000 tons per year and,
- (d) One (1) storage pile of fluxstone (lime dolomite) with a storage capacity of 30,000 tons and a pile acreage of 0.5 acres and a nominal throughput of 80,000 tons per year,
- (e) Above ground coal and iron ore reclaim hoppers used by the front end loaders to transport material from the storage piles to the conveying system.
- (f) Closed conveyers with a nominal capacity of 1,100 tons per hour to move coal and ore to storage silos or coal crusher.

(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.9.1 Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]

- (a) Pursuant to CP-033-8091-00043, issued June 25, 1997 and 326 IAC 2-2-3, water shall be applied at each transfer and discharge point of the coal and iron ore stacker. The material dropping distance shall be maintained at less than three (3) feet.
- (b) Pursuant to CP-033-8091-00043, issued on June 25, 1997 and 326 IAC 2-2-3, the coal and iron conveyers shall be covered and the transfer points enclosed. The visible emissions at the discharged and transfer point shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A) pursuant to 326 IAC 5-1-4.
- (c) Pursuant to CP-033-9187-00043, issued March 24, 1998 and 326 IAC 2-2-3, the material reclaim hoppers used by the front end loaders to transport material from the storage piles to the conveying system shall be located above ground. The discharge dropping point distance shall be less than three (3) feet.
- (d) Pursuant to CP-033-9187-00043, issued on March 24, 1998, water shall be applied to the storage piles to minimize fugitive dust. Water shall be applied continuously during stacking. The material drop shall be maintained at less than three (3) feet.
- (e) Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the visible emissions from all transfer and discharge points shall be limited to three percent (3%) opacity determined by six (6) minute average (24 readings taken in accordance with

EPA Method 9, Appendix A).

- (f) Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the opacity of fugitive particulate emissions from the storage piles shall be limited to ten (10%) percent opacity determined by a six (6) minute average (24 readings taken in accordance with EPA Method 9, Appendix A). These limitations may not apply during periods, when application of fugitive particulate matter control measures is either ineffective or unreasonable due to sustained very high wind speeds. During such periods, the Permittee must continue to implement all reasonable fugitive particulate matter control measures.

**SECTION D.10**

**FACILITY OPERATION CONDITIONS**

**Facility Description [326 IAC 2-7-5(15):**

**Insignificant Activities**

1. Specifically regulated insignificant activities, as defined in 326 IAC 2-7-1(21):
  - (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) Bentonite railcar unloading [326 IAC 6-3-2]
2. Other insignificant activities
  - (a) Space heaters, process heaters, or boilers using the following fuels:
    - (i) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
    - (ii) Propane or liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour.
  - (b) Combustion source flame safety purging on startup.
  - (c) The following VOC and HAP storage containers:
    - (i) Storage tanks with capacity less than or equal to one thousand (1,000) gallons and annual throughputs equal to or less than twelve thousand (12,000) gallons.
    - (ii) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
  - (d) Refractory storage not requiring air pollution control equipment.
  - (e) Equipment used exclusively for filling drums, pails, or other packaging containers with the following: Lubricating oils, Waxes and Greases.
  - (f) Application of: oils; greases; lubricants; and nonvolatile material; as temporary protective coatings.
  - (g) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
  - (h) Noncontact cooling tower systems with the following: Forced and induced draft cooling tower system not regulated under a NESHAP.
  - (i) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
  - (j) Stockpiled soils from soil remediation activities that are covered and waiting transport for disposal.
  - (k) Paved and unpaved roads and parking lots with public access.

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

**Facility Description [326 IAC 2-7-5(15): Insignificant Activities (continued):**

- (l) Covered conveyors for limestone conveying of less than or equal to seven thousand two hundred (7,200) tons per day for sources other than mineral processing plants constructed after August 31, 1983.
  - (m) Underground conveyors.
  - (n) Coal bunker and coal scale exhausts and associated dust collector vents.
  - (o) Purging of gas lines and vessels that is related to routing maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
  - (p) Flue gas conditioning systems and associated chemicals such as the following: sodium sulfate; ammonia and sulfur trioxide.
  - (q) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
  - (r) On-site fire and emergency response training approved by the department.
  - (s) Purge double block and bleed valves.
  - (t) Filter or coalescer media changeout.
  - (u) A laboratory as defined in 326 IAC 2-7-1(21)(D).
  - (v) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
  - (w) Cleaners and solvents characterized as follows: Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38°C (100°F).
3. Other Activities less than significant level
- (a) Diesel generators

(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.10.1 Particulate (PM/PM<sub>10</sub>) (Particulate Matter Emissions Limitations for Manufacturing Processes) [326 IAC 6-3-2]**

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations), the particulate emissions from the brazing equipment, cutting torches, soldering equipment and welding equipment shall not exceed the particulate limitation in Section C.1 - Particulate Emission Limitations for Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour.
- (b) Pursuant to 326 IAC 6-3-2 Particulate Emission Limitations for Manufacturing Processes, the allowable particulate emission pound per hour limitation from the bentonite railcar unloading shall be calculated using the following equation:

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

$$E = 55.0 P^{0.11} - 40$$

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

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251  
Phone: 317-233-0178  
Fax: 317-233-6865**

**PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: Iron Dynamics, Inc.  
Source Address: 4500 County Road 59, Butler, IN 46721  
Mailing Address: 4500 County Road 59, Butler, IN 46721  
Part 70 Permit No.: T033-12614-00076

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 BRANCH  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251  
Phone: 317-233-0178  
Fax: 317-233-6865**

**PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT**

Source Name: Iron Dynamics, Inc.  
Source Address: 4500 County Road 59, Butler, IN 46721  
Mailing Address: 4500 County Road 59, Butler, IN 46721  
Part 70 Permit No.: T-033-12614-00076

This form consists of 2 pages

Page 1 of 2

This is an emergency as defined in 326 IAC 2-7-1(12)  
The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and  
The Permittee must submit notice in writing or by facsimile within two (2) 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 the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency?    Y    N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NOX, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

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

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

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

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

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF AIR QUALITY  
 COMPLIANCE DATA SECTION  
 100 North Senate Avenue  
 Indianapolis, Indiana 46204-2251  
 Phone: 317-233-0178  
 Fax: 317-233-6865**

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

Source Name: Iron Dynamics, Inc.  
 Source Address: 4500County Road 59, Butler, Indiana 46721  
 Mailing Address: 4500County Road 59, Butler, Indiana 46721  
 Part 70 Permit No. T033-12614-00076

<p>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".</p>	
<p align="center">NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.</p>	
<p align="center">THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD</p>	
<p>Permit Requirement (specify permit condition #)</p>	
<p>Date of Deviation:</p>	<p>Duration of Deviation:</p>
<p>Number of Deviations:</p>	
<p>Probable Cause of Deviation:</p>	
<p>Response Steps Taken:</p>	
<p>Permit Requirement (specify permit condition #)</p>	
<p>Date of Deviation:</p>	<p>Duration of Deviation::</p>
<p>Number of Deviations:</p>	
<p>Probable Cause of Deviation:</p>	
<p>Response Steps Taken:</p>	

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

Form Completed By: \_\_\_\_\_

Position: \_\_\_\_\_

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

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

Attach a signed certification to complete this report.

## Indiana Department of Environmental Management Office of Air Quality

### Addendum to the Technical Support Document for a Part 70 Operating Permit

Source Name: Iron Dynamics, Inc.  
 Source Location: 4500 County Road 59, Butler, IN 46721  
 County: DeKalb  
 SIC Code: 3312  
 Operation Permit No.: T033-12614-00076  
 Permit Reviewer: Gail McGarrity

On January 28, 2004, the Office of Air Quality (OAQ) had a notice published in the Evening Star, Auburn, Indiana, stating that Iron Dynamics, Inc. had applied for a Part 70 Operating Permit to operate a stationary Direct Reduced Iron (DRI) operation at a steel minimill. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of sixty (60) days to provide comments on whether or not this permit should be issued as proposed.

Written comments were received from Barry Smith of Steel Dynamics, Inc., on March 29, 2004 and April 21, 2004. These comments and IDEM, OAQ responses, including changes to the permit (where language deleted is shown with ~~strikeout~~ and the added is shown in **bold**) are as follows:

#### Comment 1

[ALL SUBCATEGORIES, ATTACHMENTS, FORMS, AND REPORTS SHOULD HAVE PAGE NUMBERS, ALSO.]  
THE NAME OF EACH SECTION IN THE TABLE OF CONTENTS DOES NOT NECESSARILY MATCH THAT IN THE ACTUAL SECTIONS. THEY SHOULD BE IDENTICAL, INCLUDING THE CITATIONS.

#### Response to Comment 1

The Table of Contents has been revised, numbered and citations added where needed as follows:

- B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2][IC 13-30-3-1] [IC 13-17-3-2][**IC13-30-3-1**]  
 C.1 Particulate Emission Limitations for Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [~~40 CFR 52 Subpart P~~] [326 IAC 6-3-2]

The General Record Keeping Requirements for Section C are revised to added citations in Table of Contents. The permit is revised as follows:

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [~~326 IAC 2-7-19~~] [326 IAC 2-7-6][326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11][326 IAC 2-2]**

- C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [**326 IAC 2-2**]  
 C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [**326 IAC 2-2**]  
 D.1.1 Particulate Matter (PM/PM<sub>10</sub>) – Best Available Control Technology (~~BACT~~)[326 IAC 2-2-3]  
 D.1.12 Particulate (PM/PM<sub>10</sub>) (~~BACT~~) **Best Available Control Technology** [326 IAC 2-2-3]  
 D.1.13 Sulfur Dioxide (SO<sub>2</sub>) (~~BACT~~) **Best Available Control Technology** [326 IAC 2-2-3]  
 D.1.14 Carbon Monoxide (CO) and Volatile Organic Compounds (VOC) (~~BACT~~) **Best Available Control**

- Technology** [326 IAC 2-2-3]  
D.1.15 Nitrogen Oxides (NO<sub>x</sub>) (~~BACT~~) **Best Available Control Technology** [326 IAC 2-2-3]  
D.2.6 Particulate **Matter (PM/PM<sub>10</sub>)** – Best Available Control Technology [326 IAC 2-2-3]  
D.3.1 Particulate Matter (PM/PM<sub>10</sub>) – Best Available Control Technology [326 IAC 2-2-3]  
D.3.12 Particulate Matter (**PM/PM<sub>10</sub>**)– Best Available Control Technology [326 IAC 2-2-3]  
D.4.4 Particulate (**PM/PM<sub>10</sub>**) – Best Available Control Technology [326 IAC 2-2-3]  
D.5.3 Particulate Matter (**PM/PM<sub>10</sub>**) – Best Available Control Technology [326 IAC 2-2-3]  
D.6.10 Particulate (**PM/PM<sub>10</sub>**) – Best Available Control Technology [326 IAC 2-2-3]  
D.7.4 Particulate (**PM/PM<sub>10</sub>**)– Best Available Control Technology [326 IAC 2-2-3]  
D.8.2 Particulate (**PM/PM<sub>10</sub>**) – Best Available Control Technology [326 IAC 2-2-3]

**Compliance Determination Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]** The reference has been added to the Table of Contents for sections D.1, D.2 and D.3.

Typos and reference numbers are included for B and C conditions general requirements throughout the document have been revised.

## Comment 2

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

- (a) The Permittee owns and operates a stationary Direct Reduced Iron (DRI) manufacturing operation at a steel ~~and iron manufacturing plant~~ minimill.
- (b) Responsible Official: ~~DRI~~ Plant Manager or designee

## Response to Comment 2

- (a) The Condition A.1 General Information has been revised as follows:  
  
The Permittee owns and operates a stationary Direct Reduced Iron (DRI) manufacturing operation at a steel ~~and iron manufacturing plant~~ minimill.
- (b) The term “designee” alone does not meet the definition of a responsible official as defined in 326 IAC 2-7-1(34) (A). The “responsible official” for a corporation in 326 IAC 2-7-1(34) (A) is one the following:
  - (i) a president;
  - (ii) a secretary;
  - (iii) a treasurer;
  - (iv) a vice president of the corporation in charge of a principal business function;
  - (v) any other person who performs similar policy or decision making functions for the corporation; or
  - (vi) a duly authorized representative of any person listed in this clause if the representative is responsible for the overall operation of one (1) or more manufacturing, production, or operating facilities applying for or subject to a Part 70 permit and either:
    - (AA) the facilities employ more than two hundred fifty (250) persons or have gross annual sales or expenditures exceeding twenty-five million dollars (\$25,000,000) (in second quarter 1980 dollars); or
    - (BB) the delegation of authority to such representative is approved in advance by the commissioner.

Therefore, the “Responsible Official” is revised as follows:

~~DRI~~ Plant Manager or designee as defined in 326 IAC 2-7-1(34)(A)

### Comment 3

#### A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]

---

- (a) ~~This steel and iron manufacturing plant~~ The source consists of:
- (b) ~~—~~ IDEM has determined that Steel Dynamics, Inc. (033-00043) and Iron Dynamics, Inc. (033-00076) are under the common control. These two plants are considered one source for Part 70 applicability.
- (c) Separate Part 70 permits will be issued to Steel Dynamics, Inc. (033-8068-00043) and Iron Dynamics, Inc. (033-12614-00076), solely for administrative purposes. For this permit, the Permittee is Iron Dynamics, Inc. the supporting operation.

### Response to Comment 3

IDEM agrees. Condition A.2 Part 70 Source Definition has been revised to better clarify which emissions units and control devices are associated with Iron Dynamics, Inc., the supporting operation. The following changes have been made to the permit to clarify that Condition A.2 is not federally enforceable.

### Section A

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, **A.2**, A.3 and A.4 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.

In addition it has been determined that the paragraph that discusses common control does not need to be included in Condition A.2. The language is revised as follows.

#### A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]

---

~~This steel and iron manufacturing plant~~ **The source** consists of:

- (a) Steel Dynamics, Inc., the primary operation, located at 4500 County Road 59, Butler, Indiana 46721; and
- (b) Iron Dynamics, Inc., the supporting operation, located at 4500 County Road 59, Butler, Indiana 46721.

~~IDEM has determined that Steel Dynamics, Inc. (033-00043) and Iron Dynamics, Inc. (033-00076) are under common control. These two plants are considered one source for Part 70 applicability.~~

Separate Part 70 permits will be issued to Steel Dynamics, Inc. (033-8068-00043) and Iron Dynamics, Inc. (033-12614-00076), solely for administrative purposes. **For this permit, the Permittee is Iron Dynamics, Inc., the supporting operation.**

#### Comment 4

#### Changes to Condition A.3 Emission Units and Pollution Control Equipment Summary

##### Rotary Hearth Furnace (RHF)

- (a) One (1) rotary hearth furnace (RHF) constructed in 1998 and modified in 2001 with an addition of ten (10) natural gas fired low-NOx burners, having a total ~~furnace~~ furnace nominal heat input of 376 MMBtu per hour. The RHF processes coal and iron ore to produce a nominal throughput of ninety-six (96) tons of direct reduced iron per hour. Emissions are controlled by an afterburner for CO and VOC, lime injection in the gas stream for SO<sub>2</sub>, selective non-catalytic reduction for NOx, and a baghouse ~~pulse-jet fiberglass filter~~ for PM/PM<sub>10</sub> and calcium sulfate (formed during reaction of lime and SO<sub>2</sub>). Emissions exhaust through Stack 40.

##### Rotary Hearth Furnace Additional Emission Points

- (b) RHF Briquetters

Two (2) enclosed RHF green briquetters, constructed in 2003, replacing the existing pelletizing equipment, with a nominal throughput of 160 tons per hour, exhausting through the RHF fugitive emissions baghouse, exhausting through ~~stack~~ Stack 77.

##### Submerged Arc Furnace (SAF)

- (a) Submerged Arc Furnace (SAF)

(1) One (1) submerged arc furnace (SAF), constructed in 1998, that processes direct reduced iron (DRI) ~~pellets~~, coke and lime to produce a nominal throughput of ~~one hundred six~~ (106) tons of liquid hot metal (pig iron) per hour. ~~The DRI pellets are stored in a bin above the SAF, where coke and lime are added before being charged through tubes into the SAF.~~ Emissions are exhausted through a hole in the stationary lid, with particulate controlled by a wet venturi scrubber and carbon monoxide (CO) controlled by a thermal oxidizer exhausting through Stack 58.

(2) One (1) desulfurization station, constructed in 1998, with a nominal capacity of 106 tons per hour, uses lime to remove sulfur in the pig iron produced at the SAF. Emissions from the desulfurization station, DRI bins, slag pots and tapping associated with the SAF are captured by ~~a canopy hood~~ hoods and particulate matter is controlled by the desulfurization baghouse exhausting through ~~stack~~ Stack 58.

- (b) RHF Discharge Chute

One (1) 60,000 dscfm airflow RHF Discharge Chute baghouse, added ~~in~~ in 2003, to control fugitive emissions from the pan conveyor used to transport material from the Rotary Hearth Furnace to the Submerged Arc Furnace exhausting to Stack 58.

- (c) Ladle Preheaters

Two (2) ladle preheaters each with a ~~maximum~~ nominal heat input of 9 MMBtu per hour;

- (d) Briquetters

Two (2) enclosed SAF hot briquetters, constructed in 2002, with a nominal throughput of 106 tons per hour, exhausting through ~~stack~~ Stack 58.

### Coal and Iron Ore Unloading

- (a) One (1) receiving shed, constructed in 1998, with a particulate matter emissions exhaust system controlled by a baghouse exhausting through ~~stacks~~ Stacks 67 and 68.
- (b) One (1) rotary railcar dumper, constructed in 1998, with a nominal throughput of 2,500 tons per hour, with the particulate matter emissions captured by a side hood controlled by the shed baghouse exhausting through ~~stacks~~ Stacks 67 and 68.

### Coal Processing

- (a) One (1) totally enclosed coal crusher identified as a double cone classifier (grinder), constructed in 1998, with the air from the coal collectors that is not recirculated is exhausted through the coal dryer ~~stack~~ Stack 75.
- (b) One (1) coal dryer, ~~identified as 75~~, constructed in 1998, with a nominal heat capacity of 25 MMBtu per hour and processes a nominal 60 tons of coal per hour, with emissions exhausting through Baghouse B-75, then Stack 75.

### Ore Dryer

One (1) ~~ore dryer, identified as 76~~ Ore Dryer, constructed in 1998, with a nominal heat capacity of ~~27~~ 27 MMBtu per hour and ~~processes~~ processes a nominal 115 tons of ore per hour, with emissions exhausting through Baghouse B-76, then ~~stack~~ Stack 76.

### Ore Processing

One (1) Ore Preparation Process ~~identified as 74~~, constructed in 1998, consisting of a roll screener, ore press (grinder) and magnetic separators with particulate matter emissions controlled by a baghouse, exhausting to ~~stack~~ Stack 74.

### Material Storage and Handling

- (a) Silos and Bins

Fourteen (14) material storage silos and bins equipped with air bin vent filters to vent the displaced air for particulate matter emissions control, consisting of the following:

- (1) One (1) storage bin, ~~identified as 44~~, constructed in 1998, with a nominal capacity of 8,000 cubic feet, exhausts through ~~stack~~ Stack 44.
- (2) One (1) EAF dust silo, ~~identified as 45~~, constructed in 1998, with a nominal capacity of 7,970 cubic feet, exhausting through ~~stack~~ Stack 45.
- (3) One (1) carbon injection silo, ~~identified as 46~~, constructed in 1998, with a nominal capacity of 2,300 cubic feet, exhausting through ~~stack~~ Stack 46.
- (4) Four (4) coal silos, ~~identified as 47 through 50~~, constructed in 1998, with a nominal capacities of 8,909, 23,420, 19,712 and 24,289 cubic feet respectively, exhausting through ~~stacks~~ Stacks 47 through 50.

- (5) One (1) SAF bin, ~~identified as 86~~, constructed in 1998, with a nominal capacity of 7,970 cubic feet, exhausting through ~~stack~~ Stack 86.
  - (6) One (1) zinc silo, ~~identified as 80~~ and constructed in 2003, with a ~~maximum~~ nominal throughput rate of 3.0 tons of recycled zinc per hour, controlled by one (1) filter, and exhausting through ~~stack~~ Stack 80.
  - (7) One (1) ash silo ~~identified as 81~~ and constructed in 2003, with a ~~maximum~~ nominal throughput rate of 3.0 tons of ash per hour, controlled by one (1) filter, and exhausting into the building.
  - (8) Four (4) storage bins, constructed in 1998,
- (b) Material Recycling and Unloading Systems
- (1) One (1) SAF dust recycling system, ~~identified as 79~~ and constructed in 2003 with a nominal throughput rate of 3.0 tons of dust per hour, controlled by one (1) filter, and exhausting into the building.
  - (2) One (1) zinc silo, ~~identified as 80~~ and constructed in 2003 with a nominal throughput rate of 3.0 tons of recycled zinc per hour, controlled by one (1) filter, and exhausting through Stack 80.
  - (3) One (1) ash silo, ~~identified as 81~~ and constructed in 2003 with a nominal throughput rate of 3.0 tons of ash per hour, controlled by one (1) filter, and exhausting into the building.
  - (4) One (1) EAF dust unloading process, ~~identified as 82~~ and constructed in 2003 with a nominal throughput rate of 3.0 tons of dust per hour, controlled by one (1) filter, and exhausting into the building.
  - (5) One (1) vacuum system, ~~identified as 83~~ and constructed in 2003 with a ~~maximum~~ nominal throughput rate of 3.0 tons of dust per hour, controlled by one (1) filter, and exhausting into the building.
  - (6) One (1) zinc silo unloading process, ~~identified as 84~~ and constructed in 2003 with a nominal throughput rate of 3.0 tons of zinc per hour, controlled by one (1) filter, and exhausting into the building.
  - (7) One (1) ash silo unloading process, ~~identified as 85~~ and constructed in 2003 with a nominal throughput rate of 3.0 tons of ash per hour, controlled by one (1) filter, and exhausting into the building.

### Outdoor Storage and Handling

- (a) One (1) coal and ore stacker conveyer with a ~~maximum~~ nominal capacity of 2,500 tons per hour. Fugitive emissions controlled as needed by water sprays, to control fugitive dust at transfer and discharge points.
- (b) One (1) storage pile of coal with a nominal storage capacity of 20,000 tons and a nominal pile acreage of 1.0 acre and a ~~maximum~~ nominal throughput of 300,000 tons per year,

- (c) One (1) storage pile of iron ore with a nominal storage capacity of 120, 000 tons and a nominal pile acreage of 5.7 acres and a ~~maximum~~ nominal throughput of 900,000 tons per year and,
- (d) One (1) storage pile of fluxstone (lime dolomite) with a storage capacity of 30,000 tons and a pile acreage of 0.5 acres and a ~~maximum~~ nominal throughput of 80,000 tons per year,
- (e) Above ground coal and iron ore reclaim hoppers used by the front end loaders to transport material from the storage piles to the conveying system.
- (f) Closed conveyers with a ~~maximum~~ nominal capacity of ~~one thousand one hundred~~ (1,100) tons per hour to move coal and ore to storage silos or coal crusher.

~~Fugitive emissions are controlled by water sprays and the piles are built with berms to reduce wind erosion.~~

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

Iron Dynamics, Inc., also includes ~~the following~~ insignificant activities, as follows:

- ~~(a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.~~
- ~~(b) Cleaners and solvents characterized as follows: Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100°F).~~

[ALL INSIGNIFICANT AND TRIVIAL ACTIVITIES OTHER THAN COLD CLEANING OPERATIONS SHOULD BE INCLUDED.]

#### Responses to Comment 4

The descriptions are revised in Condition A.3 Emission Units and Pollution Control Equipment Summary and the corresponding Section D description boxes as follows:

#### Rotary Hearth Furnace (RHF)

- (a) One (1) rotary hearth furnace (RHF) constructed in 1998 and modified in 2001 with an addition of ten (10) natural gas fired low-NOx burners, having a total ~~burner~~ **furnace** nominal heat input of 376 MMBtu per hour. The RHF processes coal and iron ore to produce a nominal throughput of ninety-six (96) tons of direct reduced iron per hour. Emissions are controlled by an afterburner for CO and VOC, lime injection in the gas stream for SO<sub>2</sub>, selective non-catalytic reduction for NOx, **and** a baghouse ~~pulse jet fiberglass filter~~ for PM/PM<sub>10</sub> and calcium sulfate (formed during reaction of lime and SO<sub>2</sub>). Emissions exhaust through Stack 40.

#### Rotary Hearth Furnace Additional Emission Points

- (b) RHF Briquetters  
Two (2) enclosed RHF green briquetters, constructed in 2003, replacing the existing

pelletizing equipment, with a nominal throughput of 160 tons per hour, exhausting through the RHF fugitive emissions baghouse, exhausting through ~~stack~~ **Stack 77**.

### **Submerged Arc Furnace (SAF)**

- (a) Submerged Arc Furnace (SAF)
  - (1) One (1) submerged arc furnace (SAF), constructed in 1998, that processes direct reduced iron (DRI) ~~pellets~~, coke and lime to produce a nominal throughput of ~~one hundred six~~ 106 tons of liquid hot metal (pig iron) per hour. ~~The DRI pellets are stored in a bin above the SAF, where coke and lime are added before being charged through tubes into the SAF.~~ Emissions are exhausted through a hole in the stationary lid, with particulate controlled by a wet venturi scrubber and carbon monoxide (CO) controlled by a thermal oxidizer exhausting through **Stack 58**.
  - (2) One (1) desulfurization station, constructed in 1998, with a nominal capacity of 106 tons per hour, uses lime to remove sulfur in the pig iron produced at the SAF. Emissions from the desulfurization station, DRI bins, slag pots and tapping associated with ~~the~~ SAF are captured by ~~a canopy hood~~ **hoods** and particulate matter is controlled by the desulfurization baghouse exhausting through ~~stack~~ **Stack 58**.
- (b) RHF Discharge Chute  
One (1) 60,000 dscfm airflow RHF Discharge Chute baghouse, added ~~in~~ **in** 2003, to control fugitive emissions from the pan conveyor used to transport material from the Rotary Hearth Furnace to the Submerged Arc Furnace exhausting to Stack 58.
- (c) Ladle Preheaters  
Two (2) ladle preheaters **each** with a ~~maximum~~ **nominal** heat input of 9 MMBtu per hour;
- (d) Briquetters  
Two (2) enclosed SAF hot briquetters, constructed in 2002, with a nominal throughput of 106 tons per hour, exhausting through ~~stack~~ **Stack 58**.

The descriptions are revised in Condition A.3 Emission Units and Pollution Control Equipment Summary and Section D description box as follows:

### **Coal and Iron Ore Unloading**

- (a) One (1) receiving shed, constructed in 1998, with a particulate matter emissions exhaust system controlled by a baghouse exhausting through ~~stacks~~ **Stacks 67 and 68**.
- (b) One (1) rotary railcar dumper, constructed in 1998, with a **nominal** throughput of 2,500 tons per hour, with the particulate matter emissions captured by a side hood controlled by the shed baghouse exhausting through ~~stacks~~ **Stacks 67 and 68**.

### **Coal Processing**

- (a) One (1) totally enclosed coal crusher identified as a double cone classifier (grinder), constructed in 1998, with the air from the coal collectors that is not recirculated ~~is~~ **exhausted** through the coal dryer ~~stack~~ **Stack 75**.

- (b) One (1) coal dryer, ~~identified as 75~~, constructed in 1998, with a nominal heat capacity of 25 MMBtu per hour and processes **a nominal** 60 tons of coal per hour, with emissions exhausting through Baghouse B-75, then Stack 75.

### Ore Dryer

One (1) ~~ore dryer, identified as 76~~ Ore Dryer, constructed in 1998, with a nominal heat capacity of 27 MMBtu per hour and ~~processes~~ **processes a nominal** 115 tons of ore per hour, with emissions exhausting through Baghouse B-76, then ~~stack~~ **Stack 76**.

### Ore Processing

One (1) Ore Preparation Process ~~identified as 74~~, constructed in 1998, consisting of a roll screener, ore press (grinder) and magnetic separators with particulate matter emissions controlled by a baghouse, exhausting to ~~stack~~ **Stack 74**.

### Material Storage and Handling

- (a) Silos and Bins

Fourteen (14) material storage silos and bins equipped with air bin vent filters to vent the displaced air for particulate matter emissions control, consisting of the following:

- (1) One (1) storage bin, ~~identified as 44~~, constructed in 1998, with a nominal capacity of 8,000 cubic feet, exhausts through ~~stack~~ **Stack 44**.
- (2) One (1) EAF dust silo, ~~identified as 45~~, constructed in 1998, with a nominal capacity of 7,970 cubic feet, exhausting through ~~stack~~ **Stack 45**.
- (3) One (1) carbon injection silo, ~~identified as 46~~, constructed in 1998, with a nominal capacity of 2,300 cubic feet, exhausting through ~~stack~~ **Stack 46**.
- (4) Four (4) coal silos, ~~identified as 47 through 50~~, constructed in 1998, with nominal capacities of 8,909, 23,420, 19,712 and 24,289 cubic feet respectively, exhausting through ~~stacks~~ **Stacks 47 through 50**.
- (5) One (1) SAF bin, ~~identified as 86~~, constructed in 1998, with a nominal capacity of 7,970 cubic feet, exhausting through ~~stack~~ **Stack 86**.
- (6) One (1) zinc silo, ~~identified as 80 and~~ constructed in 2003, with a ~~maximum~~ **nominal** throughput rate of 3.0 tons of recycled zinc per hour, controlled by one (1) filter, ~~and~~ exhausting through ~~stack~~ **Stack 80**.
- (7) One (1) ash silo ~~identified as 81 and~~ constructed in 2003, with a ~~maximum~~ **nominal** throughput rate of 3.0 tons of ash per hour, controlled by one (1) filter, ~~and~~ exhausting into the building.
- (8) Four (4) storage bins, constructed in 1998.

- (b) Material Recycling and Unloading Systems

- (1) One (1) SAF dust recycling system, ~~identified as 79 and~~ constructed in 2003 with a nominal throughput rate of 3.0 tons of dust per hour, controlled by one (1) filter,

- ~~and~~ exhausting into the building.
- (2) One (1) zinc silo, ~~identified as 80 and~~ constructed in 2003 with a nominal throughput rate of 3.0 tons of recycled zinc per hour, controlled by one (1) filter, ~~and~~ exhausting through Stack 80.
  - (3) One (1) ash silo, ~~identified as 81 and~~ constructed in 2003 with a nominal throughput rate of 3.0 tons of ash per hour, controlled by one (1) filter, ~~and~~ exhausting into the building.
  - (4) One (1) EAF dust unloading process, ~~identified as 82 and~~ constructed in 2003 with a nominal throughput rate of 3.0 tons of dust per hour, controlled by one (1) filter, ~~and~~ exhausting into the building.
  - (5) One (1) vacuum system, ~~identified as 83 and~~ constructed in 2003 with a ~~maximum~~ **nominal** throughput rate of 3.0 tons of dust per hour, controlled by one (1) filter, ~~and~~ exhausting into the building.
  - (6) One (1) zinc silo unloading process, ~~identified as 84 and~~ constructed in 2003 with a **nominal** throughput rate of 3.0 tons of zinc per hour, controlled by one (1) filter, ~~and~~ exhausting into the building.
  - (7) One (1) ash silo unloading process, ~~identified as 85 and~~ constructed in 2003 with a **nominal** throughput rate of 3.0 tons of ash per hour, controlled by one (1) filter, ~~and~~ exhausting into the building.

### Outdoor Storage and Handling

- (a) One (1) coal and ore stacker conveyer with a ~~maximum~~ nominal capacity of 2,500 tons per hour. Fugitive emissions controlled **as needed** by water sprays, to control fugitive dust at transfer and discharge points.
- (b) One (1) storage pile of coal with a **nominal** storage capacity of 20,000 tons and a **nominal** pile acreage of 1.0 acre and a ~~maximum~~ **nominal** throughput of 300,000 tons per year.
- (c) One (1) storage pile of iron ore with a **nominal** storage capacity of 120,000 tons and a **nominal** pile acreage of 5.7 acres and a ~~maximum~~ **nominal** throughput of 900,000 tons per year and
- (d) One (1) storage pile of fluxstone (lime dolomite) with a storage capacity of 30,000 tons and pile acreage of 0.5 acres and a ~~maximum~~ **nominal** throughput of 80,000 tons per year.
- (e) Above ground coal and iron ore reclaim hoppers used by the front end loaders to transport material from the storage piles to the conveying system.
- (f) Closed conveyers with a ~~maximum~~ **nominal** capacity of ~~one thousand one hundred~~ {1,100} tons per hour to move coal and ore to storage silos or coal crusher.

~~Fugitive emissions are controlled by water sprays and the piles are built with berms to reduce wind erosion.~~

The insignificant list is revised to include those insignificant activities listed in the Steel Dynamics, Inc. Part 70 Application on Form GSD-10(a). The trivial activities are not required to be included in the Part 70 permit application, because the potential uncontrolled emissions from these activities are less than one (1) pound per day and meet the exemption level. Therefore, trivial activities are not listed in the Part 70 Permit, but they may be accessed on the IDEM website at <http://www.in.gov/idem/rules> in 326 IAC 2-7-1(40). Also, the degreasing operations are not specifically regulated, since the degreasing operations are not subject to 326 IAC 8-3. Condition A.4 was revised as follows:

- (4) 1. Specifically regulated insignificant activities, ~~which are specifically regulated~~ as defined in 326 IAC 2-7-1(21):
- (a) **The following equipment related to manufacturing activities not resulting in the emission of HAPS: brazing equipment, cutting torches, soldering equipment and welding equipment. [326 IAC 6-3-2]**
  - (b) **Bentonite railcar unloading [326 IAC 6-3-2]**
- (2) 2. **Other insignificant activities**
- (a) **Space heaters, process heaters, or boilers using the following fuels:**
    - (i) **Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.**
    - (ii) **Propane or liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour.**
  - (b) **Combustion source flame safety purging on startup.**
  - (c) **The following VOC and HAP storage containers:**
    - (i) **Storage tanks with capacity less than or equal to one thousand (1,000) gallons and annual throughputs equal to or less than twelve thousand (12,000) gallons.**
    - (ii) **Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.**
  - (d) **Refractory storage not requiring air pollution control equipment.**
  - (e) **Equipment used exclusively for filling drums, pails, or other packaging containers with the following: Lubricating oils, Waxes and Greases.**
  - (f) **Application of: oils; greases; lubricants; and nonvolatile material; as temporary protective coatings.**
  - (g) **Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.**
  - (h) **Noncontact cooling tower systems with the following: Forced and induced draft cooling tower system not regulated under a NESHAP.**
  - (i) **Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.**
  - (j) **Stockpiled soils from soil remediation activities that are covered and waiting transport for disposal.**

- (k) Paved and unpaved roads and parking lots with public access.
  - (l) Covered conveyors for limestone conveying of less than or equal to seven thousand two hundred (7,200) tons per day for sources other than mineral processing plants constructed after August 31, 1983.
  - (m) Underground conveyors
  - (n) Coal bunker and coal scale exhausts and associated dust collector vents.
  - (o) Purging of gas lines and vessels that is related to routing maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
  - (p) Flue gas conditioning systems and associated chemicals such as the following: sodium sulfate; ammonia and sulfur trioxide.
  - (q) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
  - (r) On-site fire and emergency response training approved by the department.
  - (s) Purge double block and bleed valves.
  - (t) Filter or coalescer media changeout.
  - (u) A laboratory as defined in 326 IAC 2-7-1(21)(D).
  - (v) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
  - (w) Cleaners and solvents characterized as follows: Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38°C (100°F).
3. Other Activities less than significant level
- (a) Diesel generators

#### Comment 5

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

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, ~~or to determine compliance with this permit.~~ The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.

#### Response to Comment 5

Condition B.7 is the direct rule language from 326 IAC 2-7-5(6)(E). Pursuant to 326 IAC 2-7-5(6) (E), 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 ..... or to determine compliance with the Part 70 permit. Therefore, the permit is not revised as a result of this comment.

### Comment 6

#### 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) Where specifically designated by this permit ~~or required by an applicable requirement,~~ **[CERTIFICATION CAN COVER ONLY WHAT IS IN PERMIT]** any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form or its equivalent, with each submittal requiring certification.

### Response to Comment 6

Pursuant to 326 IAC 2-7-5(C)(ii), the reporting of deviations from Part 70 permit requirements, including those attributable to upset conditions as defined in a Part 70 permit .... Proper notice submittal under section 16 of this rule satisfies the reporting requirements of this item. Notwithstanding requirements in this section, the reporting of deviations **required by an applicable requirement shall follow the schedule stated in the applicable requirement** (emphasis). Therefore, the permit is not revised as a result of this comment.

IDEM has made the requested revision as follows:

- (b) One (1) certification shall be included, using the attached Certification Form **or its equivalent**, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

### Comment 7

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

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- (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; and
  - (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).

### Response to Comment 7

Condition B.9 is the direct rule language from 326 IAC 2-7-6(5)(C). A requirement that the compliance certification include the following: ..... **(v) Such other facts as the commissioner may require to determine the compliance status of the source** (emphasis). Therefore the permit is not revised as a result of this comment.

### Comment 8

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1), (3) and (13)] [326 IAC 2-7-6(1) and (6)]  
[326 IAC 1-6-3]

- 
- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) ~~within~~ no later than ninety (90) days after ~~issuance~~ the effectiveness of this permit condition, including the following information on each facility:
- The PMP extension notification ~~do~~ does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).
- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or ~~contribute~~ is the primary contributor to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or ~~contributes~~ is the primary contributor to any violation. The PMP does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).
- (d) Records of preventive maintenance specified in the PMPs shall be retained for a period of at least five (5) years. These records shall be kept 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.

### Response to Comment 8

Pursuant to IC 13-15-5-3, this Part 70 permit becomes effective upon issuance; therefore the effective date of the permit and issuance date of the permit are the same. It is not necessary to replace the word “issuance” with the word “effectiveness”.

IDEM has determined that the Permittee is not required to keep records of all preventive maintenance. However, where the Permittee seeks to demonstrate that an emergency has occurred, the Permittee must provide, upon request, records of preventive maintenance in order to establish that the lack of proper maintenance did not cause or contribute to the deviation. The IDEM, OAQ telephone and facsimile numbers are revised in this condition and throughout the permit. Therefore, IDEM has deleted paragraph (b) of Section B – Preventive Maintenance condition as follows:

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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, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, 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 Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

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

- ~~(b) The Permittee shall implement the PMPs, including any required record keeping as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.~~
- ~~(e)~~ (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 does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- ~~(d)~~ (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.

**Comment 9**

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, except as otherwise provided in 326 IAC 2-7-16 of this condition.[CHANGE IS CONSISTENT WITH RULE LANGUAGE]
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ and Northern Regional Office within four (4) daytime business hours after

the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or  
Telephone Number: 317-233-5674 (ask for Compliance Section)  
Facsimile Number: 317-233-5967

~~Telephone Number: 1-800-753-5519 (Northern Regional Office)~~  
~~or~~  
~~Telephone Number: 574-245-4870~~  
~~Facsimile Number: 574-245-4877~~  
[NO BASIS FOR REQUIRING NOTICE TO TWO LOCATIONS]

- (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 Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

No later than two (2) working days of after the time when emission limitations were exceeded due to the emergency.

- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(10) for the emission unit that experienced an emergency be revised in response to an emergency.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report that are found to be valid emergencies.

### Response to Comment 9

IDEM has determined that the Permittee is not required to keep records of all preventive maintenance. However, where the Permittee seeks to demonstrate that an emergency has occurred, the Permittee must provide, upon request, records of preventive maintenance in order to establish that the lack of proper maintenance did not cause or contribute to the deviation. Therefore, IDEM has amended the Section B – Emergency Provisions condition as follows:

Condition B.11(a) The following statement in the above comment, except as otherwise provided in 326 IAC 2-7-16 or this condition is only in part direct language from the rule 326 IAC 2-7-16. Therefore, the permit is revised as follows:

Condition B.11(b)(4) IDEM agrees that the regional office references are not needed.

The following statement in the above comment No later than two (2) working days of after the time when emission limitations were exceeded due to the emergency is not the direct language from 326 IAC 2-7-16(5). The Permittee submitted notice in writing or facsimile ..... **Within two (2) working days of the time when the emissions limitations were exceeded due to the emergency** (emphasis). Therefore, the permit is not revised as a result of this comment.

A typo has been revised in Condition B.11(e) to refer to the proper rule concerning the Preventive Maintenance Plan. The IDEM compliance telephone and facsimile numbers are revised in this condition and throughout the permit. There is no language in the rule that specifies for the emission unit that experienced an emergency .

Condition B.11(h), states all emergencies are to be reported. Therefore, the permit is revised, as follows:

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

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, **except as otherwise provided in this condition.**
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,  
Compliance Section), or  
Telephone Number: 317-233-~~5674~~ **0178**(ask for Compliance Section)  
Facsimile Number: 317-233-~~5967~~ **6865**

~~Telephone Number: 1-800-753-5519 (Northern Regional Office)~~  
or  
~~Telephone Number: 574-245-4870~~  
~~Facsimile Number: 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 Branch, Office of Air Quality  
100 North Senate Avenue, ~~P. O. Box 6015~~  
Indianapolis, Indiana ~~46206-6015~~ **46204-2251**

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "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)(10)(9) be revised in response to an emergency.**
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

#### Comment 10

##### B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B.11 - Emergency Provisions); the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

### Response to Comment 10

The permit condition is revised as follows:

#### B.14 15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3) (C) (ii)]

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- (a) Deviations from any permit requirements (for emergencies see Section B.11 - Emergency Provisions); the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

### Comment 11

#### 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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- (c) Proceedings by IDEM, OAQ, ~~determines any of the following:~~ determining 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 ~~determines any of the following:~~ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ ~~determines any of the following:~~ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)] [CHANGE IS CONSISTENT WITH RULE LANGUAGE]

### Response to Comment 11

B.15 is renumbered B.16. The phrase “determines any of the following” is deleted from the condition subsections (c) and (d). Therefore, the permit is revised as follows:

- (c) Proceedings by IDEM, OAQ, ~~determines any of the following:~~ 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 ~~determines any of the following:~~ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ ~~determines any of the following:~~ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

### Comment 12

#### B.16 Permit Renewal [326 IAC 2-7-4]

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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 the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]  
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 reasonable deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

### Response to Comment 12

Condition B.16(a) is renumbered B.17(a) and is revised as follows:

#### ~~B.16~~ B.17 Permit Renewal [326 IAC 2-7-4]

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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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.17(c) specifies that the deadline for submission will be specified in the written request for additional information. Therefore, the permit condition is not revised as a result of this comment.

### Comment 13

#### 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.

### Response to Comment 13

Condition B.18(a) is renumbered B.19(a) contains language directly from the rule 326 IAC 2-7-5(8). The requested language addition is not in the rule. Therefore, the permit condition is not revised as a result of this comment.

#### ~~B.18~~ B.19 Permit Revision under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

---

- (a).....

### Comment 14

#### 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;~~  
[CHANGE CONSISTENT WITH RULE LANGUAGE]

### Response to Comment 14

Condition B.19 is renumbered B.20

Condition B.20(a)(2) refers to 326 IAC 2-7-10.5, which lists any preconstruction approval that "might" be necessary depending on the change or changes made at the source. Therefore, the permit condition is not revised as a result of the comment.

IDEM has clarified the Section B Operational Flexibility condition as follows:

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

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
- (3) The changes do not result in emissions which exceed the ~~emissions allowable~~ **under 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  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015 **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, ~~on a rolling five (5) year basis~~, all such changes and emissions ~~trading trades~~ that are subject to 326 IAC 2-7-20(b), (c), or (e). ~~and makes~~ **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 the certification by the "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 ~~in emissions in~~ 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.

### Comment 15

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

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A modification, construction, or reconstruction is governed by the applicable requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

### Response to Comment 15

Condition B.20 is renumbered B.21. This condition contains the applicable rules to modify, reconstruct or construct a source. With all the different subsections of the rules, any of these actions could trigger any part of these rules, so the entire rules 326 IAC 2 and 326 IAC 2-7-10.5 are stated in the condition. Therefore, the permit condition is not revised as a result of this comment.

**~~B.20~~ 21 Source Modification Requirement [326 IAC 2-7-10.5] [326 IAC 2-2-2]**

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### Comment 16

B.21 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC13-30-3-1] [IC13-17-3-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to any legal privilege and 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 and the U.S. EPA, or an authorized representative to perform the following:

- (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 regulated under this permit for the purpose of assuring compliance with this permit or applicable requirements; and

### Response to Comment 16

Condition B.21 is renumbered B.22.

Adding any legal privilege to condition B.22 would be reiterating what is already stated in the condition.

Condition B.22(d) is the language taken verbatim from rule.

Therefore, the permit conditions B.22 and B.22(d) are not revised as a result of this comment.

B.24 22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC13-30-3-1] [IC13-17-3-2]

### Comment 17

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

- (b) Any application requesting a permit revision that allows for 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:

### Response to Comment 17

Condition B.22 is renumbered B.23.

The addition of the language in Condition B.23(b) will clarify the condition. 326 IAC 2-7-11 rule language contains this language. Therefore the condition is revised as follows:

B.22 23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (b) Any application requesting a **permit revision that allows for 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:

### Comment 18

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

- (a) The Permittee shall pay annual fees to IDEM, OAQ ~~within~~ no later than thirty (30) calendar days ~~of~~ after 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.~~

### Response to Comment 18

Condition B.23 is renumbered B.24.

In Condition B.24(a) the language is taken verbatim from the rule, therefore the permit condition is not revised as a result of this comment.

In Condition B.24(b) pursuant to 326 IAC 2-1.1-7(8), failure to pay in accordance with the fee payment schedule that results in substantial nonpayment of the fee may result in revocation of the permit, if applicable. Therefore, the permit condition is not revised as a result of the comment.

~~B.23~~ **24** Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)] [326 IAC 2-1.1-7]

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### Comment 19

C.1 Particulate Matter Emission Limitations for Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

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- ~~(a) Pursuant to 40 CFR 52 Subpart P, particulate matter emissions from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour. [PROVIDE REGULATORY AUTHORITY OR OMIT]~~

### Response to Comment 19

The 326 IAC 6-3 revisions became effective on June 12, 2002 and were approved into the State Implementation Plan on September 23, 2005. These rules replace the previous version of 326 IAC 6-3 (Process Operations) that had been part of the SIP. Therefore, the requirements of the previous version of 326 IAC 6-3-2 are no longer applicable to this source. Condition C.1 has been revised to remove (a) which contained the old version and add the revised federally approved requirements. Therefore, the permit is revised as follows:

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour ~~[40 CFR 52 Subpart P]~~[326 IAC 6-3-2(e)]

---

- ~~(a) Pursuant to 40 CFR 52 Subpart P, particulate matter emissions from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.~~

- ~~(b) 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.~~

### Comment 19A

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

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The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2 or in this permit. This provision does not prohibit the

introduction of feedstock material for melting in electric arc furnaces. 326 IAC 9-1-2 is not federally enforceable.

### Response to Comment 19A

The definition of "Incinerator" in 326 IAC 1-2-34 states that an incinerator is an engineered apparatus that burns waste substances..... Feedstock material for melting in the RHF and SAF is not considered "waste substance" based on this definition. This permit condition is not revised as a result of this comment.

### Comment 20

[FOR ASBESTOS ABATEMENT (C.9), USE THE NEW IDEM SHORT VERSION]

### Response to Comment 20

Condition C.9 is renumbered C.8.

The long version has been deleted and replaced with the short version. The language in the permit is revised as follows:

### C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- ~~(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.~~
- ~~(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:~~
- ~~(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or~~
- ~~(2) If there is a change in the following:~~
- ~~(A) Asbestos removal or demolition start date;~~
- ~~(B) Removal or demolition contractor; or~~
- ~~(C) Waste disposal site.~~
- ~~(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).~~
- ~~(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).~~

~~All required notifications shall be submitted to:~~

~~Indiana Department of Environmental Management~~

~~Asbestos Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015~~

~~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 Accredited 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 Accredited 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.~~

**The Permittee shall comply with the applicable requirements of 326 IAC 14-10, 326 IAC 18, and 40 CFR 61.140.**

**Comment 21**

**C.10 Performance Testing [326 IAC 3-6]**

- 
- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

~~Within~~ No later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "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 certification by the "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 ~~Within~~ No 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 ~~Within~~ no later than five (5) days prior to the end of the initial forty-five (45) day period. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

### Response to Comment 21

Condition C.10 is renumbered C.9.

Since the addition of the sentence "**The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34)**" does not change the intent of the condition. Therefore, the condition is revised as follows:

#### C.40 9 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, ~~P. O. Box 6015~~  
Indianapolis, Indiana ~~46206-6015~~ **46204-2251**

~~within~~ **no later than** thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "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 ~~Within~~ **no 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 ~~Within~~ **no later than** five (5) days prior to the end of the initial forty-five (45) day period. **The notification requesting the extension submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).**

### Comment 22

#### C.12 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented ~~Within~~ no later than ninety (90) days after the effectiveness of this permit issuance. ~~If required by Section D, the condition.~~ The Permittee shall be responsible for installing any ~~necessary~~ required in Section D equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control,

that equipment cannot be installed and operated ~~within~~ **no later than** ninety (90) days, 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 Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

## Response to Comment 22

Condition C.12 is renumbered C.11.

IDEM agrees to change "within" to "no later than."

Pursuant to IC 13-15-5-3, the Part 70 permit becomes effective upon issuance. Therefore the effective date of the permit and issuance date of the permit are the same. It is not necessary to replace the word "issuance" with the word "effectiveness".

Pursuant to 326 IAC 2-7-5(3)(A)(iii) with respect to monitoring each Part 70 permit shall contain as necessary, requirements concerning the use, maintenance, and where appropriate installation of monitoring equipment or methods.

The last sentence in the condition ensures the source is in continuous compliance with the applicable permit requirements for all emission units. Therefore the permit is revised as follows:

### C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented ~~within~~ **no later than** ninety (90) days ~~of~~ **after** permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated ~~within~~ **no later than** ninety (90) days, 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 Branch, Office of Air Quality  
100 North Senate Avenue ~~P.O. Box 6015~~  
Indianapolis, Indiana ~~46206-6015~~ **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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

### Comment 23

#### ~~C.13 Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]~~

- ~~(a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous opacity monitoring systems (COMS) and related equipment.~~
- ~~(b) In the event that a breakdown of a continuous opacity monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.~~
- ~~(c) Whenever a continuous opacity monitor (COM) is malfunctioning or will be down for calibration, maintenance, or repairs for a period of four (4) hours or more, a calibrated backup COM shall be brought online within four (4) hours of shutdown of the primary COM, if possible. If this is not possible, visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of one (1) hour beginning four (4) hours after the start of the malfunction or down time.~~
- ~~(1) If the reading period begins less than one hour before sunset, readings shall be performed until sunset. If the first required reading period would occur between sunset and sunrise, the first reading shall be performed as soon as there is sufficient daylight.~~
- ~~(2) Method 9 opacity readings shall be repeated for a minimum of one (1) hour at least once every four (4) hours during daylight operations, until such time that the continuous opacity monitor is back in operation.~~
- ~~(3) All of the opacity readings during this period shall be reported in the Quarterly Deviation and Compliance Monitoring Reports.~~
- ~~(d) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5, (and 40 CFR 60 and/or 40 CFR 63).~~

[SEE SECTION D.1.17 FOR EXACT LANGUAGE. NO NEED TO HAVE UNDER SECTION C WHEN IT IS APPLICABLE TO ONLY ONE EMISSION UNIT AND IS SPECIFICALLY SPELLED OUT IN SECTION D.1.1]

### Response to Comment 23

Since, the requirements are listed in Section D.1, the following has been deleted. Subsequent conditions in Section C will be renumbered as necessary. The permit is revised as follows:

#### ~~C.13 Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]~~

- ~~(a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous opacity monitoring systems (COMS) and related equipment, as specified in Section D.~~

- ~~(b) In the event that a breakdown of a continuous opacity monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.~~
- ~~(c) Whenever a continuous opacity monitor (COM) is malfunctioning or will be down for calibration, maintenance, or repairs for a period of four (4) hours or more, a calibrated backup COM shall be brought online within four (4) hours of shutdown of the primary COM, if possible. If this is not possible, visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of one (1) hour beginning four (4) hours after the start of the malfunction or down time.~~
- ~~(1) If the reading period begins less than one hour before sunset, readings shall be performed until sunset. If the first required reading period would occur between sunset and sunrise, the first reading shall be performed as soon as there is sufficient daylight.~~
- ~~(2) Method 9 opacity readings shall be repeated for a minimum of one (1) hour at least once every four (4) hours during daylight operations, until such time that the continuous opacity monitor is back in operation.~~
- ~~(3) All of the opacity readings during this period shall be reported in the Quarterly Deviation and Compliance Monitoring Reports.~~
- ~~(d) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5, (and 40 CFR 60 and/or 40 CFR 63)~~

#### Comment 24

##### G.14 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- ~~(a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous emission monitoring systems (CEMS) and related equipment.~~
- ~~(b) In the event that a breakdown of a continuous emission monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.~~
- ~~(c) Whenever a continuous emission monitor other than an opacity monitor is malfunctioning or will be down for calibration, maintenance, or repairs for a period of four (4) hours or more, a calibrated backup CEMS shall be brought online within four (4) hours of shutdown of the primary CEMS, and shall be operated until such time as the primary CEMS is back in operation.~~
- ~~(d) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to GP033-9187-00043 and SSM033-12992-00076.~~

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

[SEE SECTION D.1.16 FOR EQUIVALENT LANGUAGE. NO NEED TO HAVE UNDER SECTION C

WHEN IT IS APPLICABLE TO ONLY ONE EMISSION UNIT AND IS SPECIFICALLY SPELLED OUT IN SECTION D.1]

**Response to Comment 24**

Since the requirements are listed in Condition D.1.16, the following has been deleted. Subsequent conditions in Section C will be renumbered as necessary. Requirements have been added to Condition D.1.16 when the SO<sub>2</sub>, NO<sub>x</sub> and CO Continuous Emission Monitoring Systems are down for maintenance or repair. The permit is revised as follows:

~~C.14 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]~~

- ~~(a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous emission monitoring systems (CEMS) and related equipment.~~
- ~~(b) In the event that a breakdown of a continuous emission monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.~~
- ~~(c) Whenever a continuous emission monitor other than an opacity monitor is malfunctioning or will be down for calibration, maintenance, or repairs for a period of four (4) hours or more, a calibrated backup CEMS shall be brought online within four (4) hours of shutdown of the primary CEMS, and shall be operated until such time as the primary CEMS is back in operation.~~
- ~~(d) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to CP033-9187-00043 and SSM033-12992-00076.~~

Since this condition is deleted and the last sentence added in the comment is already listed in Condition C.12 Compliance Monitoring, the sentence was left in Condition C.12.

D.1.16 Continuous Emission Rate Monitoring [326 IAC 3-5]

- (a) Pursuant to 326 IAC 3-5-1(d), the Permittee shall calibrate, certify, operate, and maintain a continuous **emissions** monitoring systems (**CEMS**) for measuring SO<sub>2</sub>, CO, and NO<sub>x</sub> emissions rates in pounds per hour from the rotary hearth furnace process baghouse Stack 40, in accordance with 326 IAC 3-5-2 through 326 IAC 3-5-7.
- (b) The Permittee shall record the output of the system and shall perform the required record keeping, pursuant to 326 IAC 3-5-6, and reporting, pursuant to 326 IAC 3-5-7.
- (c) **In the event that a breakdown of the SO<sub>2</sub>, CO, and/or NO<sub>x</sub> continuous emission monitoring system (CEMS) occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.**
- (d) **Whenever the SO<sub>2</sub> CEMS is malfunctioning or will be down for calibration, maintenance, or repairs for a period of six (6) hours, the Permittee shall monitor the lime injection rate into the gas stream.**
- (e) **Whenever the NO<sub>x</sub> CEMS is malfunctioning or will be down for calibration, maintenance, or repairs for a period of six (6) hours, the Permittee shall monitor the ammonia injection rate into the Selective Non-Catalyst Reduction Unit.**

- (f) **When ever the CO continuous emissions monitoring system is malfunctioning or down for maintenance or repair for a period of six (6) hours, the Permittee shall monitor the thermal oxidizer temperature, so it is maintained at the temperature achieved during the last compliant stack test.**
- (g) **A calibrated backup SO<sub>2</sub>, NO<sub>x</sub> and/or CO CEMS shall be brought online no later than seventy-two (72) hours of shutdown of the primary CEMS, and shall be operated until such time as the primary CEMS is back in operation.**
- (h) **Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 2-2.**

#### Comment 25

~~C.16 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)]  
[326 IAC 2-7-6(1)]~~

- ~~(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( $\pm 2\%$ ) of full scale reading.~~

#### **[OMIT – NO REGULATORY AUTHORITY]**

- ~~(b) Whenever a condition in this permit requires the measurement of a pressure drop or flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( $\pm 2\%$ ) of full scale reading.~~

#### **[LETTER (b) COVERS PRESSURE DROP.]**

- ~~(c) The Preventive Maintenance Plan for the pH meter shall include calibration using known standards. The frequency of calibration shall be adjusted such that the typical error found at calibration is less than one pH point.~~

#### **[ADDS SUBSTANTIVE NEW REQUIREMENTS WITHOUT ANY CORRESPONDING AUTHORITY.]**

- ~~(d) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.~~

#### **[NO pH METERS REQUIRED BY THIS PERMIT.]**

#### Response to Comment 25

Condition C.15 is renumbered C.13.

IDEM realizes that these specifications can only be practically applied to analog units, and has therefore clarified the condition to state that the condition only applies to analog units. Upon further review, IDEM has also determined that the accuracy of the instruments is not nearly as important as whether the instrument has a range that is appropriate for the normal expected reading of the parameter. Therefore, the accuracy requirements have been removed from the condition.

~~C.15 13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]~~

- ~~(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed~~ **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 normal maximum reading for the normal range shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (2%) of full scale reading.**

- ~~(b) Whenever a condition in this permit requires the measurement of voltage or current across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two five percent (2%) of full scale reading.~~
- ~~(c) Whenever a condition in this permit requires the measurement of a temperature or flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (2%) of full scale reading.~~
- ~~(d) The Preventive Maintenance Plan for the pH meter shall include calibration using known standards. The frequency of calibration shall be adjusted such that the typical error found at calibration is less than one pH point.~~
- ~~(e) (b) The Permittee may request that the IDEM, OAQ approve the use of a pressure gauge or other an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other the parameters.~~

## Comment 26

### C.16 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

- ~~(a) The Permittee shall prepare has prepared written emergency reduction plans (ERPs) consistent with safe operating procedures.~~

- ~~(b) These ERPs shall be The plan was submitted for approval to:~~

~~Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015~~

~~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. August 16, 1999.~~

- (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]

### Response to Comment 26

Condition C.16 is renumbered C.14.

Since an ERP was submitted, the permit condition is revised as follows:

#### ~~C.16~~ **14** 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 **prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on August 21, 1998.**

- ~~(b) These ERPs shall be submitted for approval to:~~

~~Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015~~

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

### Comment 27

C.18 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

[OMIT – NO REGULATORY AUTHORITY]

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- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. If a Permittee is required to have an

Operation, Maintenance and Monitoring (OMM) Plan (or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan) under 40 CFR 60/63, such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance ~~the effectiveness date~~ of this permit condition by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

- (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected time frame for taking reasonable response steps.
- ~~(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan (or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan) and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan (or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan) to include such response steps taken.~~

The OMM Plan (or Parametric Monitoring and SSM Plan) shall be submitted within the time frames specified by the applicable 40 CFR 60/63 requirement.

- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
  - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan (or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan) ; or
  - (2) If none of the reasonable response steps listed in the Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan (or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan) is applicable or responsive to the excursion, the Permittee shall devise and implement ~~additional~~ appropriate response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit ~~so long as the Permittee documents such response steps in accordance with this condition.~~
  - ~~(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be ten (10) days or more until the unit or device will be shut down, then the Permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down. The notification shall also include the status of the applicable compliance monitoring parameter with respect to normal, and the results of the response actions taken up to the time of notification.~~
  - (4) Failure to take reasonable response steps shall be considered a deviation from the permit.

- (c) The Permittee is not required to take any further response steps for any of the following reasons:
  - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
  - (3) An automatic measurement was taken when the process was not operating.
  - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B.14 -Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when, ~~in accordance with Section D,~~ the response steps required by Section D are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

### Response to Comment 27

Condition C.18 is renumbered C.16.

IDEM has reconsidered the requirement to develop and follow a Compliance Response Plan. The Permittee will still be required to take reasonable response steps when a compliance monitoring parameter is determined to be out of range or abnormal. Replacing the requirement to develop and follow a Compliance Response Plan with a requirement to take reasonable response steps will ensure that the control equipment is returned to proper operation as soon as practicable, while still allowing the Permittee the flexibility to respond to situations that were not anticipated. The Section D conditions that refer to this condition have been revised to reflect the new condition title, and the following changes have been made to the Section C condition:

**C.1816 Compliance Response Plan – Preparation, Implementation, Records, and Reports**  
**Response to Excursions or Exceedances** [326 IAC 2-7-5] [326 IAC 2-7-6]

- 
- (a) ~~The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:~~

- ~~(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.~~
  - ~~(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.~~
- ~~(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:~~
- ~~(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or~~
  - ~~(2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.~~
  - ~~(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be ten (10) days or more until the unit or device will be shut down, then the Permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down. The notification shall also include the status of the applicable compliance monitoring parameter with respect to normal, and the results of the response actions taken up to the time of notification.~~
  - ~~(4) Failure to take reasonable response steps shall be considered a deviation from the permit.~~
- ~~(c) The Permittee is not required to take any further response steps for any of the following reasons:~~
- ~~(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.~~
  - ~~(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.~~
  - ~~(3) An automatic measurement was taken when the process was not operating.~~
  - ~~(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.~~
- ~~(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred,~~

~~the Permittee shall report such deviations pursuant to Section B Deviations from Permit Requirements and Conditions.~~

- ~~(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.~~
- (a) Upon detecting an excursion or exceedance, the Permittee shall 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 emissions.**
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are 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 within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.**
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:**
- (1) monitoring results;**
  - (2) review of operation and maintenance procedures and records;**
  - (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 maintain the following records:**
- (1) monitoring data;**
  - (2) monitor performance data, if applicable; and**
  - (3) corrective actions taken.**

## Comment 28

### C.17 ~~19~~ Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

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- (a) When the results of a stack test performed in conformance with Section C.10 - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, ~~within~~ **no later than** thirty (30) days ~~of~~ **after** receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the corrective actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed ~~within~~ **no later than** one hundred twenty (120) days ~~of receipt~~ **after submission to IDEM, OAQ** of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and 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 documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## Response to Comment 28

IDEM agrees to change "within" to "no later than." In order to clarify which documents need to be certified by the responsible official response action has been added to the last sentence of the condition. The permit is revised as follows:

### C.17 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.9 - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, ~~within~~ **no later than** thirty (30) days ~~of~~ **after** receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the corrective actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed ~~within~~ **no later than** one hundred twenty (120) days ~~of receipt~~ **after submission to IDEM, OAQ** of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and 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 not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

### Comment 29

#### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6] [326 IAC 2-7-5(3)] [326 IAC 2-1.1-11]

### Response to Comment 29

The record keeping and reporting heading was not included in the draft permit. Therefore, it has been added before the emissions statement general condition as follows:

#### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] ][326 IAC 2-7-6] [326 IAC 2-7-5(3)] [326 IAC 2-1.1-11] ][326 IAC 2-2]

### Comment 30

#### C.24 20Emission 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] [CHANGE TO REFLECT NEW RULE]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by no later than July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall ~~meet the following requirements:~~
- ~~———— (1) ———— Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);   .~~
  - ~~———— (2) ———— Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) (“Regulated pollutant which is used only for purposes of Section 19 of this rule”) from the source, for purposes of Part 70 fee assessment. [LISTED AS MINOR HAP SOURCE IN SECTION A OF THIS PERMIT.]~~
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:
- Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015  
The emission statement does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).
- (c) The annual emission statement 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.

### Response to Comment 30

Condition C.21 is renumbered C.18.

The emission statement condition has been revised to incorporate the revisions of the Emission

Statement Rule 326 IAC 2-6 that became effective March 27, 2004 and was federally approved October 29, 2004.

Iron Dynamics is minor for HAPS. HAPS are not required to be reported under the Emission statement Rule 326 IAC 2-6-4(a). In 326 IAC 2-7-5(7) the Part 70 fees are based on the tons of regulated air pollutants emitted as stated in 326 IAC 2-7-19(c). The regulated air pollutants that are to be included for fee assessment are listed in 326 IAC 2-7-1(32). Condition C.18 is revised as follows:

C.2418 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]

- (a) ~~The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6 that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:~~

**Pursuant to 326 IAC 2-6-3(a) (1), the Permittee shall submit no later than July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:**

- (1) ~~Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);~~

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

- (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant which is used only for purposes of Section 19 of this rule") from the source, for purposes of Part 70 fee assessment.

- ~~(b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:~~

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6045  
Indianapolis, Indiana 46206-6045 **46204-2251**

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- ~~(e)~~ (b) The annual emission statement 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.

**Comment 31**

C.23 22 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required monitoring data 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, all record keeping requirements not already legally required shall be implemented ~~within~~ no later than ninety (90) days after the effectiveness date of this permit issuance condition.

### Response to Comment 31

Condition C.23 is renumbered C.19.

IDEM agrees to change "within" to "no later than."

Pursuant to IC 13-15-5-3, this Part 70 permit becomes effective upon issuance; therefore the effective date of the permit and issuance date of the permit are the same. It is not necessary to replace the word "issuance" with the word "effectiveness".

The permit is revised as follows:

#### C.23 19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2]

- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented ~~within~~ **no later than** ninety (90) days **after** permit issuance.

### Comment 32

#### C.23 22 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent for any deviations for which a report is specifically required under Section D. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted ~~within~~ no later than thirty (30) days ~~of~~ after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:
- Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- (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) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted ~~within~~ no later than thirty (30) days of the end of the reporting period. All reports ~~do that~~ require ~~the~~ certification shall be signed by the “responsible official” as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the ~~date of issuance~~ effectiveness of this permit condition and ending on the last day of the reporting period. Reporting periods are based on calendar months, quarters or years.

### Response to Comment 32

Condition C.23(a) is renumbered C.20(a).

The deviations covered in condition C.20 include all deviations from conditions in the entire permit not just conditions in the D sections. IDEM agrees to change “within” to “no later than.” Therefore, Condition C.20(a) is revised as follows:

#### C.23 20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2]

- (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. This report shall be submitted ~~within~~ **no later than** thirty (30) days ~~of~~ **after** the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

The language in Condition C.23(d) is renumbered C.20(d) and is revised to clarify that not all reports need to be signed by the responsible official and changing “within” to no later than does not change the meaning of the condition. Therefore, Condition C.20(d) is changed as follows:

- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted ~~within~~ **no later than** thirty (30) days ~~of~~ **after** the end of the reporting period. All reports ~~do that~~ require ~~the~~ certification **shall be signed** by the “responsible official” as defined by 326 IAC 2-7-1(34).

Condition D.20(e)

Pursuant to IC 13-15-5-3, this Part 70 permit becomes effective upon issuance; therefore the effective date of the permit and issuance date of the permit are the same. It is not necessary to replace the word “issuance” with the word “effectiveness”. General reporting requirements include the entire permit not just this condition. The time periods were added as requested to clarify the different reporting periods. Therefore Condition C.20(e) is revised as follows:

- (e) 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 **months, quarters or** 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.

### Comment 33

#### C.24 23 Compliance with 40 CFR 82 and 326 IAC 22-1

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

- ~~(a) — Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.~~
- ~~(b) — Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.~~
- ~~(c) — Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.~~

### Response to Comment 33

Condition C.24 is renumbered Condition C.21.

Stratospheric Ozone Protection 40 CFR 82, regulates the handling of ozone depleting substances such as Freon in a variety of processes and products including domestic and commercial refrigeration and air-conditioning units and portable fire extinguishers. Most sources include one or more of these subject units. Maintenance or repair of such units has the potential to release substances controlled under 40 CFR 82. Pursuant to 326 IAC 22-1 the Air Pollution Control Board incorporated the provisions of 40 CFR 82 for the purposes of implementing the Stratospheric Ozone Protection program that meets the requirements of Title VI of the Clean Air Act with respect to sources operating pursuant to a Part 70 permit. Therefore, the permit is not revised as a result of this comment.

#### C.24 21 Compliance with 40 CFR 82 and 326 IAC 22-1

### Comment 34

#### Alternative ~~operating~~ Operating Scenario

#### C.25 24 Alternative Operating Scenario

The Permittee may use propane gas as an alternative fuel in place of natural gas during emergency situations.

### Response to Comment 34

The "O" in operating has been capitalized as follows:

Alternative **O**perating Scenario

#### C.25 23 Alternative Operating Scenario

### Comment 35

**Ambient Air Monitoring [NO AIR QUALITY BASIS FOR REQUIRING AMBIENT MONITORING]**

~~C.23 Ambient Monitoring Post Construction [326 IAC 2-2-4]~~

~~Pursuant to CP033-9187-00043, issued March 24, 1998 and 326 IAC 2-2-4, the Permittee shall collect ambient concentrations for PM<sub>10</sub>, NO<sub>2</sub> and meteorological data as described in (a) through (h). These sites shall begin collecting valid data prior to commencement of operation of the Submerged Arc Furnace (SAF).~~

~~(a) The monitoring must be performed using U.S. EPA approved methods, procedures, and quality assurance programs and be in accordance with a plan and protocol approved by OAQ.~~

~~(b) The Quality Assurance Plan and Protocol shall be updated and submitted to OAQ Ambient Monitoring Section, ninety (90) calendar days in advance of the start of monitoring.~~

~~(c) The Quality Assurance Plan and Protocol must be approved by OAQ prior to commencement of monitoring.~~

~~(d) The monitoring sites shall meet the operating and maintenance criteria outlined in IDEM, OAQ Quality Assurance Manual.~~

~~(e) IDEM, OAQ reserves the authority to require the Permittee to monitor for compliance with the National Ambient Air Quality Standards (NAAQS) for PM<sub>2.5</sub> in the event that such information is necessary to demonstrate compliance with the standard.~~

~~(f) The monitoring sites shall measure the following meteorological parameters:~~

~~(1) wind direction,~~

~~(2) wind speed, and~~

~~(3) temperature.~~

~~(g) A quarterly summary of the monitoring data shall be submitted to:~~

~~Indiana Department of Environmental Management  
Ambient Monitoring Section, Office of Air Quality  
2525 North Shadeland Avenue  
Indianapolis, IN 46219~~

~~(h) The Permittee may petition for the removal of the monitoring requirements, if it is established to the satisfaction of the Commissioner, that ambient NO<sub>2</sub> levels will continue to comply with the NAAQS with an adequate margin of safety. The monitoring requirements may be continued if there exists a threat to the NAAQS or if determined to be warranted by IDEM, OAQ. Pursuant to approval letter by the IDEM dated September 7, 2001, the Permittee is not required to operate PM<sub>10</sub> monitoring site at this time. IDEM, OAQ reserves the authority to require additional ambient air monitoring for this source.~~

**Response to Comment 35**

The Permittee requested in a letter IDEM received on August 27, 2001 to discontinue ambient air monitoring at Iron Dynamics, Inc. that was required pursuant to CP033-9187-00043, issued March 24,

1998. IDEM approved the request to discontinue the ambient monitoring in a letter dated September 7, 2001. The ambient air monitoring demonstrated that the emissions met the National Ambient Air Quality Standards. Therefore, the permit is revised as follows:

### **Ambient Air Monitoring**

#### **~~C.2324 Ambient Monitoring – Post Construction [326 IAC 2-2-4]~~**

~~Pursuant to CP033-9187-00043, issued March 24, 1998 and 326 IAC 2-2-4, the Permittee shall collect ambient concentrations for PM<sub>10</sub>, NO<sub>2</sub> and meteorological data as described in (a) through (h). These sites shall begin collecting valid data prior to commencement of operation of the Submerged Arc Furnace (SAF).~~

- ~~(a) The monitoring must be performed using U.S. EPA approved methods, procedures, and quality assurance programs and be in accordance with a plan and protocol approved by OAQ.~~
- ~~(b) The Quality Assurance Plan and Protocol shall be updated and submitted to OAQ Ambient Monitoring Section, ninety (90) calendar days in advance of the start of monitoring.~~
- ~~(c) The Quality Assurance Plan and Protocol must be approved by OAQ prior to commencement of monitoring.~~
- ~~(d) The monitoring sites shall meet the operating and maintenance criteria outlined in IDEM, OAQ Quality Assurance Manual.~~
- ~~(e) IDEM, OAQ reserves the authority to require the Permittee to monitor for compliance with the National Ambient Air Quality Standards (NAAQS) for PM<sub>2.5</sub> in the event that such information is necessary to demonstrate compliance with the standard.~~
- ~~(f) The monitoring sites shall measure the following meteorological parameters:
  - ~~(1) wind direction,~~
  - ~~(2) wind speed, and~~
  - ~~(3) temperature.~~~~
- ~~(g) A quarterly summary of the monitoring data shall be submitted to:~~

~~Indiana Department of Environmental Management  
Ambient Monitoring Section, Office of Air Quality  
2525 North Shadeland Avenue  
Indianapolis, IN 46219~~

- ~~(h) The Permittee may petition for the removal of the monitoring requirements, if it is established to the satisfaction of the Commissioner that ambient NO<sub>2</sub> levels will continue to comply with the NAAQS with an adequate margin of safety. The monitoring requirements may be continued if there exists a threat to the NAAQS or if determined to be warranted by IDEM, OAQ. Pursuant to approval letter by the IDEM dated September 7, 2001, the Permittee is not required to operate PM<sub>10</sub> monitoring site at this time. IDEM, OAQ reserves the authority to require additional ambient air monitoring for this source.~~

### Comment 36

#### **Rotary Hearth Furnace Additional Emission Points**

(a) ~~—~~ RHF Fugitives

~~One (1) 40,000 dscfm air flow baghouse to control fugitive emissions from the Rotary Hearth Furnace (RHF), exhausting through Stack 77.~~

(b) ~~—~~ RHF Briquetters

~~Two (2) enclosed RHF green briquetter, constructed in 2003, replacing the existing pelletizing equipment, with a nominal throughput of 160 tons per hour, exhausting through the one (1) 40,000 dscfm air flow baghouse, added in 2003, exhausting through Stack 77.~~

~~(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)~~ [SEPARATE SECTION D]

#### **Response to Comment 36**

This equipment and all conditions containing limits, testing, monitoring, record keeping and reporting requirements have been moved to a separate section D.2, as requested. See Response to Comment 57.

The D sections have been renumbered sequentially to accommodate the change.

### Comment 37

D.1.1 Particulate Matter Limitations (PM/PM<sub>10</sub>) Best Available Control Technology (BACT)[326 IAC 2-2-3]

---

(a) Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), the PM/PM<sub>10</sub> (where PM<sub>10</sub> includes both filterable and condensable components) emissions from the rotary hearth furnace process baghouse shall not exceed ~~an air flow rate design of 310,000 dscfm (353,000 acfm)~~ and 0.0052 grains per dscf through Stack 40. The total emissions shall not exceed 13.4 pounds per hour.

~~(b) Pursuant to A 033-17732-00076, issued September 17, 2003 and 326 IAC 2-2-3 (BACT), the PM/PM<sub>10</sub> (where PM<sub>10</sub> includes both filterable and condensable components) emissions from the rotary hearth furnace fugitives' baghouse and briquetter baghouse shall not exceed a total air flow rate design of 100,000 dscfm and 0.0052 grains per dscf through Stack 77. The total emissions shall not exceed 4.46 pounds per hour.~~

#### **Response to Comment 37**

The requirement in Condition D.1.1(b) is now in Condition D.2.1. See Response to Comment 58.

Therefore the permit is revised as follows:

D.1.1 Particulate Matter Limitations (PM/PM<sub>10</sub>)- Best Available Control Technology (BACT)[326 IAC 2-2-3]

---

(a) Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), the PM/PM<sub>10</sub> (where PM<sub>10</sub> includes both filterable and condensable

components) emissions from the rotary hearth furnace process baghouse shall not exceed an air flow rate design of 310,000 dscfm (353,000 acfm) and 0.0052 grains per dscf through Stack 40. The total emissions shall not exceed 13.4 pounds per hour.

- (b) ~~Pursuant to A-033-17732-00076, issued September 17, 2003 and 326 IAC 2-2-3 (BACT), the PM/PM10 (where PM10 includes both filterable and condensable components) emissions from the rotary hearth furnace fugitives' baghouse and briquetter baghouse shall not exceed a total air flow rate design of 100,000 dscfm and 0.0052 grains per dscf through Stack 77. The total emissions shall not exceed 4.46 pounds per hour.~~

### Comment 38

#### D.1.2 Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]

---

- (a) Pursuant to SSM 033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), the visible emissions discharged into the atmosphere from the rotary hearth furnace process baghouse Stack 40 shall ~~be limited to~~ **not exceed** three percent (3%) opacity in accordance with condition D.1.16 ~~17~~, as determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A). ~~{D.1.16 IS COM}~~
- (b) Pursuant to CP-033-8091-00043, issued June 25, 1997 and 326 IAC 2-2-3, the visible emissions from vents, stacks and building roof monitors, unless otherwise specified, shall not exceed three (3%) percent opacity. Visible emissions shall be determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A). ~~pursuant to 326 IAC 5-1-4.~~
- (c) ~~Pursuant to SSM 033-17732-00076, issued September 17, 2003 and 326 IAC 2-2-3 (BACT), the visible emissions discharged into the atmosphere from rotary hearth furnace fugitives baghouse and briquetter baghouse Stack 77 shall be limited to three percent (3%) opacity in accordance with condition D.1.16, as determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A).~~

### Response to Comment 38

The requested changes are made to the permit. As noted by the Permittee, the reference should be D.1.17, not D.1.16, which is the requirement for a Continuous Opacity Monitor (COM), and the opacity limit shall "not exceed" rather than shall "be limited to".

The requirement in Condition D.1.2(c) is now in Condition D.2.2 as requested. See Response to Comment 59.

326 IAC 5-1-4(a)(1) states determination of opacity by means of visible emissions reading shall be made in accordance with 40 CFR 60, Appendix A, Method 9. Reference to the 326 IAC 5-1-4 is not removed from the permit. Therefore the permit is revised as follows:

#### D.1.2 Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]

---

- (a) Pursuant to SSM 033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), the visible emissions discharged into the atmosphere from the rotary hearth furnace process baghouse Stack 40 shall ~~be limited to~~ **not exceed** three percent (3%) opacity in accordance with condition D.1.16 ~~17~~, as determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A), pursuant to 326 IAC 5-1-4.

- (b) Pursuant to CP-033-8091-00043, issued June 25, 1997 and 326 IAC 2-2-3, the visible emissions from vents, stacks and building roof monitors, unless otherwise specified, shall not exceed three (3%) percent opacity. Visible emissions shall be determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A) pursuant to 326 IAC 5-1-4.
- ~~(c) Pursuant to SSM-033-17732-00076, issued September 17, 2003 and 326 IAC 2-2-3 (BACT), the visible emissions discharged into the atmosphere from rotary hearth furnace fugitives baghouse and briquetter baghouse Stack 77 shall be limited to three percent (3%) opacity in accordance with condition D.1.16, as determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A).~~

### Comment 39

#### D.1.3 Sulfur Dioxide (SO<sub>2</sub>) - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), the sulfur dioxide emissions from the rotary hearth furnace process baghouse Stack 40 shall be controlled by lime injection, wet scrubber and/or use of EAF dust as supplemental feedstock. The SO<sub>2</sub> emissions shall be limited as follows:

- (b) When using at least 2 tons per hour of EAF dust as supplemental feedstock ~~as control~~, SO<sub>2</sub> emissions shall not exceed 0.4 pounds per ton of material charged into the furnace. The SO<sub>2</sub> emissions shall not exceed 39.0 pounds per hour. If the stack test shows that this limitation is not achievable in practice, the Permittee can request the Department to re-evaluate the SO<sub>2</sub> emissions and adjust the EAF dust as supplemental feedstock limitation to reflect the control efficiency observed in the test. The Department may, at its discretion, use the authority under IC 13-15-7-2 to re-open and revise the limit to more closely reflect the actual stack test results. The Department will provide an opportunity for public notice and comment prior to finalizing any permit modification. IC 13-15-7-3 (Revocation or Modification of a Permit: Appeal to Board) shall apply to this permit modification.

[BOILERPLATE REQUIRING "CONTROLS" AT ALL TIMES CONFLICTS WITH THIS PROVISION]

### Response to Comment 39

The request to delete the language "as control" has not been made because this language is taken directly from SSM-033-15955-00076, issued December 18, 2002 and was part of the SO<sub>2</sub> limitation established under 326 IAC 2-2-3 (BACT). Condition D.1.3 is revised as follows, since the initial stack tests required in SSM-033-15955-00076 are already completed:

#### D.1.3 Sulfur Dioxide (SO<sub>2</sub>) - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), the sulfur dioxide emissions from the rotary hearth furnace process baghouse Stack 40 shall be controlled by lime injection, wet scrubber and/or use of EAF dust as supplemental feedstock. The SO<sub>2</sub> emissions shall be limited as follows:

- (b) When using at least 2 tons per hour of EAF dust as supplemental feedstock as control, SO<sub>2</sub> emissions shall not exceed 0.4 pounds per ton of material charged into the furnace. The SO<sub>2</sub> emissions shall not exceed 39.0 pounds per hour. ~~If the stack test shows that this limitation is not achievable in practice, the Permittee can request the Department to~~

~~re-evaluate the SO<sub>2</sub> emissions and adjust the EAF dust as supplemental feedstock limitation to reflect the control efficiency observed in the test. The Department may, at its discretion, use the authority under IC 13-15-7-2 to re-open and revise the limit to more closely reflect the actual stack test results. The Department will provide an opportunity for public notice and comment prior to finalizing any permit modification. IC 13-15-7-3 (Revocation or Modification of a Permit: Appeal to Board) shall apply to this permit modification.~~

#### Comment 40

##### D.1.4 Volatile Organic Compounds (VOC) - Best Available Control Technology [326 IAC 2-2-3]

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Pursuant to SSM-033-15955-00076, issued December 18, 2002, and a change request of January 11, 2000 and 326 IAC 2-2-3 (BACT), except during periods of start up or shut down, the volatile organic compound emissions from the rotary hearth furnace process baghouse Stack 40 shall be controlled by an afterburner and operated at a temperature exceeding ~~two thousand six hundred (2,600)~~ 1,500 °F and emissions shall not exceed 0.06 pounds per ton of material charged into the furnace. The total emissions shall not exceed 6.23 pounds per hour.

#### Response to Comment 40

A request to remove the thermal oxidizer destruct temperature for VOC of 2600 °F in Condition D.1.4 was received as additional information to the Part 70 permit application on January 26, 2000. In SSM 033-15955-00043, issued December 18, 2002, Condition D.1.5, superseded Condition 26 in CP033-8091-00043, the VOC destruction temperature remained at 2600 °F. The request in Comment 40 suggests the VOC destruct temperature be revised to 1,500 °F. The RHF VOC destruction temperature of 2600 °F is higher than necessary to control VOC emissions and it is impossible to operate the thermal oxidizer at 2600 °F without damage to the control device and other equipment. During the stack test performed on February 19, 2004 the average afterburner temperature was 1863°F and the RHF was in compliance during the stack test. Condition D.1.4 is revised as follows:

##### D.1.4 Volatile Organic Compounds (VOC) - Best Available Control Technology [326 IAC 2-2-3]

---

Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), except during periods of start up or shut down, the volatile organic compound emissions from the rotary hearth furnace process baghouse Stack 40 shall be controlled by an afterburner and operated at **a an average** temperature exceeding ~~two thousand six hundred (2,600)~~ **of one thousand eight hundred sixty three (1863)** °F and emissions shall not exceed 0.06 pounds per ton of material charged into the furnace. The total emissions shall not exceed 6.23 pounds per hour.

#### Comment 41

##### D.1.6 Carbon Monoxide (CO) - Best Available Control Technology [326 IAC 2-2-3]

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Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), except during periods of start up or shut down, the carbon monoxide emissions from the rotary hearth furnace process bag house Stack 40 shall be controlled by afterburner and operated at a temperature exceeding ~~two thousand six hundred (2,600)~~ °F and emissions shall not exceed 100 ppm, and 114,519 ug/m<sup>3</sup>. The total emissions shall not exceed 146.8 pounds per hour.  
[NO NEED FOR TWO CONCENTRATION LIMITS.]

### Response to Comment 41

An Administrative Amendment application to delete the thermal oxidizer destruct temperature for CO in Condition D.1.6 was received on July 20, 2004. The thermal oxidizer temperature was stated much higher than necessary to control CO emissions and it is impossible to operate the thermal oxidizer at 2600 °F without damage to the control device and the RHF equipment. Also, a CEMS is required in Condition D.1.16 to continuously monitor CO emissions. During the stack test performed on February 19, 2004 the average afterburner temperature was 1863°F and the RHF was in compliance during the stack test.

The language in Condition D.1.6 is taken verbatim from the SSM-033-15955-00076. This modification permit was reviewed under PSD, 326 IAC 2-2 and BACT. The Part 70 program incorporates all the modifications into one document. In order to revise the BACT CO limit, the Permittee can request a change through the source modification review process under 326 IAC 2-7-10.5 and 326 IAC 2-2. Therefore, the permit is not revised as a result of this comment.

Condition D.1.6 is revised as follows:

#### D.1.6 Carbon Monoxide (CO) - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), except during periods of start up or shut down, the carbon monoxide emissions from the rotary hearth furnace process bag house Stack 40 shall be controlled by afterburner and operated at **an average temperature of ~~exceeding two thousand six hundred (2,600)~~ one thousand eight hundred sixty three (1863)° F** and emissions shall not exceed 100 ppm, and 114,519 ug/m3. The total emissions shall not exceed 146.8 pounds per hour.

### Comment 42

#### D.1.7 Nitrogen Oxides (NO<sub>x</sub>) - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), the nitrogen oxide(s) emissions from the rotary hearth furnace process baghouse Stack 40 shall be controlled by the use of ~~low-NO<sub>x</sub>~~ natural gas-fired burners and a selective non-catalytic reduction unit (SNCR). Except during periods of start up or shut down, the total emissions shall not exceed 1.25 pounds per ton of material charged into the furnace and 120 pounds per hour.

The SNCR system shall be operated in a manner recommended by the manufacturer and good work practices to minimize the NO<sub>x</sub> emissions and ammonia slip.

### Response to Comment 42

The requirement for low NO<sub>x</sub> burners and the SNCR as controls for NO<sub>x</sub> is BACT for the RHF. This language is taken verbatim from the SSM-033-15955-00076, issued December 18, 2002. Therefore, the permit is not revised as a result of this comment.

### Comment 43

#### D.1.8 Lead Emissions - Best Available Control Technology [326 IAC 2-2-3]

~~(a)~~ Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), the lead emissions from the rotary hearth furnace process baghouse Stack 40 shall not exceed 0.00058 pounds per ton of material charged into the furnace and 0.0557 pounds per hour.

- ~~(b) Pursuant to A 033-17732-00076, issued September 17, 2003 and 326 IAC 2-2-3 (BACT), the lead emissions from the rotary hearth furnace rotary hearth furnace fugitive baghouse and briquetter baghouse Stack 77 shall not exceed 0.019 pounds per hour.~~

### Response to Comment 43

The requirements in D.1.8(b) are now in Condition D.2.3. See Response to Comment 60.

Therefore the permit is revised as follows:

#### D.1.8 Lead Emissions - Best Available Control Technology [326 IAC 2-2-3]

- (a) Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), the lead emissions from the rotary hearth furnace process baghouse Stack 40 shall not exceed 0.00058 pounds per ton of material charged into the furnace and 0.0557 pounds per hour.
- ~~(b) Pursuant to A 033-17732-00076, issued September 17, 2003 and 326 IAC 2-2-3 (BACT), the lead emissions from the rotary hearth furnace rotary hearth furnace fugitive baghouse and briquetter baghouse Stack 77 shall not exceed 0.019 pounds per hour.~~

### Comment 44

#### D.1.9 Startup and Shutdown Emissions - Best Available Control Technology [326 IAC 2-2-3]

- (a) Pursuant to SSM 033-15955-00076, issued on December 18, 2002 and 326 IAC 2-2-3, the startup is defined as the duration from the firing of the burners in the RHF to the time when the RHF exhaust gas temperature is within the optimum ranges of the operation control devices for NOx, CO and VOC emissions.
- (b) Shutdown is defined as the duration from first curtailment of fuel input to the RHF burners with the intent of full shutdown to the final complete stop of fuel input and complete cessation of ~~combustion~~ reduction chemistry in the RHF.
- ~~(c) The RHF shall be operated in a manner consistent with good air pollution control and work practices to minimize emissions during startup and shutdown by operating in accordance with written procedures developed and maintained by the Permittee, which shall include at a minimum the following measures:~~
- ~~(1) Review of operating parameters of the unit startup, or shutdown as necessary to make adjustments to reduce or eliminate excess emissions;~~
  - ~~(2) Operate emission control equipment as soon as the RHF exhaust gas temperature reaches the lower value of the optimum temperature range for the control equipment. This operation shall continue until the time the RHF shutdown sequence is initiated with the intention of shutdown of the unit; and~~
  - ~~(3) Implementation of the inspection and repair procedures for the RHF and the emissions control equipment prior to attempting startup to ensure proper operation.~~

#### Response to Comment 44

This condition is to ensure control of emissions from the RHF during startup and shutdown and are BACT pursuant to SSM 033-15955-00076, issued December 18, 2002. There is no change to the permit as a result of this comment.

#### Comment 45

##### D.1.10 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for ~~RHF, RHF briquetters~~ and the RHF's following control devices: the rotary hearth furnace process baghouse, RHF selective non-catalytic reduction system, ~~RHF fugitives baghouse, RHF briquetters baghouse~~ and thermal oxidizer.

#### Response to Comment 45

The Preventive Maintenance Plan requirement must be included in every applicable Title V permit pursuant to 326 IAC 2-7-5(13). This rule refers back to the Preventive Maintenance Plan requirement as described in 326 IAC 1-6-3. This Preventive Maintenance Plan rule sets out the requirements for:

- (1) Identification of the individuals responsible for inspecting, maintaining and repairing the emission control equipment (326 IAC 1-6-3(a)(1)),
- (2) The description of the items or conditions in the facility that will be inspected and the inspection schedule for said items or conditions (326 IAC 1-6-3(a)(2)), and
- (3) The identification and quantification of the replacement parts for the facility which the Permittee will maintain in inventory for quick replacement (326 IAC 1-6-3(a)(3)).

It is clear from the structure of the wording in 326 IAC 1-6-3 that the PMP requirement affects the entirety of the applicable facilities. Only 326 IAC 1-6-3(a)(1) is limited, in that it requires identification of the personnel in charge of only the emission control equipment, and not any other facility equipment. 326 IAC 1-6-3(b) provides that "...as deemed necessary by the commissioner, any person operating a facility shall comply with the requirements of subsection (a) of this section."

Many types of facilities require maintenance in order to prevent excess emissions. In addition to preventive maintenance performed on the control devices, preventive maintenance should be performed on the RHF because lack of proper maintenance on the RHF can result in increased emissions.

The briquetters and fugitive emission baghouse requirements are now in Condition D.2.4. See Response to Comment 61. Therefore, the permit is revised as follows:

##### D.1.10 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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A Preventive Maintenance Plan, in accordance with Section B.10 - Preventive Maintenance Plan, of this permit, is required for RHF, ~~RHF briquetters~~ and the following control devices: the rotary hearth furnace process baghouse, RHF selective non-catalytic reduction system, ~~RHF fugitives baghouse, RHF briquetters baghouse~~ and thermal oxidizer.

#### Comment 46

##### D.1.11 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

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~~(a) Pursuant to SSM033-15955-00076, within sixty (60) days of achieving maximum~~

~~production rate but no later than 18 months after issuance of this operation permit validation letter as per requirements of SSM033-15955-00076, for the rotary hearth furnace process stack 40, and in order to demonstrate compliance with conditions D.1.1(a), D.1.3, D.1.4, D.1.6 and D.1.7, the Permittee shall perform PM/PM10, SO<sub>2</sub>, VOC, CO and NO<sub>x</sub> testing on the RHF process baghouse Stack 40, using a testing methods approved by the Commissioner. PM10 includes both filterable and condensable components.~~

- ~~(b) The Permittee shall perform PM/PM10, NO<sub>x</sub>, CO, VOC and SO<sub>2</sub> testing on the RHF process baghouse Stack 40 every two and one half (2.5) years after completing the testing required in item (a) of this condition, utilizing testing methods approved by the Commissioner. PM10 includes both filterable and condensable components.~~
- ~~(c) Pursuant to SSM033-15955-00076, during the time frame mentioned in item (a) of this condition, the Permittee shall perform PM/PM10 testing for the RHF fugitives baghouse and RHF briquetter baghouse Stack 77, in order to demonstrate compliance with condition D.1.1(b), utilizing methods as approved by the commissioner. PM10 includes both filterable and condensable components.~~
- ~~(d) The Permittee shall perform PM/PM10 testing for the RHF fugitives baghouse and RHF briquetter baghouse Stack 77, every two and one half (2.5) years after completing the testing required in item (c) of this condition, utilizing testing methods approved by the Commissioner. PM10 includes both filterable and condensable components.~~
- ~~(e) Pursuant to SSM033-15955-00076, during the time frame mentioned in item (a) of this condition, the Permittee shall analyze the EAF baghouse dust for the hazardous components. The Permittee shall calculate the hourly HAP emissions assuming 100% vaporization of the hazardous components identified previously for the Rotary Hearth Furnace process baghouse Stack 40, using the highest throughput rate in tons per hour of EAF baghouse dust achieved during this period. This mass balance computation shall be converted to annual emissions assuming 8760 hours of operation in a year, and used to establish that the single HAP emissions are less than 10 tons per year and the combination of HAPs emissions are less than 25 tons per year pursuant to 326 IAC 2-4.1-1. In the event that the HAP emissions exceed the threshold stated earlier, the Permittee shall inform the IDEM, OAQ about the same, and curtail the operation of the RHF in a manner, not to exceed the thresholds specified in this condition.~~

~~All testing (except testing of the EAF baghouse dust, which shall be tested in accordance with SW-846 or other approved methods) shall be conducted in accordance with Section C-Performance Testing.~~

[INITIAL TESTING ALREADY COMPLETED]

- (b) The Permittee shall perform PM/PM10 and VOC testing on the RHF process baghouse Stack 40 every five (5) years after completing a valid compliance demonstration, utilizing testing methods approved by the Commissioner. PM10 includes both filterable and condensable components.

All testing shall be conducted in accordance with Section C.10 –Performance Testing.

#### **Response to Comment 46**

The initial testing required in D.1.11(a) and (e) is completed. The source has Continuous Emissions

Monitoring (CEMS) for SO<sub>2</sub>, CO and NO<sub>x</sub>, so the testing requirements for these pollutants in Condition D.1.11(b) are required when IDEM requests testing. The revised condition item D.1.11(a) includes testing for PM/PM<sub>10</sub>, and VOC emissions on RHF Baghouse Stack 40. IDEM, OAQ has determined that the stack testing frequency of the RHF can be changed from every two and one-half (2 ½) years to every five (5) years. The revised item D.1.11(e) is renumbered D.1.11(b) and contains the testing requirements for the RHF baghouse dust.

The testing requirements for the RHF fugitives baghouse Condition D.1.11(c) and (d) are revised and now in Condition D.2.5. See Response to Comment 62.

Therefore the permit is revised as follows:

D.1.11 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

- (a) Pursuant to SSM033-15955-00076, within sixty (60) days of achieving maximum production rate but no later than 18 months after issuance of this operation permit validation letter as per requirements of SSM033-15955-00076, for the rotary hearth furnace process stack 40, and in order to demonstrate compliance with conditions D.1.1(a), D.1.3, D.1.4, D.1.6 and D.1.7, the Permittee shall perform PM/PM<sub>10</sub>, SO<sub>2</sub>, VOC, CO and NO<sub>x</sub> testing on the RHF process baghouse Stack 40, using a testing methods approved by the Commissioner. PM<sub>10</sub> includes both filterable and condensable components.
- (b) The Permittee shall perform PM/PM<sub>10</sub>, NO<sub>x</sub>, CO, VOC and SO<sub>2</sub> testing on the RHF process baghouse Stack 40 every two and one half (2.5) years after completing the testing required in item (a) of this condition, utilizing testing methods approved by the Commissioner. PM<sub>10</sub> includes both filterable and condensable components.
- (c) Pursuant to SSM033-15955-00076, during the time frame mentioned in item (a) of this condition, the Permittee shall perform PM/PM<sub>10</sub> testing for the RHF fugitives baghouse and RHF briquetter baghouse Stack 77, in order to demonstrate compliance with condition D.1.1(b), utilizing methods as approved by the commissioner. PM<sub>10</sub> includes both filterable and condensable components.
- (d) The Permittee shall perform PM/PM<sub>10</sub> testing for the RHF fugitives baghouse and RHF briquetter baghouse Stack 77, every two and one half (2.5) years after completing the testing required in item (c) of this condition, utilizing testing methods approved by the Commissioner. PM<sub>10</sub> includes both filterable and condensable components.
- (e) Pursuant to SSM033-15955-00076, during the time frame mentioned in item (a) of this condition, the Permittee shall analyze the EAF baghouse dust for the hazardous components. The Permittee shall calculate the hourly HAP emissions assuming 100% vaporization of the hazardous components identified previously for the Rotary Hearth Furnace process baghouse Stack 40, using the highest throughput rate in tons per hour of EAF baghouse dust achieved during this period. This mass balance computation shall be converted to annual emissions assuming 8760 hours of operation in a year, and used to establish that the single HAP emissions are less than 10 tons per year and the combination of HAPs emissions are less than 25 tons per year pursuant to 326 IAC 2-4.1-1. In the event that the HAP emissions exceed the threshold stated earlier, the Permittee shall inform the IDEM, OAQ about the same, and curtail the operation of the RHF in a manner, not to exceed the thresholds specified in this condition.

All testing (except testing of the EAF baghouse dust, which shall be tested in accordance with SW 846 or other approved methods) shall be conducted in accordance with Section C-

~~Performance Testing-~~

- (a) **Within thirty (30) months from the date of the latest compliance demonstration stack test and in order to demonstrate compliance with Condition D.1.1 and D.1.4, the Permittee shall perform PM/PM10 and VOC testing on the RHF, utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years. PM10 includes filterable and condensable components.**
- (b) **Within thirty (30) months from the date of the latest compliance demonstration stack test and in order to demonstrate compliance with Condition D.1.8, the Permittee shall analyze the EAF baghouse dust for the hazardous components. The Permittee shall calculate the hourly HAP emissions assuming 100% vaporization of the hazardous components identified previously for the Rotary Hearth Furnace process baghouse Stack 40, using the highest throughput rate in tons per hour of EAF baghouse dust achieved during this period. This mass balance computation shall be converted to annual emissions assuming 8760 hours of operation in a year, and used to establish that the single HAP emissions are less than 10 tons per year and the combination of HAPs emissions are less than 25 tons per year pursuant to 326 IAC 2-4.1-1. In the event that the HAP emissions exceed the threshold stated earlier, the Permittee shall inform the IDEM, OAQ about the same, and curtail the operation of the RHF in a manner, not to exceed the thresholds specified in this condition.**

**All testing (except testing of the EAF baghouse dust, which shall be tested in accordance with SW-846 or other approved methods) shall be conducted in accordance with Section C.9 - Performance Testing-**

**Comment 47**

D.1.12 Particulate Matter (PM/PM10) Best Available Control Technology [326 IAC 2-2-3]

- ~~(a) Pursuant to SSM 033-15955-00076, issued on December 18, 2002 and A-033-17732-00076, issued September 17, 2003 and 326 IAC 2-2-3(Control Technology Review: Requirements) and in order to comply with conditions D.1.1 and D.1.8, the baghouse for PM/PM10 control shall be in operation and control emissions from the rotary hearth furnace process baghouse Stack 40 at all times the rotary hearth furnace is in operation.~~
- ~~(b) Pursuant to SSM15955-00076, issued on December 18, 2002 and A-033-17732-00073, issued September 17, 2003 and 326 IAC 2-2-3(Control Technology Review: Requirements) and in order to comply with conditions D.1.1 and D.1.2, the baghouses for PM/PM10 control shall be in operation and control emissions from the rotary hearth furnace fugitives and briquetters at all times the rotary hearth furnace and briquetters are in operation.~~

**Response to Comment 47**

The county designation 033 was inadvertently left out of the permit number in Condition D.1.12 and D.1.12(b).

The requirements for the RHF fugitives and briquetter baghouses in D.1.12(b) are revised and now in Condition D.2.6. See Response to Comment 63.

Therefore the permit is revised as follows:

D.1.12 Particulate Matter (PM/PM10) Best Available Control Technology [326 IAC 2-2-3]

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- (a) Pursuant to SSM ~~033-15955-00076~~, issued on December 18, 2002, ~~and A-033-17732-00073-6~~, issued September 17, 2003 and 326 IAC 2-2-3(Control Technology Review: Requirements) and in order to comply with conditions D.1.1 and D.1.8, the baghouse for PM/PM10 control shall be in operation and control emissions from the rotary hearth furnace process baghouse Stack 40 at all times the rotary hearth furnace is in operation.
- (b) Pursuant to ~~SSM15955-00076~~, issued on December 18, 2002 and ~~A-033-17732-00073~~, issued September 17, 2003 and 326 IAC 2-2-3(Control Technology Review: Requirements) and in order to comply with conditions D.1.1 and D.1.2, the baghouses for PM/PM10 control shall be in operation and control emissions from the rotary hearth furnace fugitives and briquetters at all times the rotary hearth furnace and briquetters are in operation.

**Comment 48**

D.1.13 Sulfur Dioxide (SO<sub>2</sub>) Best Available Control Technology [326 IAC 2-2-3]

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Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (Control Technology Review: Requirements) and in order to comply with condition D.1.3, the lime injection or wet scrubber unit for sulfur dioxide control shall be in operation and/or use of EAF dust as supplemental feedstock in the RHF to control emissions from the rotary hearth furnace process baghouse Stack 40 at all times the rotary hearth furnace is in operation except during periods of startup and shutdown.

**Response to Comment 48**

The requirements in Condition D.1.9, Startup and Shutdown Emissions-BACT cover the emissions during periods of startup and shut down of the RHF and associated control devices. Therefore, the permit is revised as follows:

D.1.13 Sulfur Dioxide (SO<sub>2</sub>) Best Available Control Technology [326 IAC 2-2-3]

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Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (Control Technology Review: Requirements) and in order to comply with condition D.1.3, the lime injection or wet scrubber unit for sulfur dioxide control shall be in operation and/or use of EAF dust as supplemental feedstock in the RHF to control emissions from the rotary hearth furnace process baghouse Stack 40 at all times the rotary hearth furnace is in operation **except as provided in D.1.9(c)(2).**

**Comment 49**

D.1.14 Carbon Monoxide (CO) and Volatile Organic Compounds (VOC) Best Available Control Technology [326 IAC 2-2-3]

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Pursuant to CP-033-8091-00043, issued on June 25, 1997 and 326 IAC 2-2-3 (Control Technology Review: Requirements) and in order to comply with conditions, D1.4, and D.1.5, the afterburner for control of carbon monoxide and volatile organic compounds shall be in operation and control emissions from the rotary hearth furnace at all times the rotary hearth furnace is in operation except during periods of startup and shutdown.

**Response to Comment 49**

The requirements in Condition D.1.9, Startup and Shutdown Emissions-BACT cover the emissions during periods of startup and shut down of the RHF and associated control devices. The permit is revised as

follows:

D.1.14 Carbon Monoxide (CO) and Volatile Organic Compounds (VOC) Best Available Control Technology [326 IAC 2-2-3]

---

Pursuant to SSM033-15955-00076, issued on December 18, 2002 and 326 IAC 2-2-3 (Control Technology Review: Requirements and in order to comply with conditions, D1.4, and D.1.5, the afterburner for control of carbon monoxide and volatile organic compounds shall be in operation and control emissions from the rotary hearth furnace at all times the rotary hearth furnace is in operation **except as provided in D.1.9(c)(2).**

**Comment 50**

D.1.16 Continuous Emission Rate Monitoring [326 IAC 3-5]

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- (a) Pursuant to 326 IAC 3-5-1(d), the Permittee shall install, calibrate, certify, operate, and maintain a continuous monitoring system for measuring SO<sub>2</sub>, CO, and NO<sub>x</sub> emissions rates in pounds per ~~three hour blocks~~ from the rotary hearth furnace process baghouse ~~stack (identified as stack Stack 40)~~ in accordance with 326 IAC 3-5-2 through 326 IAC 3-5-7.
- ~~(b) The Permittee shall submit to IDEM, OAQ, prior to start of operation, a complete written continuous monitoring standard operating procedure (SOP), in accordance with the requirements of 326 IAC 3-5-4. {ALREADY DONE}~~
- (c) The Permittee shall record the output of the system and shall perform the required record keeping, pursuant to 326 IAC 3-5-6, and reporting, pursuant to 326 IAC 3-5-7.

**Response to Comment 50**

The continuous emissions "rate" monitoring is intended to mean measuring emissions at a rate of pounds per hour. The language "rate in pounds per three hour block" is not stated in the original construction permit or subsequent modifications. Pursuant to 326 IAC 3-5-2(2)(B) continuous monitoring systems that measure CO, NO<sub>x</sub> and SO<sub>2</sub> emissions shall complete a minimum of one (1) cycle of operation (sampling, analyzing and data recording) for each successive fifteen (15) minutes measuring period. Therefore, the permit is not revised as a result of this comment.

Provisions are added to Condition D.1.16 in the event the SO<sub>2</sub>, NO<sub>x</sub> and CO CEMS are malfunctioning or down for repairs. See Response to Comment 24.

The monitoring devices are already installed and the SOP was submitted on February 19, 2004. Therefore, the permit is revised as follows:

D.1.16 Continuous Emission Rate Monitoring [326 IAC 3-5]

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- (a) Pursuant to 326 IAC 3-5-1(d), the Permittee shall ~~install~~, calibrate, certify, operate, and maintain a continuous monitoring system for measuring SO<sub>2</sub>, CO, and NO<sub>x</sub> emissions rates in pounds per hour from the rotary hearth furnace process baghouse ~~stack (identified as stack Stack 40)~~ in accordance with 326 IAC 3-5-2 through 326 IAC 3-5-7.
- ~~(b) The Permittee shall submit to IDEM, OAQ, prior to start of operation, a complete written continuous monitoring standard operating procedure (SOP), in accordance with the requirements of 326 IAC 3-5-4.~~

- (e) (b) The Permittee shall record the output of the system and shall perform the required record keeping, pursuant to 326 IAC 3-5-6, and reporting, pursuant to 326 IAC 3-5-7.

### Comment 51

#### D.1.17 Opacity Monitoring on the Rotary Hearth Furnace

{CITE AUTHORITY or OMIT}

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The Permittee shall demonstrate compliance with Condition D.1.2 by using any of the following methods:

- (a) Opacity Readings by certified opacity observer:
- (1) Opacity from the rotary hearth furnace process baghouse ~~stack~~ Stack 40 ~~and the RHF fugitives and briquetter baghouse stack 77~~ shall be performed at least once per shift during normal daylight operations. A certified opacity observer shall observe the opacity when the rotary hearth furnace is in operation.
  - (2) These observations shall be taken in accordance with 40 CFR 60 Appendix A, Method 9 for at least two six (6) minute averages.
  - ~~(3) 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.~~
  - {Not applicable}
  - (4) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an excess emission is observed. Failure to take response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit.
  - ~~(5) Conditions (1) through (3) above are not applicable should a continuous opacity monitor be installed which meets 40 CFR 60, Appendix B, Performance Specification or a bag leak detector is installed as provided in this condition.~~
- (b) ~~Install, calibrate,~~ Calibrate, certify, operate and maintain a continuous opacity monitoring system in accordance with 40 CFR 60 Appendix B, Performance Specification for measuring opacity from the rotary hearth furnace process baghouse Stack 40 ~~and the RHF fugitives and briquetters baghouse stack 77~~, in accordance with 326 IAC 3-5-2 through 326 IAC 3-5-7.

The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an excess emission is observed. Failure to take response steps in accordance with Section C. ~~18-~~ Compliance Response Plan - Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit.

- (c) ~~Installation and operation of a bag leak detection system.~~ If bag leak detection system is installed, then condition D.1.18 and D.1.19 shall not be applicable. If the bag leak detection system is inoperable, the Permittee shall substitute Condition D.1.17 (a), ~~D1.18 and D.1.21 (b) and (e)~~ to show compliance, until the bag leak detection system is operable.

The baghouse leak detection system shall meet the following criteria:

- (1) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 0.0052 grains per dry standard cubic foot or less.
- (2) The bag leak detection system sensor must provide output of relative particulate matter loading.
- (3) The bag leak detection system must be equipped with an alarm system that will alarm when an increase in relative particulate loading is detected over a preset level established or verified during a stack test.
- (4) The bag leak detection system shall be installed and operated in a manner consistent with available written guidance from the US Environmental Protection Agency or, in the absence of such written guidance, the manufacturer's written specifications and recommendations for installation, operation, and adjustment of the system.

[EXTRA STEPS DO NOT ENHANCE QUALITY OF INFORMATION PROVIDED BY BAG LEAK DETECTION SYSTEM.]

- ~~(5) The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the devices, and establishing the alarm set points and the alarm delay time.~~
- ~~(6) In no event shall the sensitivity be increased by more than 100 percent or decreased by more than 50 percent over a 326 day period unless such adjustment follows a complete baghouse inspection which demonstrates the baghouse is in good operating condition.~~
- ~~(7) The bag leak detection system sensors must be inspected monthly and build up must be removed from probe and insulator.~~
- ~~(8) The Permittee shall perform monthly QA checks including response tests and electronics drift checks and opacity readings to confirm the operation of the baghouse is in order.~~
- ~~(9) The bag detector must be installed downstream of the baghouse.~~

~~In the event of a bag leak detection system alarm is triggered the Permittee shall follow the steps in Condition D.1.20 of this permit.~~

- ~~(10) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an excess emission is observed. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records and Reports, shall be considered a deviation of this permit.~~
- (5) The bag leak detection system sensors must be inspected quarterly and build-up must be removed from probe and insulator.
- (6) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an excess emission is observed.

Failure to take response steps in accordance with Section C.18 – Compliance Response Plan – Preparation, Implementation, Records and Reports, shall be considered a deviation of this permit.

### Response to Comment 51

326 IAC 2-7-5(1) and 326 IAC 2-7-6(1) provide IDEM the authority to require compliance monitoring conditions as necessary to assure continuous compliance with the emission limits. These rule cites are included as part of the title of the compliance monitoring section of the permit.

IDEM has reconsidered the requirement to develop and follow a Compliance Response Plan. The Permittee will still be required to take reasonable response steps when a compliance monitoring parameter is determined to be out of range or abnormal. Replacing the requirement to develop and follow a Compliance Response Plan with a requirement to take reasonable response steps will ensure that the control equipment is returned to proper operation as soon as practicable, while still allowing the Permittee the flexibility to respond to situations that were not anticipated. Conditions D.1.17(a)(4) and D.1.17(b) are revised.

Upon further review, IDEM has determined that once per day monitoring of the visible emission notations is generally sufficient to ensure proper operation of the control device. IDEM has also determined that monitoring these parameters once per day is sufficient to satisfy the requirements of the Part 70 rules in 326 IAC 2-7-5 and 326 IAC 2-7-6. Condition D.1.17(a)(1) is revised.

The requirements of the RHF Fugitives and briquetters equipment are now in Section D.2. See Response to Comment 64.

Installation of the COM has already taken place.

In the event the bag leak detection system is inoperable, Condition D.1.17(c) requires the Permittee to conduct opacity readings as specified in D.1.17(a) and conduct parametric monitoring of the baghouse as specified in Condition D.1.18 and the associated recordkeeping requirements. Therefore, the permit is revised as follows:

#### D.1.17 Opacity Monitoring on the Rotary Hearth Furnace

The Permittee shall demonstrate compliance with Condition D.1.2 by using any of the following methods:

- (a) Opacity Readings by certified opacity observer:
  - (1) Opacity from the rotary hearth furnace process baghouse ~~stack~~ **Stack 40** and the ~~RHF fugitives and briquetter baghouse stack 77~~ shall be performed at least once per ~~shift~~ **day** during normal daylight operations. A certified opacity observer shall observe the opacity when the rotary hearth furnace is in operation.
  - (2) These observations shall be taken in accordance with 40 CFR 60 Appendix A, Method 9 for at least two six (6) minute averages.
  - (3) 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.

- (4) **If abnormal emissions are observed, the Permittee shall take reasonable** ~~The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps~~ **in accordance with Section C.16 – Response to Excursions or Exceedances** ~~for when an excess emission is observed. Failure to take response steps in accordance with Section C.17– Compliance Response Plan– Preparation, Implementation, Records and Reports,~~ **Section C.16 – Response to Excursions or Exceedances** shall be considered a deviation from this permit.
  - (5) Conditions (1) through (3) above are not applicable should a continuous opacity monitor be installed which meets 40 CFR 60, Appendix B, Performance Specification or a bag leak detector is installed as provided in this condition.
- (b) **Continuous Opacity Monitoring System (COMs)**
- (1) ~~Install,~~ Calibrate, certify, operate and maintain a continuous opacity monitoring system in accordance with 40 CFR 60 Appendix B, Performance Specification for measuring opacity from the rotary hearth furnace process baghouse Stack 40 ~~and the RHF fugitives and briquetters baghouse stack 77,~~ in accordance with 326 IAC 3-5-2 through 326 IAC 3-5-7.
  - (2) ~~The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an excess emission is observed. Failure to take response steps in accordance with Section C.17– Compliance Response Plan– Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit.~~ **In the event that a breakdown of a COMS occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.**
  - (3) **Whenever a COM is malfunctioning or is down for maintenance, or repairs for a period of twenty-four (24) hours or more, and a backup COMS is not online within twenty-four (24) hours of shutdown or malfunction of the primary COMS, the Permittee shall provide a certified opacity reader, who may be an employee of the Permittee or an independent contractor, to self-monitor the emissions from the emission unit stack.**
    - (A) **Visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.**
    - (B) **Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least twice per day during daylight operations, with at least four (4) hours between each set of readings, until a COMS is online.**
    - (C) **Method 9 readings may be discontinued once a COMS is online.**

**(D) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.**

**(4) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5 and 40 CFR 60.**

**(c) Bag Leak Detection System**

- ~~(1)~~ ~~Installation and~~ **Operation** of a bag leak detection system. If bag leak detection system is installed, then condition D.1.18 ~~and D.1.19~~ shall not be applicable.
- (2)** In the event ~~if~~ the bag leak detection system is inoperable, the Permittee shall substitute Condition D.1.17(a) **and** D.1.18 ~~and D.1.21 (b) and (c)~~ to show compliance, until the bag leak detection system is operable.
- (3)** The baghouse leak detection system shall meet the following criteria:

  - (A)** The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 0.0052 grains per dry standard cubic foot or less.
  - (B)** The bag leak detection system sensor must provide output of relative particulate matter loading.
  - (C)** The bag leak detection system must be equipped with an alarm system that will alarm when an increase in relative particulate loading is detected over a preset level established or verified during a stack test.
  - (D)** The bag leak detection system shall be installed and operated in a manner consistent with available written guidance from the US Environmental Protection Agency or, in the absence of such written guidance, the manufacturer's written specifications and recommendations for installation, operation, and adjustment of the system.
  - ~~(5)~~**(E)** The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the devices, and establishing the alarm set points and the alarm delay time.
  - ~~(6)~~**(F)** In no event shall the sensitivity be increased by more than 100 percent or decreased by more than 50 percent over a 326 day period unless such adjustment follows a complete baghouse inspection which demonstrates the baghouse is in good operating condition.
  - ~~(7)~~**(G)** The bag leak detection system sensors must be inspected monthly and build-up must be removed from probe and insulator.
  - ~~(8)~~**(H)** The Permittee shall perform monthly QA checks including response tests and electronics drift checks and opacity readings to confirm the operation of the baghouse is in order.

- ~~(I)~~ (I) The bag detector must be installed downstream of the baghouse.
- (J) In the event of a bag leak detection system alarm is triggered the Permittee shall follow the steps: in Condition D.1.20 of this permit **and 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.**
- ~~(10)~~ The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an excess emission is observed. Failure to take response steps in accordance with Section C.17 Compliance Response Plan Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit.
- (K) **If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C.16 – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C.16 – Response to Excursions or Exceedances shall be considered a deviation from this permit.**

## Comment 52

### D.1.18 Parametric Monitoring

- ~~(a)~~ The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the rotary hearth furnace, at least once per shift when the RHF is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 and 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- ~~(b)~~ The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the rotary hearth furnace fugitives and briquetters, at least once per shift when the RHF is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 and 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- ~~(c)~~ The instrument used for determining the pressure shall comply with Section C Pressure Gauge and Other 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.1.18 Parametric Monitoring {NO REGULATORY AUTHORITY}

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the rotary hearth furnace, at least once per day when the RHF is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range established in the Compliance Response Plan, the Permittee shall take reasonable response steps in accordance with Section C.18- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C.18 - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. This inspection is not applicable if a bag leak detection or COM is installed.

**Response to Comment 52**

326 IAC 2-7-5(1) and 326 IAC 2-7-6(1) provide IDEM the authority to require compliance monitoring conditions as necessary to assure continuous compliance with the emission limits. These rule cites are included as part of the title of the compliance monitoring section of the permit. The baghouse must operate properly in order for the RHF to achieve compliance; therefore, it is reasonable and necessary to require the source to monitor the baghouse periodically. A pressure drop range needs to be listed in this requirement, because baghouse manufacturers specify what pressure drop range ensures optimal emissions control. Any pressure reading above or below the optimum range can signal a problem with the baghouse.

Upon further review, IDEM has determined that once per day monitoring of the control device is generally sufficient to ensure proper operation of the control device. IDEM has also determined that monitoring these parameters once per day is sufficient to satisfy the requirements of the Part 70 rules at 326 IAC 2-7-5 and 326 IAC 2-7-6.

The requirements for the RHF Fugitives and briquetters are now in Section D.2. See Response to Comment 65.

In the event the bag leak detection system is inoperable, Condition D.1.17(c) requires the Permittee to conduct opacity readings as specified in D.1.17(a) and conduct parametric monitoring of the baghouse as specified in Condition D.1.18 and the associated recordkeeping requirements. Therefore, the permit is revised as follows:

D.1.18 Parametric Monitoring

- (a) The Permittee shall record the ~~total static~~ pressure drop across the baghouse used in conjunction with the rotary hearth furnace, at least once per ~~shift~~ **day** when the RHF is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 and 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with ~~Section C.17- Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Section C.16 – Response to Excursions or Exceedances**. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with ~~Section C.17- Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Section C.16 – Response to Excursions or Exceedances**, shall be considered a deviation from this permit.

- ~~(b) The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the rotary hearth furnace fugitives and briquetters, at least once per shift when the RHF is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 and 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.~~
- ~~(e)~~ **(b)** The instrument used for determining the pressure shall comply with ~~Section C.14 Pressure Gauge and Other~~ **Section C.13** - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

### Comment 53

#### D.1.19 Baghouse Inspections

An inspection shall be performed annually of all bags controlling the rotary hearth furnace process. All defective bags shall be replaced or repaired. This inspection is not applicable if a bag leak detection or COM is installed.

### Response to Comment 53

Upon further review, IDEM has determined that it is the Permittee's responsibility to include routine control device inspection requirements in the applicable preventive maintenance plan. Since the Permittee is in the best position to determine the appropriate frequency of control device inspections and the details regarding which components of the control device should be inspected, the conditions requiring control device inspections have been removed from the permit. Therefore, the permit is revised as follows:

#### D.1.19 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the rotary hearth furnace process, RHF fugitives and RHF briquetter baghouses. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

### Comment 54

#### D.1.20 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- ~~(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. 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.~~

- ~~(b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have 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).~~

#### D.1.20 Broken or Failed Bag Detection {NO REGULATORY AUTHORITY}

In the event that bag failure has been observed, the Compliance Response Plan shall be initiated in accordance with Section C.18- Compliance Response Plan – Preparation, Implementation, Records and Reports.

#### **Response to Comment 54**

Paragraph (a) of the Broken or Failed Baghouse condition has been deleted, because the permit will not specify what actions the Permittee needs to take in response to a broken bag. Paragraph (b) is deleted since there is only a multi-compartment baghouse on the RHF.

IDEM determined after further review that if a COM is installed, the COM should indicate if there is a problem. Then the additional monitoring of the baghouse for broken bags/failure is not necessary. The broken or failed bag detection condition is removed.

However, if a bag leak detection system is installed and the alarm is triggered, a requirement has been added to Condition D.1.17(c)(3)(J) requiring the Permittee to notify IDEM if a broken bag is detected and the control device will not be repaired for more than ten (10) days. This notification allows IDEM to take any appropriate actions if the emission unit will continue to operate for a long period of time while the control device is not operating in optimum condition (see Response 51).

Subsequent conditions are renumbered as necessary. This permit is revised as follows:

#### D.1.20 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- ~~(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C.17 Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation deviation of this permit. 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.~~

- ~~(b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have 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.11 - Emergency Provisions).~~

## Comment 55

### D.1.21 Record Keeping Requirements

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- (a) To document compliance with Condition D.1.16 and D.1.17(b) (if applicable) the Permittee shall maintain records as required under 326 IAC 3-5-6 at the source in a manner such that they may be inspected by IDEM, OAQ or U.S. EPA, is requested.
- (b) To document compliance with Condition D.1.17(a) (if applicable), the Permittee shall maintain records of opacity readings of the rotary hearth furnace process baghouse Stack 40, RHF fugitives and RHF briquetter baghouses stack 77 exhausts, once per shift for a period of five (5) years. These records shall be made available to the IDEM, OAQ staff upon request for their review.
- (c) To document compliance with Condition D.1.18 (if applicable), the Permittee shall maintain records of the ~~once per shift~~ differential static pressure during normal operation.
- (d) To document compliance with Condition D.1.19 (if applicable), the Permittee shall maintain records of the results of the inspections required ~~under Condition D.1.19.~~
- (e) To document compliance with condition D1.17(c)(3) (if applicable), the Permittee shall maintain records of opacity readings of the dates and times of all bag leak detection system alarms, the cause of each alarm, and an explanation of all corrective actions taken and records of preventive maintenance required by D.1.17(c)(7) ~~and (8).~~
- ~~(f) To document compliance with Condition D.1.10, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.~~
- ~~(g) All records shall be maintained in accordance with Section C.18 - General Record Keeping Requirements, of this permit.~~

## Response to Comment 55

The record keeping requirements of the RHF Fugitives and briquetters are now in Section D.2.9. See Response to Comment 65.

Since IDEM changed the frequency of VE notations and parametric monitoring to once per day the record keeping requirements in D.1.19 (b) and (c) are revised to reflect the change.

Since IDEM deleted the baghouse inspection condition, the requirement to keep records of the

inspections in condition D.1.19(d) has been removed.

IDEM has determined that the Permittee is not required to keep records of all preventive maintenance. Therefore, the requirements to keep records of the inspections in Condition D.1.19 (e) and (f) have been removed.

A record keeping requirement has been added to include records keeping for CEMS down time in Condition D.1.16(c) through (g).

The specific reference numbers for Section C requirements have been added to this permit and conditions renumbered as necessary. Therefore the permit is revised as follows:

#### D.1.24 ~~19~~ Record Keeping Requirements

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- (a) To document compliance with Condition D.1.16**(b)** and D.1.17(b) (if applicable) the Permittee shall maintain records as required under 326 IAC 3-5-6 at the source in a manner such that they may be inspected by IDEM, OAQ or U.S. EPA, ~~is as~~ requested.
- (b) To document compliance with Condition D.1.16(c) through (g), the Permittee shall maintain records of CEMS down time, the lime injection rate, the ammonia injection rate and/or the thermal oxidizer temperature during the CEMS down time.**
- ~~(b) (c)~~ To document compliance with Condition D.1.17(a) (if applicable), the Permittee shall maintain records of **the once per day** opacity readings of the rotary hearth furnace process baghouse Stack 40. ~~RHF fugitives and RHF briquetter baghouses stack 77 exhausts, for a period of five (5) years. These records shall be made available to the IDEM, OAQ staff upon request for their review.~~
- ~~(e) (d)~~ To document compliance with Condition D.1.18 (if applicable), the Permittee shall maintain records of the once per ~~shift~~ **day differential static pressure drop** during normal operation.
- ~~(d)~~ ~~To document compliance with Condition D.1.19 (if applicable), the Permittee shall maintain records of the results of the inspections required under Condition D.1.19.~~
- ~~(e) (e)~~ To document compliance with condition D1.17(c)(3) (if applicable), the Permittee shall maintain records of opacity readings of the dates and times of all bag leak detection system alarms, the cause of each alarm., and an explanation of all corrective actions taken and records of preventive maintenance required by ~~D.1.17(c)(7) and (8)~~ **D.1.17(c)(3)(G) and (H).**
- ~~(f)~~ ~~To document compliance with Condition D.1.10, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.~~
- (g) (f)** All records shall be maintained in accordance with Section C.19 - General Record Keeping Requirements, of this permit.

#### Comment 56

#### D.1.22 Reporting Requirements

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The Permittee shall submit on a quarterly basis records of excess opacity, SO<sub>2</sub>, CO and NO<sub>x</sub> emissions (defined in 326 3-5-7 and 40 CFR Part 60.7) from the continuous emissions monitoring system and the opacity readings taken (if applicable). These reports shall be submitted no later

than thirty (30) days after the end of each calendar quarter and in accordance with Section C.23-General Reporting Requirements of this permit. The report submitted by the Permittee does require certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

### Response to Comment 56

The reporting requirements for the RHF Fugitives and briquetters are now in Section D.2.10. See Response to Comment 66.

The reporting requirement for opacity readings depend on the operable or inoperable status of the bag leak detection system. Therefore, the permit is revised as follows:

#### D.1.2220 Reporting Requirements

The Permittee shall submit on a quarterly basis records of excess opacity, SO<sub>2</sub>, CO and NO<sub>x</sub> emissions (defined in 326 3-5-7 and 40 CFR Part 60.7) from the continuous emissions monitoring system and the opacity readings taken (**if applicable**). These reports shall be submitted no later than thirty (30) days after the end of each calendar quarter and in accordance with Section C.20-General Reporting Requirements of this permit. The report submitted by the Permittee does require certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

### Comment 57

## SECTION D.2 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]: Rotary Hearth Furnace Operations

#### Rotary Hearth Furnace Additional Emission Points

(a) RHF Fugitives

One (1) ) 40, 000 dscfm air flow baghouse to control fugitive emissions from the Rotary Hearth Furnace (RHF), exhausting through Stack 77.

(b) RHF Briquetters

Two (2) enclosed RHF green briquetter, constructed in 2003, with a nominal throughput of 160 tons per hour, exhausting through RHF fugitives emissions baghouse, exhausting through Stack 77.

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

### Response to Comment 57

As stated in response to comment 36 the equipment and all conditions containing limits, testing, monitoring, record keeping and reporting for the RHF additional emission points are moved to this section of the permit. The D sections have been renumbered as necessary to accommodate the change. The new section D.2 conditions are as follows:

## SECTION D.2 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]: Rotary Hearth Furnace Additional Emission Points

**(a) RHF Fugitives**

One (1) 40,000 dscfm air flow baghouse to control fugitive emissions from the Rotary Hearth Furnace (RHF), exhausting through Stack 77.

**(b) RHF Briquetters**

Two (2) enclosed RHF green briquetter, constructed in 2003, replacing the existing pelletizing equipment, with a nominal throughput of 160 tons per hour, exhausting through the one (1) 40,000 dscfm air flow baghouse, added in 2003, exhausting through Stack 77.

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

#### Comment 58

D.2.1 Particulate Matter Limitations (PM/PM10)- Best Available Control Technology (BACT)[326 IAC 2-2-3]

Pursuant to A-033-17732-00076, issued September 17, 2003 and 326 IAC 2-2-3 (BACT), the PM/PM10 (where PM10 includes both filterable and condensable components) emissions from the rotary hearth furnace fugitives baghouse and briquetter baghouse shall not exceed 0.0052 grains per dscf through Stack 77. The total emissions shall not exceed 4.46 pounds per hour.

#### Response to Comment 58

The requirements for the RHF fugitives baghouse and briquetter baghouse emission limitations are now in Section D.2. See Response to Comment 37.

D.2.1 Particulate Matter (PM/PM10) - Best Available Control Technology (BACT)[326 IAC 2-2-3]

Pursuant to A-033-17732-00076, issued September 17, 2003 and 326 IAC 2-2-3 (BACT), the PM/PM10 (where PM<sub>10</sub> includes both filterable and condensable components) emissions from the rotary hearth furnace fugitives baghouse and briquetter baghouse shall not exceed a total air flow rate design of 100,000 dscfm and 0.0052 grains per dscf through Stack 77. The total emissions shall not exceed 4.46 pounds per hour.

#### Comment 59

D.2.2 Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to SSM 033-17732-00076, issued September 17, 2003 and 326 IAC 2-2-3 (BACT), the visible emissions discharged into the atmosphere from rotary hearth furnace fugitives baghouse and briquetter baghouse Stack 77 shall be limited to three percent (3%) opacity in accordance with condition D.1.16, as determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A).

#### Response to Comment 59

The requirements for the RHF fugitives baghouse and briquetter baghouse emission limitations are now in Section D.2. See Response to Comment 38.

**D.2.2 Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]**

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**Pursuant to A033-17732-00076, issued September 17, 2003 and 326 IAC 2-2-3 (BACT), the visible emissions discharged into the atmosphere from rotary hearth furnace fugitives baghouse and briquetter baghouse Stack 77 shall not exceed three percent (3%) opacity, in accordance with condition D.2.7, as determined by a six (6) minute average (24 readings taken in accordance with EPA Method 9, Appendix A).**

**Comment 60**

**D.2.3 Lead Emissions - Best Available Control Technology [326 IAC 2-2-3]**

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Pursuant to A-033-17732-00076, issued September 17, 2003 and 326 IAC 2-2-3 (BACT), the lead emissions from the rotary hearth furnace rotary hearth furnace fugitive baghouse and briquetter baghouse Stack 77 shall not exceed 0.019 pounds per hour.

**Response to Comment 60**

The requirements for the RHF fugitives baghouse and briquetter baghouse emission limitations are now in Section D.2. See Response to Comment 43.

**D.2.3 Lead Emissions - Best Available Control Technology [326 IAC 2-2-3]**

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**Pursuant to A033-17732-00076, issued September 17, 2003 and 326 IAC 2-2-3 (BACT), the lead emissions from the rotary hearth furnace fugitive emissions and briquetter baghouses Stack 77 shall not exceed 0.019 pounds per hour.**

**Comment 61**

**D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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A Preventive Maintenance Plan, in accordance with Section B.10 - Preventive Maintenance Plan, of this permit, is required for RHF briquetters baghouse.

**Response to Comment 61**

The PMP in condition D.2.4 does not include the briquetters, because the briquetters allowable emissions are low.

The requirements for the RHF fugitives baghouse and briquetter are now in Section D.2. See Response to Comment 45.

**D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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**A Preventive Maintenance Plan, in accordance with Section B.10 - Preventive Maintenance Plan, of this permit, is required for the RHF control devices: fugitives baghouse and RHF briquetters baghouse.**

**Comment 62**

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

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The Permittee shall perform PM/PM10 testing on the RHF fugitives baghouse and RHF briquetter baghouse Stack 77, five (5) years after the date compliance is demonstrated, utilizing testing methods approved by the Commissioner. PM10 includes filterable and condensable components.

## Response to Comment 62

The requirements for the RHF fugitives baghouse and briquetter baghouse testing are now in Section D.2. See Response to Comment 46.

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

**Within thirty (30) months from the date of the latest compliance demonstration stack test and in order to demonstrate compliance with Conditions D.2.1, the Permittee shall perform PM/PM10 testing for the RHF fugitives baghouse and RHF briquetter baghouse Stack 77, every two and one-half (2.5) years, utilizing testing methods approved by the Commissioner. PM10 includes both filterable and condensable components. Testing shall be conducted in accordance with Section C.9 - Performance Testing.**

## Comment 63

### D.2.6 Particulate Matter (PM/PM10) Best Available Control Technology [326 IAC 2-2-3]

Pursuant to SSM 033-15955-00076, issued on December 18, 2002 and A-033-17732-00073, issued September 17, 2003 and 326 IAC 2-2-3(Control Technology Review: Requirements) and in order to comply with conditions D.2.1 and D.2.2, the baghouses for PM/PM10 control shall be in operation and control emissions from the rotary hearth furnace fugitives and briquetters at all times the rotary hearth furnace and briquetters are in operation.

## Response to Comment 63

The requirements for the RHF fugitives baghouse and briquetter baghouse are now in Section D.2. See Response to Comment 47.

### D.2.6 Particulate Matter (PM/PM10) Best Available Control Technology [326 IAC 2-2-3]

**Pursuant to SSM 033-15955-00076, issued on December 18, 2002, A-033-17732-00076, issued September 17, 2003 and 326 IAC 2-2-3(Best Available Control Technology Review: Requirements) and in order to comply with conditions D.2.1 and D.2.3, the baghouses for PM/PM10 control shall be in operation and control emissions from the rotary hearth furnace fugitives and briquetters at all times the rotary hearth furnace and briquetters are in operation.**

## Comment 64

### D.2.7 Parametric Monitoring {NO REGULATORY AUTHORITY}

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the rotary hearth furnace fugitives and briquetters, at least once per day when the RHF is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range established in the Compliance Response Plan, the Permittee shall take reasonable response steps in accordance with Section C.18- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C.18 - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. This inspection is not applicable if a bag leak detection or COM is installed.

## Response to Comment 64

Condition D.2.7 includes the Opacity Monitoring on the Rotary Hearth Furnace for Stack 77 that is in

Permit A033-17732-00076, Condition D.1.18, issued September 17, 2003 and IDEM determines as necessary to ensure compliance with Condition D.2.2. See Response to Comment 51.

In the event the bag leak detection system is inoperable, Condition D.2.7(c) requires the Permittee to conduct opacity readings as specified in D.2.7(a) and conduct parametric monitoring of the baghouse as specified in Condition D.2.8 and the associated recordkeeping requirements.

The opacity monitoring requirements for the RHF Fugitives and briquetters are now in Section D.2. See Response to Comment 51.

326 IAC 2-7-5(1) and 326 IAC 2-7-6(1) provide IDEM the authority to require compliance monitoring conditions as necessary to assure continuous compliance with the emission limits. These rule cites are included as part of the title of the compliance monitoring section of the permit. The baghouse must operate properly in order for the RHF to achieve compliance; therefore, it is reasonable and necessary to require the source to monitor the baghouse periodically. A pressure drop range needs to be listed in this requirement, because baghouse manufacturers specify what pressure drop range ensures optimal emissions control. Any pressure reading above or below the optimum range can signal a problem with the baghouse.

Upon further review, IDEM has determined that once per day monitoring of the control device is generally sufficient to ensure proper operation of the control device. IDEM has also determined that monitoring these parameters once per day is sufficient to satisfy the requirements of the Part 70 rules at 326 IAC 2-7-5 and 326 IAC 2-7-6.

Therefore, the permit is revised as follows:

#### **D.2.7 Opacity Monitoring on the Rotary Hearth Furnace**

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**The Permittee shall demonstrate compliance with Condition D.2.2 by using any of the following methods:**

- (a) Opacity Readings by certified opacity observer:**
- (1) Opacity from the RHF fugitives and briquetter baghouse stack 77 shall be performed at least once per day during normal daylight operations. A certified opacity observer shall observe the opacity when the rotary hearth furnace is in operation.**
  - (2) These observations shall be taken in accordance with 40 CFR 60 Appendix A, Method 9 for at least two six (6) minute averages.**
  - (3) 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.**
  - (4) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C.16 – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C.16 – Response to Excursions or Exceedances shall be considered a deviation from this permit.**
  - (5) Conditions (1) through (3) above are not applicable should a continuous opacity monitor be installed which meets 40 CFR 60, Appendix B, Performance Specification or a bag leak detector is installed as provided in**

**this condition.**

**(b) Continuous Opacity Monitoring System (COMs)**

- (1) Calibrate, certify, operate and maintain a continuous opacity monitoring system in accordance with 40 CFR 60 Appendix B, Performance Specification for measuring opacity from the RHF fugitives and briquetters baghouse stack 77, in accordance with 326 IAC 3-5-2 through 326 IAC 3-5-7.**
- (2) In the event that a breakdown of a COMS occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.**
- (3) Whenever a COM is malfunctioning or is down for maintenance, or repairs for a period of twenty-four (24) hours or more, and a backup COMS is not online within twenty-four (24) hours of shutdown or malfunction of the primary COMS, the Permittee shall provide a certified opacity reader, who may be an employee of the Permittee or an independent contractor, to self-monitor the emissions from the emission unit stack.**
  - (A) Visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.**
  - (B) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least twice per day during daylight operations, with at least four (4) hours between each set of readings, until a COMS is online.**
  - (C) Method 9 readings may be discontinued once a COMS is online.**
  - (D) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.**
- (4) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5 and 40 CFR 60.**

**(c) Bag Leak Detection System**

- (1) Operation of a bag leak detection system. If bag leak detection system is installed, then condition D.2.8 shall not be applicable.**
- (2) In the event the bag leak detection system is inoperable, the Permittee shall substitute Condition D.2.7(a) and D.2.8 to show compliance, until the bag leak detection system is operable.**
- (3) The baghouse leak detection system shall meet the following criteria:**
  - (A) The bag leak detection system must be certified by the**

**manufacturer to be capable of detecting particulate matter emissions at concentrations of 0.0052 grains per dry standard cubic foot or less.**

- (B) The bag leak detection system sensor must provide output of relative particulate matter loading.**
- (C) The bag leak detection system must be equipped with an alarm system that will alarm when an increase in relative particulate loading is detected over a preset level established or verified during a Stack test.**
- (D) The bag leak detection system shall be installed and operated in a manner consistent with available written guidance from the US Environmental Protection Agency or, in the absence of such written guidance, the manufacturer's written specifications and recommendations for installation, operation, and adjustment of the system.**
- (E) The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the devices, and establishing the alarm set points and the alarm delay time.**
- (F) In no event shall the sensitivity be increased by more than 100 percent or decreased by more than 50 percent over a 326 day period unless such adjustment follows a complete baghouse inspection which demonstrates the baghouse is in good operating condition.**
- (G) In the event a bag leak detection system alarm is triggered and 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.**
- (H) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C.16 – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C.16 – Response to Excursions or Exceedances shall be considered a deviation from this permit.**

#### **D.2.8 Parametric Monitoring**

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- (a) The Permittee shall record the pressure drop across the baghouses used in conjunction with the rotary hearth furnace fugitives and briquetters, at least once per day when the RHF is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 and 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C.16- Response to Excursions or Exceedances. A pressure reading that is outside the above**

**mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C.16- Response to Excursions or Exceedances shall be considered a deviation from this permit.**

- (b) The instrument used for determining the pressure shall comply with Section C.13 - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.**

#### **Comment 65**

##### D.2.8 Baghouse Inspections {NO REGULATORY AUTHORITY}

An inspection shall be performed annually of all bags controlling the RHF fugitives and RHF briquetter baghouse. All defective bags shall be replace or repaired. The inspections are not applicable if a bag leak detection system or COM is installed.

#### **Response to Comment 65**

Upon further review, IDEM has determined that it is the Permittee's responsibility to include routine control device inspection requirements in the applicable preventive maintenance plan. Since the Permittee is in the best position to determine the appropriate frequency of control device inspections and the details regarding which components of the control device should be inspected, the conditions requiring control device inspections have been removed from the permit. Therefore, the requirement to inspect the baghouse is not added to this Section D.

Since IDEM changed the frequency of VE notations and parametric monitoring to once per day the record keeping requirements in D.2.9(b) and (c) are revised to reflect the change.

The specific reference numbers for Section C requirements have been added to this permit and conditions renumbered as necessary. Therefore the permit is revised as follows:

##### D.2.9 Record Keeping Requirements

- (a) To document compliance with Condition D.2.7(b) (if applicable) the Permittee shall maintain records as required under 326 IAC 3-5-6 at the source in a manner such that they may be inspected by IDEM, OAQ or U.S. EPA, if requested.**
- (b) To document compliance with Condition D.2.7(a) (if applicable), the Permittee shall maintain records of once per day opacity readings of the RHF fugitives and RHF briquetter baghouses stack 77 exhausts.**
- (c) To document compliance with Condition D.2.8 (if applicable), the Permittee shall maintain records of the once per day pressure drop during normal operation.**
- (d) To document compliance with condition D.2.7(c)(3) (if applicable), the Permittee shall maintain records of opacity readings of the dates and times of all bag leak detection system alarms, and the cause of each alarm.**
- (e) All records shall be maintained in accordance with Section C.19 - General Record Keeping Requirements, of this permit.**

The reporting requirement for opacity readings depends on the operable or inoperable status of the bag leak detection system. Therefore, the permit is revised as follows:

### D.2.10 Reporting Requirements

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The Permittee shall submit on a quarterly basis records of excess opacity, emissions (defined in 326 3-5-7 and 40 CFR Part 60.7) from the continuous emissions monitoring system and the opacity readings taken (if applicable). These reports shall be submitted no later than thirty (30) days after the end of each calendar quarter and in accordance with Section C.20 - General Reporting Requirements of this permit. The report submitted by the Permittee does require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

#### Comment 66

##### D.2.3.1 Particulate Matter Limitations (PM/PM<sub>10</sub>)- Best Available Control Technology [326 IAC 2-2-3]

---

- (a) Pursuant to SSM- ~~CP033-15955-00076~~ 9187-00076, issued ~~December 18, 2002~~ March 24, 1998 and 326 IAC 2-2-3, the filterable PM/PM<sub>10</sub> emissions from the submerged arc furnace (SAF) ~~stack~~ Stack 58 shall not exceed 0.0032 grains per dry standard cubic feet (dscf). ~~At a maximum air flow rate of 300,000 dry standard cubic feet per minute (dscfm), this limit is equivalent to and~~ 8.23 pounds of filterable PM/PM<sub>10</sub> per hour.
- (b) Pursuant to CP-033-9187-00043, issued March 24, 1998 and 326 IAC 2-2-3, the PM/PM<sub>10</sub> emissions from the desulfurization station, DRI bins, slag pots and tapping associated with the SAF shall be captured by a canopy ~~hood~~ hoods and exhausted to the SAF baghouse.

#### Response to Comment 66

The operation condition 22 in CP-033-9187-00043 is superseded by Condition D.1.9 in SSM 033-15955-00076, Particulate Matter BACT 326 IAC 2-2-3. The language in Condition 3.1(a) is language taken verbatim from the SSM 033-15955-00076. This Significant Source Modification was reviewed under PSD 326 IAC 2-2 and BACT. The Part 70 program incorporates all the modifications into one document. The Permittee can request a change such as this through the source modification review process in order to revise a condition under 326 IAC 2-2. Therefore, the permit is not revised as a result of this comment.

A typo is corrected. Condition D.2.1(b) renumbered D.3.1(b) is revised as follows:

##### D.2.3.1 Particulate Matter Limitations (PM/PM<sub>10</sub>)- Best Available Control Technology [326 IAC 2-2-3]

---

- (a) Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3, the PM/PM<sub>10</sub> emissions from the submerged arc furnace (SAF) Stack 58 shall not exceed 0.0032 grains per dry standard cubic feet (dscf). At a maximum air flow rate of 300,000 dry standard cubic feet per minute (dscfm), this limit is equivalent to 8.23 pounds of ~~PM/PM<sub>10</sub>~~ PM/PM<sub>10</sub> per hour.
- (b) Pursuant to CP-033-9187-00043, issued March 24, 1998 and 326 IAC 2-2-3, the PM/PM<sub>10</sub> emissions from the desulfurization station, DRI bins, slag pots and tapping associated with the SAF shall be captured by a canopy ~~hood~~ hoods and exhausted to the SAF baghouse.

#### Comment 67

##### D.2.3.2 Particulate (PM/PM<sub>10</sub>) (Particulate Emissions Limitations for Manufacturing Processes) [40-CFR-52-Subpart P][326 IAC 6-3-2]

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Pursuant to exemption 033-17200-00076, issued August 6, 2003 and 326 IAC 6-3-2] (Particulate Emissions Limitations for Manufacturing Processes), filterable particulate emissions from the

each hot pan conveyor transfer point shall not exceed 51.9 pounds per hour when operating at a nominal process weight rate of 106 tons per hour.

Interpolation and extrapolation 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:

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

### Response to Comment 67

Conditions D.2.2 is renumbered D.3.2.

The 326 IAC 6-3 revisions that became effective on June 12, 2002 were approved into the State Implementation Plan on September 23, 2005. These rules replace the previous version of 326 IAC 6-3 (Process Operations) that had been part of the SIP; therefore, the requirements of the previous version of 326 IAC 6-3-2 are no longer applicable to this source. Condition D.3.2 has been revised to remove 40 CFR 52 Subpart P which contained these requirements. Therefore, the permit is revised as follows:

#### D.2 3.2 Particulate (PM/PM10) (Particulate Emissions Limitations for Manufacturing Processes) ~~[40 CFR 52 Subpart P]~~[326 IAC 6-3-2]

---

Pursuant to exemption 033-17200-00076, issued August 6, 2003 and 326 IAC 6-3-2 (Particulate Emissions Limitations for Manufacturing Processes), particulate emissions from ~~the~~ each hot pan conveyor transfer point shall not exceed 51.9 pounds per hour when operating at a nominal process weight rate of 106 tons per hour.

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#### D.3.2 Particulate (PM/PM10) (Particulate Emissions Limitations for Manufacturing Processes) ~~[40 CFR 52 Subpart P]~~[326 IAC 6-3-2]

### Comment 68

#### D.2 3.3 Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]

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- (a) Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the visible emissions from the submerged arc furnace (SAF) ~~stack~~ Stack 58 shall not exceed three percent (3%) opacity determined by a six (6) minute average.
- (b) Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the visible emissions from any building opening, shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A). ~~pursuant to 326 IAC 5-1-4.~~

### Response to Comment 68

Typos have been corrected. The language in Condition D.2.3(b) renumbered D.3.3(b) is removed as requested. Condition 28 in CP-033-9187-00043, issued on March 24, 1998 does not include this language. The permit is revised as follows:

#### D.2 3.3 Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]

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- (a) Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the visible emissions from the submerged arc furnace (SAF) ~~stack~~ Stack 58 shall not exceed

three percent (3%) opacity determined by a six (6) minute average.

- (b) Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the visible emissions from any building opening, shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A). ~~pursuant to 326 IAC 5-1-4.~~

#### **Comment 69**

##### D.2.3.4 Sulfur Dioxide (SO<sub>2</sub>) - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the sulfur dioxide emissions from the submerged arc furnace stack 58 shall not exceed 0.084 pounds per ton. ~~At a maximum process throughput of 106 tons per hour, this limit is equivalent to~~ and 1.6 pounds of SO<sub>2</sub> per hour.

#### **Response to Comment 69**

The language in Condition D.2.4 renumbered D.3.4 is language taken verbatim from the CP-033-9187-00043. This construction permit was reviewed under PSD 326 IAC 2-2 and BACT. The Part 70 program incorporates all the modifications into one document. In order to revise the BACT SO<sub>2</sub> limit, the Permittee can request a change through the source modification review process under 326 IAC 2-7-10.5 and 326 IAC 2-2. Therefore, the permit is not revised as a result of this comment.

#### **Comment 70**

##### D.2.3.5 Volatile Organic Compounds (VOC) - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the volatile organic compound emissions from the submerged arc furnace stack 58 shall not exceed 0.035 pounds per ton. ~~At a maximum process throughput of 106 tons per hour, this limit is equivalent to~~ and 3.7 pounds of VOC per hour.

#### **Response to Comment 70**

The language in Condition D.2.5 renumbered D.3.5 is language taken verbatim from the CP-033-9187-00043. This construction permit was reviewed under PSD 326 IAC 2-2 and BACT. The Part 70 program incorporates all the modifications into one document. In order to revise the BACT VOC limit, the Permittee can request a change through the source modification review process under 326 IAC 2-7-10.5 and 326 IAC 2-2. Therefore, the permit is not revised as a result of this comment.

#### **Comment 71**

##### D.2.3.6 Carbon Monoxide (CO) - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the carbon monoxide emissions from the submerged arc furnace stack 58 shall not exceed 1.26 pounds per ton. ~~At a maximum process throughput of 106 tons per hour, this limit is equivalent to~~ and 133.5 pounds of CO per hour.

#### **Response to Comment 71**

The language in Condition D.2.6 renumbered D.3.6 is language taken verbatim from the CP033-9187-00043. This construction permit was reviewed under PSD 326 IAC 2-2 and BACT. The Part 70 program incorporates all the modifications into one document. In order to revise the BACT CO limit, the Permittee

can request a change through the source modification review process under 326 IAC 2-7-10.5 and 326 IAC 2-2. Therefore, the permit is not revised as a result of this comment.

### **Comment 72**

#### D.2 3.7 Carbon Monoxide (CO) [326 IAC 9-1]

Pursuant to CP033-9187-00043, issued March 24, 1998 and 326 IAC 9-1, the Permittee shall not allow the discharge of CO from the Submerged Arc Furnace unless the waste gas stream is controlled by a thermal oxidizer, except during startup and shutdown.

### **Response to Comment 72**

Condition D.2.7 is renumbered D.3.7.

Pursuant to 326 IAC 9-1-2(a)(2) ferrous metal smelters. The source shall not operate a grey iron cupola, basic oxygen steel furnace, or other ferrous metal smelting equipment, having a capacity of ten (10) tons per hour or more process weight, unless the waste gas stream is burned in one (1) of the following: (a) boiler; (B) direct-flame afterburner or (C) recuperative incinerator. In instances where carbon monoxide destruction is not required, carbon monoxide emissions shall be released at such elevation that the maximum ground level concentration from a single source is shall not exceed twenty percent (20%) of the maximum one (1) hour Indiana ambient air quality value for carbon monoxide. Also pursuant to Condition 36 in construction permit CP033-9187-00043 issued March 24, 1998, the thermal oxidizer system shall be operated at all times the SAF is in operation. Therefore, the permit is not revised as a result of this comment.

#### D.2 3.7 Carbon Monoxide (CO) [326 IAC 9-1]

### **Comment 73**

#### D.2 3.8 Nitrogen Oxides (NO<sub>x</sub>) - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the nitrogen oxide(s) emissions from the submerged arc furnace stack 58 shall not exceed 0.117 pounds per ton. ~~At a maximum process throughput of 106 tons per hour, this limit is equivalent to and~~ 12.4 4 pounds of NO<sub>x</sub> per hour.

#### D.2 3.9 Applicability [326 IAC 2-1.1-3]

Pursuant to Exemption 033-17200-00076, issued August 6, 2003 and 326 IAC 2-1.1-3, the conveyors provided in the description information above are classified as exempt from air pollution permit requirements.

### **Response to Comment 73**

Conditions D.2.8 and D.2.9 are renumbered D.3.8 and D.3.9.

The language in Condition D.3.8 is language taken verbatim from the CP 033-9187-00043. This construction permit was reviewed under PSD 326 IAC 2-2 and BACT. The Part 70 program incorporates all the modifications into one document. In order to revise the BACT NO<sub>x</sub> limit, the Permittee can request a change through the source modification review process under 326 IAC 2-7-10.5 and 326 IAC 2-2. Therefore, the permit is not revised as a result of this comment.

#### Comment 74

##### D.2 3.10 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the ~~Submerged Arc Furnace~~, RHF discharge baghouse, desulfurization station, ~~DRI bins, slag pots and tapping~~ baghouse and the Submerged Arc Furnace baghouse.

#### Response to Comment 74

Condition D.2.10 is renumbered D.3.10.

The Preventive Maintenance Plan requirement must be included in every applicable Title V permit pursuant to 326 IAC 2-7-5(13). This rule refers back to the Preventive Maintenance Plan requirement as described in 326 IAC 1-6-3. This Preventive Maintenance Plan rule sets out the requirements for:

- (1) Identification of the individuals responsible for inspecting, maintaining and repairing the emission control equipment (326 IAC 1-6-3(a)(1)),
- (2) The description of the items or conditions in the facility that will be inspected and the inspection schedule for said items or conditions (326 IAC 1-6-3(a)(2)), and
- (3) The identification and quantification of the replacement parts for the facility which the Permittee will maintain in inventory for quick replacement (326 IAC 1-6-3(a)(3)).

It is clear from the structure of the wording in 326 IAC 1-6-3 that the PMP requirement affects the entirety of the applicable facilities. Only 326 IAC 1-6-3(a)(1) is limited, in that it requires identification of the personnel in charge of only the emission control equipment, and not any other facility equipment. 326 IAC 1-6-3(b) provides that "...as deemed necessary by the commissioner, any person operating a facility shall comply with the requirements of subsection (a) of this section."

Many types of facilities require maintenance in order to prevent excess emissions. In addition to preventive maintenance performed on the control devices, preventive maintenance should be performed on the associated SAF and desulfurization station because lack of proper maintenance on the SAF and desulfurization station can result in poor performance of this equipment which results in increased emissions.

The allowable emissions from the DRI bins, slag pots and tapping are low. Therefore, the permit is revised as follows:

##### D.2 3.10 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the **RHF discharge chute baghouse**, Submerged Arc Furnace, ~~RHF discharge baghouse~~, desulfurization station, ~~DRI bins, slag pots and tapping~~ and the ~~Submerged Arc Furnace~~, **associated** baghouses.

#### Comment 75

##### D.2 3.11 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

- (a) ~~Pursuant to SSM033-15955-00076, within sixty (60) days of achieving maximum production rate but no later than 18 months after issuance of this operation permit validation letter as per requirements of SSM033-15955-00076, for the submerged arc furnace Stack 58, and in order to demonstrate~~ The Permittee shall perform PM/PM10.

~~SO<sub>2</sub>, VOC, CO and NOx testing on the SAF Stack 58 every five (5) years after compliance with conditions D.2.1, D.2.4, D.2.5, D.2.6 and D.2.8, the Permittee shall perform PM/PM<sub>10</sub>, SO<sub>2</sub>, VOC, CO and NOx testing on the SAF Stack 58, using testing methods approved by the Commissioner. PM<sub>10</sub> includes both filterable and condensable components. Is demonstrated.~~

- ~~(b) The Permittee shall perform PM/PM<sub>10</sub>, SO<sub>2</sub>, VOC, CO and NOx testing on the SAF Stack 58 every two and one half (2.5) years after completing the testing required in item (a) of this condition, utilizing testing methods approved by the Commissioner. PM<sub>10</sub> includes both filterable and condensable components.~~

All testing shall be conducted in accordance with Section C.10- Performance Testing.

### Response to Comment 75

Condition D.2.11 is renumbered D.3.11.

The initial testing required in SSM033-15955-00076 was not conducted. The Permittee was required to test the SAF in early April 2006. In late March, the Submerged Arc Furnace malfunctioned and needs to be repaired. The Permittee has applied for a source modification to repair the SAF. The Permittee will be required to test the SAF within 60 days of start up after repairs. Therefore, the permit is revised as follows:

#### D.2 3.11 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

- ~~(a) Pursuant to SSM033-15955-00076, within sixty (60) days of achieving maximum production rate but no later than 18 months after issuance of this operation permit validation letter as per requirements of SSM033-15955-00076, for the submerged arc furnace Stack 58, and in order to demonstrate compliance with conditions D.2.1, D.2.4, D.2.5, D.2.6 and D.2.8, the Permittee shall perform PM/PM<sub>10</sub>, SO<sub>2</sub>, VOC, CO and NOx testing on the SAF Stack 58, using testing methods approved by the Commissioner. PM<sub>10</sub> includes both filterable and condensable components.~~
- ~~(b) The Permittee shall perform PM/PM<sub>10</sub>, SO<sub>2</sub>, VOC, CO and NOx testing on the SAF Stack 58 every two and one half (2.5) years after completing the testing required in item (a) of this condition, utilizing testing methods approved by the Commissioner. PM<sub>10</sub> includes both filterable and condensable components. Within 60 days from start up of the Submerged Arc Furnace and in order to comply with conditions D.3.1, D.3.4, D.3.5, D.3.6 and D.3.8 the Permittee shall perform PM/PM<sub>10</sub>, SO<sub>2</sub>, VOC, CO and NOx testing on the SAF Stack 58, utilizing testing methods approved by the Commissioner. The tests shall be repeated every two and one-half (2.5) years from the date of the most recent valid compliance demonstration. PM<sub>10</sub> includes both filterable and condensable components. Testing shall be conducted in accordance with Section C.9 - Performance Testing.~~

### Comment 76

#### D.2 3.12 Particulate Matter (PM/PM<sub>10</sub>) Best Available Control Technology [326 IAC 2-2-3]

- (a) Pursuant to CP-033-9187-00043, issued on March 24, 1998, and in order to comply with D.2 3.1(a), the wet venturi scrubber for particulate control shall be in operation and control emissions from the Submerged Arc Furnace at all times the Submerged Arc Furnace is in operation.

- (b) Pursuant to 326 IAC 2-2-3, Best Available Control Technology, and in and in order to comply with D.2.1(a), the ~~the~~ RHF discharge chute baghouse for particulate control shall be in operation and control emissions from the RHF discharge chute at all times the RHF ~~and Submerged Arc Furnace are~~ is in operation.
- (c) Pursuant to SSM033-15955-00043, issued on December 18, 2002, and in order to comply with D.2.1(b), the desulfurization baghouse for particulate control shall be in operation and control emissions from the desulfurization station, ~~DRI bins, slag pots and tapping~~ associated with the SAF at all times the desulfurization station, ~~DRI bins, slag pots and tapping are~~ is in operation.

### Response to Comment 76

Condition D.2.12 is renumbered D.3.12.

The equipment and associated control device language is clarified. Therefore Conditions 3.12(b) and (c) in the permit are revised as follows:

#### D.2.3.12 Particulate Matter (PM/PM<sub>10</sub>) Best Available Control Technology [326 IAC 2-2-3]

- (a) Pursuant to CP-033-9187-00043, issued on March 24, 1998, and in order to comply with D.2.3.1(a), the wet venturi scrubber for particulate control shall be in operation and control emissions from the Submerged Arc Furnace at all times the Submerged Arc Furnace is in operation.
- (b) Pursuant to 326 IAC 2-2-3, Best Available Control Technology, and in order to comply with D.2.3.1(a), the ~~the~~ RHF discharge chute baghouse for particulate control shall be in operation and control emissions from the RHF **discharge chute** at all times the RHF ~~and Submerged Arc Furnace are~~ **is** in operation.
- (c) Pursuant to SSM033-15955-00043, issued on December 18, 2002, and in order to comply with D.2.3.1(b), the desulfurization baghouse for particulate control shall be in operation and control emissions from the desulfurization station, DRI bins, slag pots and tapping associated with the SAF at all times the desulfurization station, DRI bins, slag pots and tapping are in operation.

### Comment 77

#### D.2.3.13 Carbon Monoxide (CO) Best Available Control Technology [326 IAC 2-2-3]

Pursuant to CP-033-9187-00043, issued on March 24, 1998, and in order to comply with D.2.6, the thermal oxidizer for carbon monoxide control shall be in operation and control CO emissions from the Submerged Arc Furnace at all times the Submerged Arc Furnace is in operation, except during startup and shutdown.

### Response to Comment 77

Condition D.2.13 is renumbered D.3.13 and the reference to condition D.2.6 is renumbered D.3.6. The reference to condition D.3.7 is added.

Pursuant to 326 IAC 9-1-2(a)(2) ferrous metal smelters. The source shall not operate a grey iron cupola, basic oxygen steel furnace, or other ferrous metal smelting equipment, having a capacity of ten (10) tons

per hour or more process weight, unless the waste gas stream is burned in one (1) of the following: (a) boiler; (B) direct-flame afterburner or (C) recuperative incinerator. In instances where carbon monoxide destruction is not required, carbon monoxide emissions shall be released at such elevation that the maximum ground level concentration from a single source is shall not exceed twenty percent (20%) of the maximum one (1) hour Indiana ambient air quality value for carbon monoxide. Also pursuant to Condition 36 in construction permit CP033-9187-00043 issued March 24, 1998, the thermal oxidizer system shall be operated at all times the SAF is in operation. Therefore, the permit is not revised as a result of this comment.

**D.2 3.13 Carbon Monoxide (CO) Best Available Control Technology [326 IAC 2-2-3]**

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Pursuant to CP-033-9187-00043, issued on March 24, 1998, and in order to comply with ~~D.2.6~~ **D.3.6 and D.3.7**, the thermal oxidizer for carbon monoxide control shall be in operation and control CO emissions from the Submerged Arc Furnace at all times the Submerged Arc Furnace is in operation.

**Comment 78**

**D.2 3.14 Continuous Emissions Rate Monitoring [326 IAC 3-5]**

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Pursuant to 326 IAC 3-5-1(d) and CP-033-9187-00043, issued March 24, 1998, the Permittee shall either:

- (a) Calibrate, operate and maintain a continuous monitoring system for measuring opacity at the exhaust from the SAF ~~stack~~ Stack 58 in accordance with 326 IAC 3-5 and 40 CFR 60, Appendix B. The Permittee shall record the output of the system and provide record keeping and reporting pursuant to 326 IAC 3-5;

or

- (b) The Permittee shall do the following:
- (1) Have a certified visible emission observer observe opacity of the visible emissions from the SAF ~~stack~~ Stack 58 at least once per ~~shift day~~ {OLD PERMIT SAYS PER DAY} when the SAF is operating. These observations shall be taken in accordance with 40 CFR 60, Appendix A, Method 9 for at least ~~three~~ two six minute averages. Records will be maintained of the visible emission observations;
- and
- (2) Install, calibrate, operate and maintain continuous monitoring systems for measuring and recording:
- (A) The pressure loss through the venturi constriction of the SAF scrubber. ~~The monitoring device is to be certified by the manufacturer to be accurate within ± 1 inch of water; and~~
- (B) The water supply pressure to the SAF scrubber. ~~The monitoring device is to be certified by the manufacturer to be accurate ± 5 percent of the design water supply pressure. The monitoring device's pressure sensor or pressure tap must be located close to the water discharge point. The~~ OAQ, Compliance Data Section must be consulted for approval in advance of selecting alternative locations for the pressure sensor or tap.

~~All scrubber monitoring devices shall use chart recorders which are operated at a chart speed of 1.5 inches per hour. { 1/11/2000 Requested Allowance for Electronic Recording.}~~

### Response to Comment 78

Condition D.2.14 is renumbered D.3.14.

Upon further review, IDEM has determined that once per day monitoring of visible emission notations is generally sufficient to ensure proper operation of the control device. IDEM has also determined that monitoring these parameters once per day is sufficient to satisfy the requirements of the Part 70 rules at 326 IAC 2-7-5 and 326 IAC 2-7-6. CP 033-9187-00043, issued March, 24, 1998, condition 38, states the visible observations are required once per day.

Pursuant to CP033-9187-00043, the visible emission must be conducted for at least three six minute averages.

Upon further review, IDEM has also determined that the accuracy of the instruments is not nearly as important as whether the instrument has a range that is appropriate for the normal expected reading of the parameter. Therefore, the accuracy requirements have been removed from the condition.

A letter received on January 26, 2000 as additional information to the Part 70 application, states the scrubber devices are recorded using Wonderware Sequel Server. This provides a continuous monitoring device with hard copy capabilities. This server is used in place of the chart recorder.

Therefore the permit is revised as follows:

#### D.2 3.14 Continuous Emissions Rate Monitoring [326 IAC 3-5]

Pursuant to 326 IAC 3-5-1(d) and CP-033-9187-00043, issued March 24, 1998, the Permittee shall either:

- (a) Calibrate, operate and maintain a continuous monitoring system for measuring opacity at the exhaust from the SAF ~~stack~~ **Stack** 58 in accordance with 326 IAC 3-5 and 40 CFR 60, Appendix B. The Permittee shall record the output of the system and provide record keeping and reporting pursuant to 326 IAC 3-5;

or

- (b) The Permittee shall do the following:
- (1) Have a certified visible emission observer observe opacity of the visible emissions from the SAF ~~stack~~ **Stack** 58 at least once per ~~shift~~ **day** when the SAF is operating. These observations shall be taken in accordance with 40 CFR 60, Appendix A, Method 9 for at least three six minute averages. Records will be maintained of the visible emission observations;
- and
- (2) Install, calibrate, operate and maintain continuous monitoring systems for measuring and recording:
- (A) The pressure loss through the venturi constriction of the SAF scrubber.  
~~The monitoring device is to be certified by the manufacturer to be~~

~~accurate within  $\pm$  1 inch of water; and~~

- (B) The water supply pressure to the SAF scrubber. The monitoring ~~device is to be certified by the manufacturer to be accurate  $\pm$  5 percent of the design water supply pressure.~~ The monitoring device's pressure sensor or pressure tap must be located close to the water discharge point. The OAQ, Compliance Data Section must be consulted for approval in advance of selecting alternative locations for the pressure sensor or tap.

All scrubber monitoring devices shall use ~~chart recorders which are operated at a chart speed of 1.5 inches per hour~~ **the continuous electronic recording to monitor the scrubber performance.**

### Comment 79

#### D.2 3.15 1Thermal Oxidizer Temperature {NO REGULATORY AUTHORITY}

- 
- (a) ~~{1/11/2003 LETTER REQUESTED REMOVAL OF TEMP REQUIREMENT.}~~ A continuous monitoring system shall be calibrated, maintained and operated on the thermal oxidizer for measuring operating temperature. The output of this system shall be recorded as an hourly average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports whenever the hourly average temperature of the thermal oxidizer is below 1650°F. An hourly average temperature that is below 1650°F is not a deviation from this permit. Failure to take response steps in accordance with Section C.18 - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a ~~violation~~ deviation from this permit.
- (b) The Permittee shall determine the hourly average temperature from the most recent valid stack test that demonstrates compliance in condition D.2.6, ~~as approved by IDEM.~~
- (c) On and after the date the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports whenever the hourly average temperature of the thermal oxidizer is more than 10% below the hourly average temperature as observed during the compliant stack test. An hourly average temperature that is more than 10% below the hourly average temperature as observed during the compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C.18 - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a deviation of this permit.

### Response to Comment 79

Condition D.2.15 is renumbered D.3.15.

326 IAC 2-7-5(1) and 326 IAC 2-7-6(1) provide IDEM the authority to require compliance monitoring conditions as necessary to assure continuous compliance with the emission limits. These rule cites are included as part of the title of the compliance monitoring section of the permit. The thermal oxidizer must operate properly in order for the SAF to achieve compliance.

continuous The Part 70 permit program is based on the ability of the source to demonstrate compliance with the conditions in this permit The status of the monitor parameters are

necessary to demonstrate continuous compliance with the conditions of the Part 70 permit. Therefore, the permit condition is not revised as a result of this comment.

Condition D.3.15 is associated with the thermal oxidizer monitoring. Pursuant to CP033-9187-00043, Condition 36, the thermal oxidizer temperature of 1650°F was to be maintained until a temperature, fan amperage and duct velocity could be determined for the thermal oxidizer during the stack test.

In a letter received on January 26, 2000 as additional information to the Part 70 application, SDI requested the SAF thermal oxidizer temperature requirement be removed from the permit and replaced with a requirement to operate the thermal oxidizer when the SAF is in operation. An initial test for CO to determine the thermal oxidizer temperature that controls the CO emissions to comply with the limitation in Condition D.3.6 was to be conducted in early April 2006. The testing was not completed in April 2006, because there was a furnace melt out in March 2006. Iron Dynamics, submitted an application to rebuild the furnace on May 16, 2006.

IDEM has determined that the continuous monitoring system for the thermal oxidizer operating temperature shall be recorded as a three hour average to demonstrate compliance with the CO limit in Condition D.3.6. The permit is revised as follows:

#### D.2 3.15 Thermal Oxidizer Temperature

- (a) A continuous monitoring system shall be calibrated, maintained and operated on the thermal oxidizer for measuring operating temperature. The output of this system shall be recorded as ~~an hourly~~ **a three (3) hour** average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with ~~Section C.17 Compliance Response Plan Preparation, Implementation, Records and Reports~~ **Section C.16 – Response to Excursions or Exceedances**, whenever the ~~hourly~~ **three (3) hour** average temperature of the thermal oxidizer is below 1650°. ~~An hourly~~ **A three (3) hour** average temperature that is below 1650° is not a deviation from this permit. Failure to take response steps in accordance with ~~Section C.17 Compliance Response Plan Preparation, Implementation, Records and Reports~~ **Section C.16 – Response to Excursions or Exceedances** shall be considered a ~~violation~~ **deviation** from this permit.
- (b) The Permittee shall determine the temperature from the most recent valid stack test that demonstrates compliance with limits in condition D.23.6., ~~as approved by IDEM.~~
- (c) On and after the date the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with ~~Section C.17 Compliance Response Plan Preparation, Implementation, Records and Reports~~ **Section C.16 – Response to Excursions or Exceedances**, whenever the ~~hourly~~ **three (3) hour** average temperature of the thermal oxidizer is below the ~~hourly~~ **three (3) hour** average temperature as observed during the compliant stack test. ~~An hourly~~ **A three (3) hour** average temperature that is below ~~hourly~~ **the three (3) hour** average temperature as observed during the compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with ~~Section C – Compliance Response Plan Preparation, Implementation, Records and Reports~~ **Section C.16 – Response to Excursions or Exceedances** shall be considered a deviation of this permit.

#### **Comment 80**

#### D.2 3.16 Parametric Monitoring {NO REGULATORY AUTHORITY}

- (a) ~~The~~ If the Permittee elects to do continuous emission monitoring under D.3.14(b), then

~~the Permittee shall record the total static pressure drop and flow rate of scrubber used in conjunction with the submerged arc furnace at least once per shift day when the SAF is in operation. When for any one reading, the pressure drop across the scrubber is outside the normal range of 40 to 60 inches of water or a range established during in the latest stack test CRP and the flow rate of the scrubber is below the minimum of 40 gallons per minute or a minimum rate established during the latest stack test, minimum established in the CRP,~~ the Permittee shall take reasonable response steps in accordance with Section C.18- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure drop or flow rate reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C.18 - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

- (b) ~~The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the desulfurization station, DRI bins, slag pots and tapping associated with the SAF at least once per shift day when the desulfurization station, DRI bins, slag pots and tapping associated with the SAF are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 and 10.0 inches of water or a range established during established in the latest stack test CRP, ,~~ the Permittee shall take reasonable response steps in accordance with Section C.18- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C.18 - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- (c) The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the RHF discharge chute. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 and 10.0 inches of water or a range established during in the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C.18- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C.18 - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- ~~(d) The thermal oxidizer parametric monitoring includes **{See Section D.3.15 ---- Not associated with operations.}**~~

### Response to Comment 80

Condition D.2.16 is renumbered D.3.16.

326 IAC 2-7-5(1) and 326 IAC 2-7-6(1) provide IDEM the authority to require compliance monitoring conditions as necessary to assure continuous compliance with the emission limits. These rule cites are included as part of the title of the compliance monitoring section of the permit. The baghouse must operate properly in order for the RHF and SAF to achieve compliance.

The Part 70 permit program is based on the ability of the source to demonstrate continuous compliance with the conditions in this permit. The status of the monitor parameters are necessary to demonstrate continuous compliance with the conditions of the Part 70 permit.

If the Permittee elects to do parametric monitoring of the scrubber, then Condition D.3.16(a) is the appropriate requirement. The language is revised to state when this requirement applies.

#### D.2 3.16 Parametric Monitoring

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- (a) **If the Permittee elects to do continuous emission monitoring under D.3.14(b), then,** the Permittee shall record the ~~total static~~ pressure drop and flow rate of scrubber used in conjunction with the submerged arc furnace at least once per ~~shift~~ **day** when the SAF is in operation. When for any one reading, the pressure drop across the scrubber is outside the normal range of 40 to 60 inches of water or a range established during the latest stack test and the flow rate of the scrubber is below the minimum of 40 gallons per minute or a minimum rate established during the latest stack test, the Permittee shall take reasonable response steps in accordance with ~~Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Section C.16 - Response to Excursions or Exceedances**. A pressure drop or flow rate reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with ~~Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Section C.16 - Response to Excursions or Exceedances**, shall be considered a deviation from this permit.
- (b) The Permittee shall record the ~~total static~~ pressure drop across the baghouse used in conjunction with the desulfurization station, DRI bins, slag pots and tapping associated with the SAF at least once per ~~shift~~ **day** when the desulfurization station, DRI bins, slag pots and tapping associated with the SAF are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 and 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with ~~Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Section C.16 - Response to Excursions or Exceedances**. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with ~~Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Section C.16 - Response to Excursions or Exceedances**, shall be considered a deviation from this permit.
- (c) The Permittee shall record the ~~total static~~ pressure drop across the baghouse used in conjunction with the RHF discharge chute **at least once per day**. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 and 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with ~~Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Section C.16 - Response to Excursions or Exceedances**. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with ~~Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Section C.16 - Response to Excursions or Exceedances**, shall be considered a deviation from this permit.
- (d) The instruments used for determining the pressure and flow rate, fan amperage **and duct velocity** shall comply with Section C.13. - ~~Pressure Gauge and Other Instrument Specifications~~, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

## Comment 81

### D.3.17 Scrubber Inspection {NO REGULATORY AUTHORITY}

An inspection shall be performed annually on the submerged arc furnace scrubber.

### D.3.18 Scrubber Failure Detection {NO REGULATORY AUTHORITY}

In the event a scrubber failure has been observed the Permittee shall take response steps in accordance with Section C.18 – Compliance Response Plan – Preparation Implementation Records and Reports.

### D.3.19 Baghouse Inspections {NO REGULATORY AUTHORITY}

An inspection shall be performed annually of the following: each calendar quarter of the SAF baghouse bags. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

- (1) ~~The Permittee shall determine fan amperage or duct pressure from the most recent valid stack test that demonstrates compliance with limits in condition D.2.6, as approved by IDEM.~~
  - (2) ~~The duct pressure SAF baghouse bags. All defective bags shall be replaced or fan amperage shall be observed at least once per day when the thermal oxidizer is in operation. When for any one reading the duct pressure or fan amperage is outside the normal range as established in the most recent compliant stack test, the Permittee shall take reasonable response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records and Reports. 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 – Compliance Response Plan – Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.~~
- (e) ~~The instrument used for determining the pressure, flow rate and shall comply with Section C – Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.~~

### D.2.17 Scrubber Inspections

An inspection shall be performed each calendar quarter of the submerged arc furnace scrubber. Inspections required by this condition shall not be performed in consecutive months.

### D.2.18 Scrubber Failure Detection

In the event, a scrubber failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired.

D.3.20 Broken or Failed Bag Detection {NO REGULATORY AUTHORITY} 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).

### D.2.19 Baghouse Inspections

An inspection shall be performed each calendar quarter of the SAF baghouse bags. Inspections

~~required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.~~

#### ~~D.2.20 Broken or Failed Bag Detection~~

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~~In the event that bag failure has been observed:~~

- ~~(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. If operations continue after bag failure is observed and it will be 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.~~
- ~~(b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have 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). {NO SINGLE COMPARTMENT BAGHOUSE.}~~

#### **Response to Comment 81**

Upon further review, IDEM has determined that it is the Permittee's responsibility to include routine control device inspection requirements in the applicable preventive maintenance plan. Since the Permittee is in the best position to determine the appropriate frequency of control device inspections and the details regarding which components of the control device should be inspected, the conditions D.3.17 and D.3.19 requiring control device inspections have been removed from the permit.

Paragraph (a) of the Broken or Failed Baghouse condition has been deleted. For multi-compartment baghouses, the permit will not specify what actions the Permittee needs to take in response to a broken bag. However, a requirement has been added to Condition D.3.12 (d) requiring the Permittee to notify IDEM if a broken bag is detected and the control device will not be repaired for more than ten (10) days. This notification allows IDEM to take any appropriate actions if the emission unit will continue to operate for a long period of time while the control device is not operating in optimum condition. Since there is no single compartment baghouse paragraph (b) is removed.

#### ~~D. 23.17 Scrubber Inspections~~

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~~An inspection shall be performed each calendar quarter of the submerged arc furnace scrubber. Inspections required by this condition shall not be performed in consecutive months.~~

~~D. 23.19~~ Baghouse Inspections

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~~An inspection shall be performed each calendar quarter of the SAF baghouse bags. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.~~

~~D.2.20~~ Broken or Failed Bag Detection

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~~In the event that bag failure has been observed:~~

- ~~(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. If operations continue after bag failure is observed and it will be 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.~~
- ~~(b) For single-compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have 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).~~

~~D.2 3.12~~ Particulate Matter (PM/PM<sub>10</sub>) Best Available Control Technology [326 IAC 2-2-3] **[326 IAC 2-7-6(6)]**

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- ~~(b)~~ Pursuant to 326 IAC 2-2-3, Best Available Control Technology, and in order to comply with D.2.3.1(a), the ~~the~~ RHF discharge chute baghouse for particulate control shall be in operation and control emissions from the RHF **discharge chute** at all times the RHF and Submerged-Arc-Furnace ~~are~~ **is** in operation.
- ~~(c)~~ Pursuant to SSM033-15955-00043, issued on December 18, 2002, and in order to comply with D.2.3.1(b), the desulfurization baghouse for particulate control shall be in operation and control emissions from the desulfurization station, DRI bins, slag pots and tapping associated with the SAF at all times the desulfurization station, DRI bins, slag pots and tapping are in operation.
- ~~(d)~~ **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.**

Condition D.2.18 is renumbered D.3.17.

**D.2.18 3.17 Scrubber Failure Detection**

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In the event, a scrubber failure has been observed:  
Failed units and the associated process will be shut down immediately until the failed units have 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.11 - Emergency Provisions).

**Comment 82**

**D.2.21 Record Keeping Requirements**

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- (a) To document compliance with Condition D.2 ~~3~~.14(a), (if selected), the Permittee shall maintain records of the readings of the continuous opacity monitoring system of the Submerged Arc Furnace (SAF) ~~stack~~ Stack 58.
- (b) To document compliance with Condition D.2 ~~3~~.14 (b)(1), (if selected), the Permittee shall maintain the records of the observed opacity readings of the SAF Stack 58 ~~at least once per shift~~.
- (c) To document compliance with D.2 ~~3~~.14 (b) (2) (A) and (B), (if selected), the Permittee shall maintain records of the SAF continuous chart recording of the pressure ~~loss~~ differential through the venturi constriction and water supply pressure of the SAF scrubber.
- (d) To document compliance with Condition D.2 ~~3~~.15, the Permittee shall maintain records of the thermal oxidizer temperature on a ~~continuous~~ three-hour block average basis.
- (e) To document compliance with Condition D.2 ~~3~~.16(a), the Permittee shall maintain records of total static pressure drop and flow rate of the RHF SAF scrubber, ~~at least once per shift~~.
- (f) To document compliance with Condition D.2 ~~3~~.16(b), the Permittee shall maintain records of the total static pressure drop of the SAF desulfurization station baghouse ~~at least once per shift~~. day.
- (g) To document compliance with Condition D.2.16(c), the Permittee shall maintain records of the total static pressure drop of the RHF discharge chute baghouse at least once per day shift.
- (g) To document compliance with D.3.17 and D.3.19, the Permittee shall maintain records of the inspections.
- (h) ~~To document compliance with Condition D.2.16(d), the Permittee shall maintain records of the fan amperage or duct pressure of the RHF thermal oxidizer once per day. 3.10~~, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (i) ~~To document compliance with Condition D.2.17 and D.2.19, the Permittee shall maintain records of the inspections required under Conditions D.2.17 and D.2.19.~~

- (g) ~~To document compliance with Condition D.2.10, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.~~
- (h) All records shall be maintained in accordance with Section C.22 - General Record Keeping Requirements, of this permit.

### Response to Comment 82

Condition D.2.21 is renumbered D.3.18.

Since IDEM changed the frequency of VE notations and parametric monitoring to once per day the record keeping requirements in D.3.18 (b), (e), (f) and (g) are revised to reflect the change.

Since IDEM deleted the baghouse inspection condition, the requirement to keep records of the inspections in condition D.3.18(i) has been removed.

IDEM has determined that the Permittee is not required to keep records of all preventive maintenance. Therefore, the requirements to keep records of the inspections in Condition D.3.18(j) have been removed.

The specific reference numbers for Section C requirements have been added to this permit and conditions renumbered as necessary. Therefore the permit is revised as follows:

#### D.2.21 3.18 Record Keeping Requirements

- (a) To document compliance with Condition D.2 **3.14(a)**, (if selected), the Permittee shall maintain records of the readings of the continuous opacity monitoring system of the Submerged Arc Furnace (SAF) ~~stack~~ **Stack 58**.
- (b) To document compliance with Condition D.2 **3.14 (b)(1)**, (if selected), the Permittee shall maintain the records of the observed opacity readings of the SAF Stack 58 at least once per ~~shift~~ **day**.
- (c) To document compliance with D.2 **3.14(b)(2)(A)** and (B), (if selected), the Permittee shall maintain records of the SAF continuous ~~chart~~ **electronic** recording of the pressure ~~loss differential~~ through the venturi constriction and water supply pressure of the SAF scrubber.
- (d) To document compliance with Condition D.2 **3.15**, the Permittee shall maintain records of the thermal oxidizer temperature on a continuous basis.
- (e) To document compliance with Condition D.2 **3.16(a)**, the Permittee shall maintain records of ~~the total static~~ pressure drop and flow rate of the RHF SAF scrubber, at least once per ~~shift~~ **day**.
- (f) To document compliance with Condition D.2 **3.16(b)**, the Permittee shall maintain records of the ~~total static~~ pressure drop of the SAF desulfurization station baghouse at least once per ~~shift~~ **day**.
- (g) To document compliance with Condition D.2 **3.16(c)**, the Permittee shall maintain records of the ~~total static~~ pressure drop of the RHF discharge chute baghouse at least once per ~~shift~~ **day**.
- (h) ~~To document compliance with Condition D.2.16(d), the Permittee shall maintain records of the fan amperage or duct pressure of the RHF thermal oxidizer once per day.~~

- (i) ~~To document compliance with Condition D.2.17 and D.2.19, the Permittee shall maintain records of the inspections required under Conditions D.2.17 and D.2.19.~~
- (j) ~~To document compliance with Condition D.2.10, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.~~
- (k)(h) All records shall be maintained in accordance with Section C.19 - General Record Keeping Requirements, of this permit.

### Comment 83

#### D.2.22 Reporting Requirements

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The Permittee shall submit on a quarterly basis records of excess opacity ~~emissions readings~~ (defined in 326 IAC 3-5-7 and 40 CFR Part 60.7) ~~opacity readings taken~~. These reports shall be submitted no later than thirty (30) calendar days after the end of each calendar quarter and in accordance with Section C.23- General Reporting Requirements. The report submitted by the Permittee does require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

### Response to Comment 83

Condition D.2.22 is renumbered D.3.19.

The language change clarifies the type of readings that are reported. Therefore the permit is revised as follows:

#### D.2.22 3.19 Reporting Requirements

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The Permittee shall submit, on a quarterly basis records of excess opacity ~~emissions readings~~ (defined in 326 IAC 3-5-7 and 40 CFR Part 60.7) ~~opacity readings taken~~. These reports shall be submitted no later than thirty (30) calendar days after the end of each calendar quarter and in accordance with Section C.20 - General Reporting Requirements. The report submitted by the Permittee does require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

### Comment 84

#### D.3.1 Particulate Matter - Best Available Control Technology [326 IAC 2-2-3]

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Pursuant to CP-033-9187-00043, issued March 24, 1998, 326 IAC 2-2-3, the coal and iron ore receiving shall be conducted in a shed. ~~The shed shall have closure material over the door openings with air pressure~~ Pressure in the shed shall be maintained at a level to ensure the particulate material does not escape through the doors. The drop point and shed shall each have capture systems for particulate matter which are exhausted to one (1) baghouse for control. Particulate emissions shall not exceed 0.5 pounds per hour from ~~stacks~~ Stacks 67 and 68.

### Response to Comment 84

Condition D.3.1 is renumbered D.4.1.

The operation validation letter sent December 28, 1998, states Iron Dynamics did not install the closure material over the doors of the coal and iron ore receiving shed because of the extra high capacity of the baghouse captures all fugitive dust from car dumping.

However, the requirement to have closure material over the door openings with air pressure maintained at a level to ensure particulate matter does not escape from the doors is a BACT requirement for the coal and iron ore receiving shed in CP033-9187-00043 Condition 29. If the Permittee wants to remove this requirement a request to revise the BACT requirement can be submitted for review. Therefore, the permit is not revised as a result of this comment.

Therefore, the permit is revised as follows:

**D.34.1 Particulate Matter - Best Available Control Technology [326 IAC 2-2-3]**

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Pursuant to CP-033-9187-00043, issued March 24, 1998, 326 IAC 2-2-3, the coal and iron ore receiving shall be conducted in a shed. The shed shall have closure material over the door openings with air pressure in the shed maintained at a level to ensure the particulate material does not escape through the doors. The drop point and shed shall each have capture systems for particulate matter which are exhausted to one (1) baghouse for control. Particulate emissions shall not exceed 0.5 pounds per hour from ~~stacks~~ **Stacks 67 and 68.**

**Comment 85**

**D.3.2 Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]**

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(a) ~~{NOT A PART OF SOURCE DESCRIBED}~~

~~Pursuant to CP-033-80919187-00043, issued on June 25, 1997~~ March 24, 1998 and 326 IAC 2-2-3, ~~the visible emissions from the coal receiving shed building opening or rotary car dumper Stacks 67 and iron conveyers shall be covered and the transfer points enclosed. The visible emissions at the discharged and transfer point 68 shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9 Appendix A) pursuant to 326 IAC 5-1-4.~~

(b) ~~Pursuant to CP 033-8091-00043, issued on June 25, 1997 and 326 IAC 2-2-3, the visible emissions from vents, stacks and building roof monitors, unless otherwise specified, shall not exceed three (3%) percent opacity. Visible emissions shall be determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A) pursuant to 326 IAC 5-1-4.~~

(c) ~~Pursuant to CP-033-9187-00043, issued March 24, 1998 and 326 IAC 2-2-3, the visible emissions from any building opening, shed or storage silo shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A) pursuant to 326 IAC 5-1-4.~~

**Response to Comment 85**

Condition D.3.2 is renumbered D.4.2.

A new exhaust and control system for the railcar dumper and shed was permitted in construction permit CP-033-9187-00043. The opacity limits from the original construction permit CP 089-8091-00043 were for the other processes not the railcar dumper and shed. Names of specific equipment and stacks were not included in the construction permit conditions for this equipment. Therefore, the permit is revised as follows:

**D.-34.2 Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]**

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(a) ~~Pursuant to CP-033-80919187-00043, issued on June 25, 1997 and 326 IAC 2-2-3, the coal and iron conveyers shall be covered and the transfer points enclosed. The visible~~

~~emissions at the discharged and transfer point shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9 Appendix A) pursuant to 326 IAC 5-1-4.~~

- (b) ~~Pursuant to CP-033-8091-00043, issued on June 25, 1997 and 326 IAC 2-2-3, the visible emissions from vents, stacks and building roof monitors, unless otherwise specified, shall not exceed three (3%) percent opacity. Visible emissions shall be determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A) pursuant to 326 IAC 5-1-4.~~
- (e) Pursuant to CP-033-8091 **9187**-00043, issued on June 25, 1997 **March 24, 1998** and 326 IAC 2-2-3, **the visible emissions from the coal receiving shed building opening or rotary car dumper Stacks 67** and iron conveyers shall be covered and the transfer points enclosed. ~~The visible emissions at the discharged and transfer point 68 shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 readings taken in accordance with EPA Method 9 Appendix A) pursuant to 326 IAC 5-1-4.~~

#### Comment 86

##### D.3 4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section C- Preventive Maintenance Plan, of this permit, is required for ~~receiving shed and railcar dumper, and associated the~~ shed baghouse.

#### Response to Comment 86

Condition D.3.3 is renumbered D.4.3.

After further review, IDEM has determined the Preventive Maintenance Plan will be required for the shed and baghouse in order to prevent excess emissions. In addition to preventive maintenance performed on the control devices, preventive maintenance should be performed on the receiving shed because lack of proper maintenance on the receiving shed as an enclosure can result in increased emissions. The permit is not revised as a result of this comment.

The reference for Preventive Maintenance Plan in the renumbered condition D.4.3 is revised. The permit is revised as follows.

##### D.3 4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section ~~C-~~**B.10**-Preventive Maintenance Plan, of this permit, is required for the receiving shed ~~and railcar dumper, and associated shed~~ baghouse.

#### Comment 87

##### D.3 4.4 Particulate (PM/PM<sub>10</sub>) Best Available Control Technology [326 IAC 2-2-3]

Pursuant to CP-033-8091-00043, issued on June 25, 1997, the baghouse for particulate control shall be in operation and control emissions from the receiving shed and railcar dumper at all times the ~~receiving shed and~~ railcar dumper are in operation.

### Response to Comment 87

Condition D.3.4 is renumbered D.4.4.

The condition citation for BACT is removed, because the requirement to operate the controls device at all times is not a BACT requirement in the construction permit CP-033-9187-00043.

A new exhaust and control system for the railcar dumper and shed was permitted in the construction permit CP-033-9187-00043. The requirements for the new exhaust and control system supersede the requirements in CP-033-8091-00043.

The rail car unloading operation is intermittent, so the baghouse operates when the unloading (railcar dumper) is in operation. The permit is revised as follows:

#### ~~D.3.4.4 Particulate (PM/PM<sub>10</sub>) Control Best Available Control Technology [326 IAC 2-2-3]~~

~~Pursuant to CP-033-8091-00043, issued on June 25, 1997~~ **March 24, 1998**, the baghouse for particulate control shall be in operation and control emissions from the receiving shed and railcar dumper at all times the receiving shed and railcar dumper are in operation.

### Comment 88

#### ~~D.3.5 Visible Emission Notations~~

- ~~(a) Visible emission notations of the receiving shed and railcar dumper stacks 67 and 68, exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. 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) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan, Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit.~~

### Response to Comment 88

Condition D.3.5 is renumbered D.4.5.

326 IAC 2-7-5(1) and 326 IAC 2-7-6(1) provide IDEM the authority to require compliance monitoring conditions as necessary to assure continuous compliance with the emission limits. These rule cites are included as part of the title of the compliance monitoring section of the permit. The baghouse must operate properly in order for the receiving shed and railcar dumper to achieve compliance; therefore, it is reasonable and necessary to require the source to monitor visible emissions from the baghouse

periodically. The Part 70 permit program is based on the ability of the source to demonstrate continuous compliance with the conditions in this permit. The status of the monitor parameters are necessary to demonstrate continuous compliance with the conditions of the Part 70 permit. Therefore, the permit condition is not revised as a result of this comment.

Upon further review, IDEM has determined that once per day monitoring of the visible emission notations is generally sufficient to ensure proper operation of the control device. IDEM has also determined that monitoring these parameters once per day is sufficient to satisfy the requirements of the Part 70 rules at 326 IAC 2-7-5 and 326 IAC 2-7-6.

Compliance monitoring conditions such as the requirement to perform visible emission notations are necessary to demonstrate continuous compliance with the permit requirements. Visible emission notations are used to indicate compliance with the BACT requirements of this permit.

#### D.3.5 4.5 Visible Emission Notations

- (a) Visible emission notations of the receiving shed and railcar dumper Stacks 67 and 68, exhaust shall be performed once per ~~shift~~ **day** during normal daylight operations when exhausting to the atmosphere. 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) ~~The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an~~ If abnormal emissions **are** observed, **the Permittee shall take reasonable response steps in accordance with Section C.16 - Response to Excursions or Exceedances.** Failure to take response steps in accordance with ~~Section C.16 - Compliance Response Plan—Preparation, Implementation, Records and Reports~~ **Response to Excursions or Exceedances** shall be considered a deviation from this permit.

#### **Comment 89**

{NO REGULATORY AUTHORITY}

#### D.3.6 Parametric Monitoring

- ~~(a) The Permittee shall record the total static pressure drop across the Railcar Unloading Shed Baghouse used in conjunction with the Railcar Unloading Shed and Rail Car Dumper, at least once per shift when the Railcar Unloading Shed and Rail Car Dumper are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 to 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C—Compliance Response Plan—Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C—~~

~~Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.~~

{SINGLE COMPARTMENT, NO DELTAP.}

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

## Response to Comment 89

Condition D.3.6 is renumbered D.4.6.

326 IAC 2-7-5(1) and 326 IAC 2-7-6(1) provide IDEM the authority to require compliance monitoring conditions as necessary to assure continuous compliance with the emission limits. These rule cites are included as part of the title of the compliance monitoring section of the permit. The baghouse must operate properly in order for the receiving shed and railcar dumper to achieve compliance; therefore, it is reasonable and necessary to require the source to monitor the pressure drop of the baghouse periodically. The Part 70 permit program is based on the ability of the source to demonstrate continuous compliance with the conditions in this permit. The status of the monitor parameters are necessary to demonstrate continuous compliance with the conditions of the Part 70 permit.

Condition 34 in CP033-9187-00043 states "That all baghouses shall be operated at all times when any of its associated equipment is in operation. A new exhaust and control system for the coal/iron ore receiving is listed as part of the construction. **The pressure drops from the baghouses shall be maintained within the range of 4 to 10 inches of water.**" (The Delta P for the railcar and shed baghouse was listed in the Part 70 permit application as 1.0 to 5.0.) The monitoring of the pressure drop ensures continuous compliance with this Part 70 permit. The permit is not revised as a result of this comment.

Upon further review, IDEM has determined that once per day monitoring of the control device is generally sufficient to ensure proper operation of the control device. IDEM has also determined that monitoring these parameters once per day is sufficient to satisfy the requirements of the Part 70 rules at 326 IAC 2-7-5 and 326 IAC 2-7-6. The permit is revised as follows:

### D.3 4.6 Parametric Monitoring

- 
- (a) The Permittee shall record the ~~total static~~ pressure drop across the Railcar Unloading Shed Baghouse used in conjunction with the Railcar Unloading Shed and Rail Car Dumper, at least once per ~~shift~~ **day** when the Railcar Unloading Shed and Rail Car Dumper are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 to 5.0 inches of water or a range established during the latest Stack test, the Permittee shall take reasonable response steps in accordance with ~~Section C Compliance Response Plan Preparation, Implementation, Records, and Reports~~ **Section C.16 – Response to excursions or Exceedances**. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with ~~Section C Compliance Response Plan Preparation, Implementation, Records, and Reports~~ **Section C.16 – Response to excursions or Exceedances** shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C.4413-~~Pressure Gauge and Other Instrument Specifications~~, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

## Comment 90

### D.3.7 ~~Baghouse Inspections~~

~~An inspection shall be performed each calendar quarter of all bags controlling the Railcar Unloading Shed and railcar dumper. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.~~

### D.4.6 Baghouse Inspections [326 IAC ???]

An inspection shall be performed annually of all bags controlling the Railcar Unloading Shed and railcar dumper. All defective bags shall be replaced or repaired.

### D.3.8 ~~Broken or Failed Bag Detection~~

~~In the event that bag failure has been observed:~~

~~{NOT A MULTICOMPARTMENT BAGHOUSE}~~

~~(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. 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.~~

~~(b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have 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).~~

### D.4.7 Broken or Failed Bag Detection [326 IAC ???]

In the event that bag failure has been observed, the Compliance response Plan shall be initiated in accordance with Section C.17 – Compliance Response Plan – Preparation, implementation, Records and Reports.

## Response to Comment 90

### Baghouse Inspections

Upon further review, IDEM has determined that it is the Permittee's responsibility to include routine control device inspection requirements in the applicable preventive maintenance plan. Since the Permittee is in the best position to determine the appropriate frequency of control device inspections and the details regarding which components of the control device should be inspected, the conditions

requiring control device inspections have been removed from the permit.

#### Broken or Failed Bag Detection

Paragraph (a) of the Broken or Failed Baghouse condition has been removed. For multi-compartment baghouses, the permit will not specify what actions the Permittee needs to take in response to a broken bag. Since this baghouse is a single compartment baghouse paragraph (b) applies.

Paragraph (b) of this condition has been revised for those processes that operate in batch mode. The condition required an emission unit to be shut down immediately in case of baghouse failure. However, IDEM is aware there can be safety issues with shutting down a process in the middle of a batch. IDEM also realizes that in some situations, shutting down an emissions unit mid-process can cause equipment damage. Therefore, since it is not always possible to shut down a process with material remaining in the equipment, IDEM has revised the condition to state that in the case of baghouse failure, the feed to the process must be shut off immediately, and the process shall be shut down as soon as practicable.

Condition D.3.8 is renumbered D.4.7. The permit is revised as follows:

#### D.4.7 Baghouse Inspections

~~An inspection shall be performed each calendar quarter of all bags controlling the Railcar Unloading Shed and railcar dumper. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.~~

#### D.3.8 4.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) ~~For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C—Compliance Response Plan—Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. 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.~~
- (a) For a single compartment baghouses **controlling emissions from a process operated continuously**, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then a failed units and the associated process **shall** be shut down immediately until the failed units **have 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.11 - Emergency Provisions).

- (b) For a single compartment baghouses **controlling emissions from a batch process**, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then **the feed to the process failed units and the associated process will shall** be shut down immediately until the failed units have 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 shed and railcar dumper.** 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.11 - Emergency Provisions).

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

#### Comment 91

##### D.3.9 Record Keeping Requirements

- (a) ~~To document compliance with Condition D.3.5, the Permittee shall maintain records of the once per shift visible emission notations of the shed and railcar dumper stacks 67 and 68 exhaust.~~
- ~~(b) To document compliance with Condition D.3.6, the Permittee shall maintain records of the once per shift differential static pressure during normal operation.~~
- ~~(c) To document compliance with Conditions D.3.7, the Permittee shall maintain records of the results of the inspections required in Condition D.3.7.~~
- ~~(d) To document compliance with Condition D.3.3, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.~~
- ~~(e) All records shall be maintained in accordance with Section C – General Record Keeping Requirements of this permit.~~

##### D.4.8 Record Keeping Requirements

- (a) To document compliance with Conditions D.4.6, the Permittee shall maintain records of the results of the inspections required.
- (b) To document compliance with Conditions D.4.3, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C.22 – General Record Keeping Requirements of this permit.

#### Response to Comment 91

Condition D.3.9 is renumbered D.4.8.

Since IDEM changed the frequency of VE notations and parametric monitoring to once per day, the record keeping requirements in D.4.8 (a) and (b) are revised to reflect the change.

Since IDEM deleted the baghouse inspection condition, the requirement to keep records of the inspections in condition D.4.8(c) has been removed.

IDEM has determined that the Permittee is not required to keep records of all preventive maintenance. Therefore, the requirements to keep records of the inspections in Condition D.4.8 (d) have been removed.

The specific reference numbers for Section C requirements have been added to this permit and conditions renumbered as necessary. Therefore, the permit is revised as follows:

**D.3-9 4.8 Record Keeping Requirements**

- (a) To document compliance with Condition D.~~3.4.5~~, the Permittee shall maintain records of the once per ~~shift~~ **day** visible emission notations of the shed and railcar dumper stacks 67 and 68 exhaust.
- (b) To document compliance with Condition D.~~3.4.6~~, the Permittee shall maintain records of the once per ~~shift~~ **day** ~~differential static~~ pressure **drop** during normal operation.
- (c) ~~To document compliance with Conditions D.3.7, the Permittee shall maintain records of the results of the inspections required in Condition D.3.7.~~
- (d) ~~To document compliance with Condition D.3.3, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.~~
- (e) **(c)** All records shall be maintained in accordance with Section C.19 - General Record Keeping Requirements of this permit.

**Comment 92**

**Section D.4 FACILITY OPERATION CONDITIONS**

**Section D.5 FACILITY OPERATION CONDITIONS**

**Response to Comment 92**

Section D.5 and all conditions in Section D.5 have been renumbered. Therefore, the permit is revised as follows:

**Section D.4 5 FACILITY OPERATION CONDITIONS**

**Comment 93**

**D.4 5.2 NSPS Coal Preparation Plant [40 CFR 60, Subpart Y] [326 IAC 12-1]**

- (a) Pursuant to SSM033-12992-00076, 326 IAC 12-1 and 40 CFR 60, Subpart Y (Coal Preparation Plant), the filterable PM emissions from the thermal coal dryer 75 shall not exceed 0.031 ~~grain~~ grains per dscf through Stack 75.
- (b) Pursuant to SSM033-12992-00076, 326 IAC 12-1 and 40 CFR 60, Subpart Y (Coal Preparation Plant), the visible emissions from the thermal coal dryer ~~stack~~ Stack 75 shall not exceed 20%.

**Response to Comment 93**

Condition D.4.2 is renumbered D.5.2.

PM has been changed to “particulate matter” as this is the exact rule language from 40 CFR 60, Subpart Y. The description of particulate matter as “filterable” is not in the rule. Therefore, the permit is revised as follows:

**D.45.2 NSPS Coal Preparation Plant [40 CFR 60, Subpart Y] [326 IAC 12-1]**

- (a) Pursuant to SSM033-12992-00076, 326 IAC 12-1 and 40 CFR 60, Subpart Y (Coal Preparation Plant), the **PM particulate matter** emissions from the thermal coal dryer 75 shall not exceed 0.031 ~~grain~~ **grains** per dscf through Stack 75.
- (b) Pursuant to SSM033-12992-00076, 326 IAC 12-1 and 40 CFR 60, Subpart Y (Coal Preparation Plant), the visible emissions from the thermal coal dryer ~~stack~~ **Stack** 75 shall not exceed 20%.

**Comment 94**

**D.-4 5.3 Particulate Matter (PM/PM<sub>10</sub>) - Best Available Control Technology [326 IAC 2-2-3]**

Pursuant to SSM033-12992 -00076, issued May 15, 2002 and 326 IAC 2-2-3, the PM/PM<sub>10</sub> (where PM<sub>10</sub> includes both filterable and condensable components) emissions from the Coal Dryer baghouse B-75 shall not exceed a PM/PM<sub>10</sub> emission rate of 0.0052 grains per dscf through ~~stacks~~ **Stack** 75. The PM/PM<sub>10</sub> shall not exceed 1.11 lb per hour from Coal Dryer ~~stack~~ **Stack** 75.

**Response to Comment 94**

Condition D.4.3 is renumbered D.5.3.

**D.-4 5.3 Particulate Matter (PM/PM<sub>10</sub>) - Best Available Control Technology [326 IAC 2-2-3]**

Pursuant to SSM033-12992 -00076, issued May 15, 2002 and 326 IAC 2-2-3, the PM/PM<sub>10</sub> (where PM<sub>10</sub> includes both filterable and condensable components) emissions from the Coal Dryer baghouse B-75 shall not exceed a PM/PM<sub>10</sub> emission rate of 0.0052 grains per dscf through ~~stacks~~ **Stack** 75. The PM/PM<sub>10</sub> shall not exceed 1.11 lb per hour from Coal Dryer ~~stack~~ **Stack** 75.

**Comment 95**

**D.-4 5.4 Particulate (PM/PM<sub>10</sub>) - Particulate Emissions Limitations for Manufacturing Processes [40 CFR 52 Subpart P][326 IAC 6-3-2]**

Pursuant to SSM033-12992 -00076, issued May 15, 2002, the particulate matter (PM) from the Coal Dryer shall be limited as follows:

Process	Process Weight (Lbs/hr)	PM Emission Limit (Lbs/hr)
Coal Dryer	120,000	46.3

This limit was calculated as follows:

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

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

### Response to Comment 95

Condition D.4.4 is renumbered D.5.4.

The 326 IAC 6-3 revisions that became effective on June 12, 2002 were approved into the State Implementation Plan on September 23, 2005. These rules replace the previous version of 326 IAC 6-3 (Process Operations) that had been part of the SIP; therefore, the requirements of the previous version of 326 IAC 6-3-2 are no longer applicable to this source. Condition D.5.4 has been revised to remove 40 CFR 52 Subpart P which contained these requirements. Therefore, the permit is revised as follows:

**D.45.4** Particulate (PM/PM<sub>10</sub>) (Particulate Emissions Limitations for Manufacturing Processes)  
~~[40 CFR 52 Subpart P][326 IAC 6-3-2]~~

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Pursuant to SSM033-12992 -00076, issued May 15, 2002, **and 326 IAC 6-3-2**, the particulate matter (PM) from the Coal Dryer shall be limited as follows:

#### Table of Contents

**D.5.4** Particulate (PM/PM<sub>10</sub>) (Particulate Emissions Limitations for Manufacturing Processes)  
~~[40 CFR 52 Subpart P][326 IAC 6-3-2]~~

### Comment 96

**D.-4 5.5** Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]

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- (a) Pursuant to SSM 033-12992 -00076, issued on May 15, 2002 and 326 IAC 2-2-3, the visible emissions discharged into the atmosphere from the coal dryer ~~stack~~ Stack 75 shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A) ~~pursuant to 326 IAC 5-1-4.~~
- (b) Pursuant to SSM 033-12992 -00076, issued on May 15, 2002 and 326 IAC 2-2-3, the visible emissions discharged into the atmosphere from the vents and openings in the buildings housing the coal dryer shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A) ~~pursuant to 326 IAC 5-1-4.~~

### Response to Comment 96

Condition D.4.5 is renumbered D.5.5.

326 IAC 5-1-4(a)(1) states that the determination of opacity is by means of visible emissions reading in accordance with 40 CFR 60, Appendix A, Method 9. Reference to the 326 IAC 5-1-4 is not removed from the permit. Also, this language is language taken verbatim from the SSM033-12992 -00076, issued on May 15, 2002. Therefore, the permit is not revised as a result of this comment.

**D.-4 5.5** Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]

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### Comment 97

**D.-4 5.6** Sulfur Dioxide (SO<sub>2</sub>) - Best Available Control Technology [326 IAC 2-2-3]

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Pursuant to SSM 033-12992 -00076, issued May 15, 2002 and 326 IAC 2-2-3, the sulfur dioxide emissions from the Coal Dryer shall not exceed 0.00059 pounds per MMBtu of heat input. The SO<sub>2</sub> emissions shall not exceed 0.015 pounds per hour ~~a~~ from the Coal Dryer ~~stack~~ Stack 75.

D.-4 5.7 Volatile Organic Compounds (VOC) - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to SSM 033-12992-00076, issued May 15, 2002 and 326 IAC 2-2-3, the volatile organic compound emissions from the Coal Dryer shall not exceed 0.0053 pounds per MMBtu of heat input. The VOC emissions shall not exceed 0.14 pounds per hour from the Coal Dryer ~~stack~~ Stack 75.

D.-4 5.8 Carbon Monoxide (CO) - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to SSM 033-12992-00076, issued May 15, 2002 and 326 IAC 2-2-3, the carbon monoxide emissions from the Coal Dryer shall not exceed 0.082 pounds per MMBtu of heat input. The CO emissions shall not exceed 2.1 pounds per hour from Coal Dryer ~~stack~~ Stack 75.

D.-4 5.9 Nitrogen Oxides (NOx) - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to SSM 033-12992-00076, issued May 15, 2002 and 326 IAC 2-2-3, the nitrogen oxide(s) emissions from the Coal Dryer shall be controlled by the use of low-NOx natural gas-fired burners and shall not exceed 0.049 pounds per MMBtu of heat input. The NOx emissions shall not exceed 1.25 pounds per hour from the Coal Dryer ~~stack~~ Stack 75.

**Response to Comment 97**

Conditions D.4.6, D.4.7, D.4.8 and D.4.9 are renumbered D.5.6, D.5.7, D.5.8 and D.5.9.

All conditions in Section D.5 have been renumbered and all typos have been revised.

D.-4 5.6 Sulfur Dioxide (SO<sub>2</sub>) - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to SSM 033-12992 -00076, issued May 15, 2002 and 326 IAC 2-2-3, the sulfur dioxide emissions from the Coal Dryer shall not exceed 0.00059 pounds per MMBtu of heat input. The SO<sub>2</sub> emissions shall not exceed 0.015 pounds per hour ~~a~~ from the Coal Dryer ~~stack~~ **Stack 75**.

D.-4 5.7 Volatile Organic Compounds (VOC) - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to SSM 033-12992-00076, issued May 15, 2002 and 326 IAC 2-2-3, the volatile organic compound emissions from the Coal Dryer shall not exceed 0.0053 pounds per MMBtu of heat input. The VOC emissions shall not exceed 0.14 pounds per hour from the Coal Dryer ~~stack~~ **Stack 75**.

D.-4 5.8 Carbon Monoxide (CO) - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to SSM 033-12992-00076, issued May 15, 2002 and 326 IAC 2-2-3, the carbon monoxide emissions from the Coal Dryer shall not exceed 0.082 pounds per MMBtu of heat input. The CO emissions shall not exceed 2.1 pounds per hour from Coal Dryer ~~stack~~ **Stack 75**.

D.-4 5.9 Nitrogen Oxides (NOx) - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to SSM 033-12992-00076, issued May 15, 2002 and 326 IAC 2-2-3, the nitrogen oxide(s) emissions from the Coal Dryer shall be controlled by the use of low-NOx natural gas-fired burners and shall not exceed 0.049 pounds per MMBtu of heat input. The NOx emissions shall not exceed 1.25 pounds per hour from the Coal Dryer ~~stack~~ **Stack 75**.

**Comment 98**

D.-4 5.10 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section C- Preventive Maintenance Plan, of this permit, is required for ~~coal crusher, coal dryer and the baghouse associated baghouse.~~ with the coal crusher and coal dryer.

### Response to Comment 98

Condition D.4.10 is renumbered D.5.10.

After further review, IDEM has determined, preventive maintenance plans are required for the coal dryer and baghouse in order to prevent excess emissions. In addition to preventive maintenance performed on the control devices, preventive maintenance should be performed on the coal dryer because lack of proper maintenance on the coal dryer can result in increased emissions of CO and NOx.

The reference for Preventive Maintenance Plan is revised.

The permit is revised as follows:

#### D.-4 5.10 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section ~~C-~~ **B.10** Preventive Maintenance Plan, of this permit, is required for the ~~coal crusher,~~ coal dryer and the associated baghouse.

### Comment 99

#### D.-4 5.11 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11] [40 CFR 60 Subpart Y]

- (a) Pursuant to ~~SSM033-12992-00076, issued May 15, 2002, within sixty (60) days of achieving maximum production rate, but no later than 18 months after issuance of SSM033-12992-00076 and, in order to demonstrate compliance~~ [ INITIAL TESTING ALREADY PERFORMED.]
- (b) ~~The Permittee shall perform PM/PM<sub>10</sub> testing on the coal dryer baghouse Stack 75, every five (5) years after demonstrating compliance with conditions D.4.1, D.4.2 and D.4.3, the Permittee shall perform PM/PM<sub>40</sub> utilizing testing methods approved by the Commissioner in accordance with Section C.10 testing on the coal dryer baghouse Stack 75, utilizing a testing method approved by the Commissioner in accordance with Section C-~~ Performance Testing and as specified in 40 CFR 60.254. PM<sub>10</sub> includes both filterable and condensable components.
- (b) ~~The Permittee shall perform PM/PM<sub>40</sub> testing on the Coal Dryer baghouse Stack 75 every five (5) years after completing the testing required in item (a) of this condition, utilizing testing methods approved by the Commissioner, in accordance with Section C-~~ Performance Testing. PM<sub>40</sub> includes both filterable and condensable components.

### Response to Comment 99

Condition D.4.11 is renumbered D.5.11.

The initial PM/PM<sub>10</sub> stack tests were performed on the Coal Dryer on February 19 and 20, 2004. The testing requirement language in Section D.5.11 is changed. Therefore, the permit is revised as follows:

#### D.-4 5.11 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11] [40 CFR 60 Subpart Y]

- (a) Pursuant to ~~SSM033-12992-00076, issued May 15, 2002, within sixty (60) days of achieving maximum production rate, but no later than 18 months after issuance of SSM033-12992-00076 and, in order to demonstrate compliance~~ with conditions D.4.1, D.4.2 and D.4.3, the Permittee shall perform PM/PM<sub>10</sub> testing on the coal dryer baghouse Stack 75, utilizing a testing method approved by the Commissioner in accordance with Section ~~C-~~ Performance Testing and as specified in 40 CFR 60.254. PM<sub>10</sub> includes

~~both filterable and condensable components.~~

- (b) ~~The Permittee shall perform PM/PM<sub>10</sub> testing on the Coal Dryer baghouse Stack 75 every five (5) years after completing the testing required in item (a) of this condition, utilizing testing methods approved by the Commissioner, in accordance with Section C— Performance Testing. PM<sub>10</sub> includes both filterable and condensable components.~~

**Within five (5) years from February 19, 2004 and in order to demonstrate compliance with Condition D.5.1, D.5.2 and D.5.3, the Permittee shall perform PM/PM<sub>10</sub> testing on the coal dryer baghouse Stack 75, utilizing testing methods as approved by the Commissioner in accordance with Section C. 9- Performance Testing. These tests shall be repeated at least once every five (5) years. PM<sub>10</sub> includes filterable and condensable components.**

#### **Comment 100**

##### D.-4 5.12 Particulate (PM/PM<sub>10</sub>) Best Available Control Technology [326 IAC 2-2-3]

- (a) Pursuant to CP033-8091-00043, issued on June 25, 1997, the baghouse for particulate control shall be in operation and control emissions from the coal crusher at all times the coal crusher is in operation.
- (b) Pursuant to SSM033-12992 -00076, issued May 15, 2002, the baghouse for particulate control shall be in operation and control emissions from the coal dryer at all times the coal dryer is in operation.

#### **Response to Comment 100**

Condition D.4.12 is renumbered D.5.12.

##### D.-4 5.12 Particulate (PM/PM<sub>10</sub>) Best Available Control Technology [326 IAC 2-2-3]

#### **Comment 101**

##### D.4.13 Visible Emission Notations

- (a) ~~Visible emission notations of the Coal Dryer Stack 75, exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. 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) ~~The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C— Compliance Response Plan, Preparation,~~

~~Implementation, Records and Reports, shall be considered a deviation from this permit.~~  
{NO REGULATORY AUTHORITY}

### Response to Comment 101

Condition D.4.13 is renumbered D.5.13.

326 IAC 2-7-5(1) and 326 IAC 2-7-6(1) provide IDEM the authority to require compliance monitoring conditions as necessary to assure continuous compliance with the emission limits.

These rule cites are included as part of the title of the compliance monitoring section of the permit.

The Part 70 permit program is based on the ability of the source to demonstrate continuous compliance with the conditions in this permit. The status of the monitor parameters are necessary to demonstrate continuous compliance with the conditions of the Part 70 permit. Therefore, the permit condition is not revised as a result of this comment.

Upon further review, IDEM has determined that once per day monitoring of the of visible emission notations is generally sufficient to ensure proper operation of the control device. IDEM has also determined that monitoring these parameters once per day is sufficient to satisfy the requirements of the Part 70 rules at 326 IAC 2-7-5 and 326 IAC 2-7-6. Therefore, the permit is revised as follows:

#### D.45.13 Visible Emission Notations

- (a) Visible emission notations of the Coal Dryer Stack 75, exhaust shall be performed once per ~~shift~~ **day** during normal daylight operations when exhausting to the atmosphere. 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) ~~The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an~~ **If abnormal emissions is are observed, the Permittee shall take reasonable response steps in accordance with Section C.16 - Response to Excursions or Exceedances.** Failure to take response steps in accordance with Section C.16 - ~~Compliance Response Plan—Preparation, Implementation, Records and Reports~~ **Response to Excursions or Exceedances** shall be considered a deviation from this permit.

### Comment 102

#### D.4.14 Baghouse Inspections

~~An inspection shall be performed each calendar quarter of all bags controlling the Coal Dryer. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.~~

D.5.14 Baghouse Inspections {NO REGULATORY AUTHORITY}

An inspection shall be performed annually of all bags controlling the Coal Crusher. All defective bags will be replaced or repaired.

D.4.15 Broken or Failed Bag Detection

~~In the event that bag failure has been observed:~~

~~{NOT A MULTI COMPARTMENT BAGHOUSE.}~~

- ~~(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. 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.~~
- ~~(b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have 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).~~

D.5.15 Broken or Failed Bag Detection {NO REGULATORY AUTHORITY}

In the event that bag failure has been observed, the Compliance Response Plan shall be initiated in accordance with Section C.17 – compliance Response Plan – Preparation, Implementation, Records and Reports.

**Response to Comment 102**

Condition D.4.15 is renumbered D.5.14.

326 IAC 2-7-5(1) and 326 IAC 2-7-6(1) provide IDEM the authority to require compliance monitoring conditions as necessary to assure continuous compliance with the emission limits. These rule cites are included as part of the title of the compliance monitoring section of the permit. The Coal Dryer, baghouse must operate properly in order for the Coal Dryer to achieve compliance.

Baghouse Inspections

Upon further review, IDEM has determined that it is the Permittee's responsibility to include routine control device inspection requirements in the applicable preventive maintenance plan. Since the Permittee is in the best position to determine the appropriate frequency of control device

inspections and the details regarding which components of the control device should be inspected, the conditions requiring control device inspections have been removed from the permit.

#### Broken or Failed Bag Detection

Paragraph (a) of the Broken or Failed Baghouse condition has been deleted. This baghouse is not a multi-compartment baghouse.

Paragraph (b) of this condition has been revised for those processes that operate in batch mode. The condition required an emission unit to be shut down immediately in case of baghouse failure. However, IDEM is aware there can be safety issues with shutting down a process in the middle of a batch. IDEM also realizes that in some situations, shutting down an emissions unit mid-process can cause equipment damage. Therefore, since it is not always possible to shut down a process with material remaining in the equipment, IDEM has revised the condition to state that in the case of baghouse failure, the feed to the process must be shut off immediately, and the process shall be shut down as soon as practicable.

Therefore, the permit is revised as follows:

#### D.5.14 Baghouse Inspections

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~~An inspection shall be performed each calendar quarter of all bags controlling the Coal Dryer. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.~~

#### D.4.155.14 Broken or Failed Bag Detection

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In the event that bag failure has been observed:

- (a) ~~For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C—Compliance Response Plan—Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. 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.~~
- (b) (a) For a single compartment baghouses **controlling emissions from a process operated continuously**, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then a failed units and the associated process **shall** be shut down immediately until the failed units **have 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.11 - Emergency Provisions).

- (b) For a single compartment baghouses **controlling emissions from a batch process**, if ~~failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then the feed to the process failed units and the associated process will~~ **shall** be shut down immediately until the failed units ~~have~~ 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 coal dryer and crusher.** 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.11 - Emergency Provisions).

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

### Comment 103

~~D.4.16 Monitoring of Operations [40 CFR 60.253 Subpart Y]~~

D.5.16 Monitoring of Operations [40 CFR 60.253 Subpart Y]

- (a) The Permittee shall install, calibrate, maintain and continuously operate a monitoring device for the measurement of the temperature of the gas stream at the exit of the thermal dryer on a continuous basis. The monitoring device is to be certified by the manufacturer to be accurate within  $\pm 3^{\circ}$  Fahrenheit.
- (b) The monitoring device under paragraph (a) shall be recalibrated annually in accordance with the procedure under 40 CFR 60.13(b).

### Response to Comment 103

To clarify Condition D.5.16 and renumber the condition, the permit is revised as follows:

~~D.4.16~~ D.5.15 Monitoring of Operations [40 CFR 60.253 Subpart Y]

- (a) The Permittee shall install, calibrate, maintain and continuously operate a monitoring device for the measurement of the temperature of the gas stream at the exit of the thermal dryer on a continuous basis. The monitoring device is to be certified by the manufacturer to be accurate within  $\pm 3^{\circ}$  Fahrenheit.
- (b) The monitoring device under paragraph (a) shall be recalibrated annually in accordance with **the** procedure under 40 CFR 60.13(b).

### Comment 104

D.4.17 Record Keeping Requirements

- (a) To document compliance with Conditions D.5.14, the Permittee shall maintain records of the once results of inspections.
- (b) ~~To document compliance with Condition D.4.13, the Permittee shall maintain records of the once per shift visible emission notations of the Coal Dryer Stack 75 exhaust.~~
- (b) ~~To document compliance with Conditions D.4.14, the Permittee shall maintain records of the results of the inspections required in Condition D.4.14.~~

- ~~(c)~~ — To document compliance with Condition D.4.5.10., the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- ~~(d)~~(c) All records shall be maintained in accordance with Section C.22 - General Record Keeping Requirements of this permit.

#### Response to Comment 104

Condition D.4.17 is renumbered D.5.16.

Since IDEM changed the frequency of VE notations to once per day, the record keeping requirement in D.5.16 (a) is revised to reflect the change.

Since IDEM deleted the baghouse inspection condition, the requirement to keep records of the inspections in condition D.5.16 (b) has been removed.

IDEM has determined that the Permittee is not required to keep records of all preventive maintenance. Therefore, the requirement to keep records of the inspections in Condition D.5.16(c) has been removed.

The specific reference numbers for Section C requirements have been added to this permit and conditions renumbered as necessary. Therefore the permit is revised as follows:

#### D.4.17.16 Record Keeping Requirements

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- (a) To document compliance with Condition D.4.5.13, the Permittee shall maintain records of the once per ~~shift~~ **day** visible emission notations of the Coal Dryer Stack 75 exhaust.
- ~~(b)~~ — To document compliance with Conditions D.4.14, the Permittee shall maintain records of the results of the inspections required in Condition D.4.14.
- ~~(c)~~ — To document compliance with Condition D.4.10., the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- ~~(d)~~(b) All records shall be maintained in accordance with Section C.19- General Record Keeping Requirements of this permit.

#### Comment 105

#### SECTION D.5 6 FACILITY OPERATION CONDITIONS

##### D.5 6.1 Particulate Matter - Best Available Control Technology [326 IAC 2-2-3]

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Pursuant to SSM033-12992 -00076, issued May 15, 2002 and 326 IAC 2-2-3, the PM/PM10 (where PM10 includes both filterable and condensable components) emissions from the Ore Dryer baghouse B-76 shall not exceed a PM/PM<sub>10</sub> emission rate of 0.0052 grains per dscf through ~~stack~~ Stack 76. The PM/PM10 shall not exceed 1.56 lb per hour from Ore Dryer ~~stack~~ Stack 76.

#### Response to Comment 105

All conditions in Section D.5 have been renumbered D.6 and all typos have been revised as follows:

## SECTION D.5.6 FACILITY OPERATION CONDITIONS

Condition D.5.1 is renumbered D.6.1.

### D.5.6.1 Particulate Matter - Best Available Control Technology [326 IAC 2-2-3]

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Pursuant to SSM033-12992 -00076, issued May 15, 2002 and 326 IAC 2-2-3, the PM/PM10 (where PM10 includes both filterable and condensable components) emissions from the Ore Dryer baghouse B-76 shall not exceed a PM/PM<sub>10</sub> emission rate of 0.0052 grains per dscf through ~~stack~~ **Stack 76**. The PM/PM<sub>10</sub> shall not exceed 1.56 lb per hour from Ore Dryer ~~stack~~ **Stack 76**.

### Comment 106

### D.5.6.2 Particulate (PM/PM10) (Particulate Emissions Limitations for Manufacturing Processes) [~~40 CFR 52 Subpart P~~][326 IAC 6-3-2]

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Pursuant to SSM033-12992 -00076, issued May 15, 2002, the particulate matter (PM) from the Ore Dryer shall be limited as follows:

Process	Process Weight (Lbs/hr)	PM Emission Limit (Lbs/hr)
Ore Dryer	230,000	52.7

This limit was calculated as follows:

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

$$E = 55.0 P^{0.11} - 40$$

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

### Response to Comment 106

Condition D.5.2 is renumbered D.6.2.

The 326 IAC 6-3 revisions that became effective on June 12, 2002 were approved into the State Implementation Plan on September 23, 2005. These rules replace the previous version of 326 IAC 6-3 (Process Operations) that had been part of the SIP; therefore, the requirements of the previous version of 326 IAC 6-3-2 are no longer applicable to this source. Condition D.6.2 has been revised to remove 40 CFR 52 Subpart P which contained these requirements. Therefore, the permit is revised as follows:

### D.6.2 Particulate (PM/PM<sub>10</sub>) - Particulate Emissions Limitations for Manufacturing Processes [~~40 CFR 52 Subpart P~~][326 IAC 6-3-2]

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Pursuant to SSM033-12992 -00076, issued May 15, 2002, **and 326 IAC 6-3-2**, the particulate matter (PM) from the Ore Dryer shall be limited as follows

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### D.5.6.2 Particulate (PM/PM<sub>10</sub>) - Particulate Emissions Limitations for Manufacturing Processes [~~40 CFR 52 Subpart P~~][326 IAC 6-3-2]

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### Comment 107

#### D.-5 6.3 Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]

- (a) Pursuant to SSM033-12992-00076, issued on May 15, 2002 and 326 IAC 2-2-3, the visible emissions discharged into the atmosphere from the ore dryer ~~stack~~ **Stack** 76 shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A) ~~pursuant to 326 IAC 5-1-4.~~
- (b) Pursuant to SSM033-12992 -00076, issued on May 15, 2002 and 326 IAC 2-2-3, the visible emissions discharged into the atmosphere from the vents and openings in the buildings housing the ore dryer shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A) ~~pursuant to 326 IAC 5-1-4.~~

### Response to Comment 107

Condition D.5.3 is renumbered D.6.3.

326 IAC 5-1-4(a)(1) states that the determination of opacity by means of visible emissions reading in accordance with 40 CFR 60, Appendix A, Method 9. Reference to the 326 IAC 5-1-4 is not removed from the permit. Also, this language is language taken verbatim from the SSM 033-12992 -00076, issued on May 15, 2002. Therefore, the permit is not revised as a result of this comment.

#### D.-5 6.3 Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]

### Comment 108

#### D.-5 6.4 Sulfur Dioxide (SO<sub>2</sub>) - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to SSM033-12992-00076, issued May 15, 2002 and 326 IAC 2-2-3, the sulfur dioxide emissions from the Ore Dryer shall not exceed 0.00059 pounds per MMBtu of heat input. The SO<sub>2</sub> emissions shall not exceed 0.016 pounds per hour from the Ore Dryer ~~stack~~ **Stack** 76.

#### D.-5 6.5 Volatile Organic Compounds (VOC) - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to SSM033-12992-00076, issued May 15, 2002 and 326 IAC 2-2-3, the volatile organic compound emissions from the Ore Dryer shall not exceed 0.0053 pounds per MMBtu of heat input. The VOC emissions shall not exceed 0.15 pounds per hour from Ore Dryer ~~stack~~ **Stack** 76.

#### D.-5 6.6 Carbon Monoxide (CO) - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to SSM033-12992-00076, issued May 15, 2002 and 326 IAC 2-2-3, the carbon monoxide emissions from the Ore Dryer shall not exceed 0.082 pounds per MMBtu of heat input. The CO emissions shall not exceed 2.3 pounds per hour from Ore Dryer ~~stack~~ **Stack** 76.

### Response to Comment 108

Conditions D.5.4, D.5.5 and D.5.6 are renumbered D.6.4, D.6.5 and D.6.6. All typos have been revised.

#### D.-5 6.4 Sulfur Dioxide (SO<sub>2</sub>) - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to SSM033-12992-00076, issued May 15, 2002 and 326 IAC 2-2-3, the sulfur dioxide emissions from the Ore Dryer shall not exceed 0.00059 pounds per MMBtu of heat input. The SO<sub>2</sub> emissions shall not exceed 0.016 pounds per hour from the Ore Dryer ~~stack~~ **Stack** 76.

**D.-5 6.5 Volatile Organic Compounds (VOC) - Best Available Control Technology [326 IAC 2-2-3]**

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Pursuant to SSM033-12992-00076, issued May 15, 2002 and 326 IAC 2-2-3, the volatile organic compound emissions from the Ore Dryer shall not exceed 0.0053 pounds per MMBtu of heat input. The VOC emissions shall not exceed 0.15 pounds per hour from Ore Dryer ~~stack~~ **Stack 76**.

**D.-5 6.6 Carbon Monoxide (CO) - Best Available Control Technology [326 IAC 2-2-3]**

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Pursuant to SSM033-12992-00076, issued May 15, 2002 and 326 IAC 2-2-3, the carbon monoxide emissions from the Ore Dryer shall not exceed 0.082 pounds per MMBtu of heat input. The CO emissions shall not exceed 2.3 pounds per hour from Ore Dryer ~~stack~~ **Stack 76**.

**Comment 109**

**D.-5 6.7 Nitrogen Oxides (NOx) - Best Available Control Technology [326 IAC 2-2-3]**

---

Pursuant to SSM033-12992-00076, issued May 15, 2002 and 326 IAC 2-2-3, the nitrogen oxide(s) emissions from the Ore Dryer shall be controlled by the use of ~~low-NOx~~ natural gas-fired burners and shall not exceed 0.049 pounds per MMBtu of heat input. The ~~NOx~~ NOx emissions shall not exceed 1.35 pounds per hour from Ore Dryer ~~stack~~ Stack 76.

**Response to Comment 109**

Condition D.5.7 is renumbered D.6.7.

The use of low-NOx burners in the SSM033-12992-00076, issued May 15, 2002 is BACT for NOx emission limits from the ore dryer. In order for a revision to be considered the Permittee can submit an application under 326 IAC 5-7-10.5 and 326 IAC 2-2. Therefore, the permit is not revised as a result of this comment.

**D.-5 6.7 Nitrogen Oxides (NOx) - Best Available Control Technology [326 IAC 2-2-3]**

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**Comment 110**

**D.-5 6.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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A Preventive Maintenance Plan, in accordance with Section ~~C~~ B.10 Preventive Maintenance Plan, of this permit, is required for the ore dryer ~~and associated~~ baghouse.

**Response to Comment 110**

Condition D.5.8 is renumbered D.6.8.

It is clear from the structure of the wording in 326 IAC 1-6-3 that the PMP requirement affects the entirety of the applicable facilities. Only 326 IAC 1-6-3(a)(1) is limited, in that it requires identification of the personnel in charge of only the emission control equipment, and not any other facility equipment. 326 IAC 1-6-3(b) provides that "...as deemed necessary by the commissioner, any person operating a facility shall comply with the requirements of 326 IAC 1-6-3(a)."

Many types of facilities require maintenance in order to prevent excess emissions. In addition to preventive maintenance performed on the control devices, preventive maintenance should be performed on the ore dryer itself, because lack of proper maintenance on the ore dryer can result in increased emissions. The permit is not revised as a result of this comment.

The reference for Preventive Maintenance Plan is revised as shown below.

~~D.-5 6.8~~ Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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A Preventive Maintenance Plan, in accordance with Section ~~C~~-**B.10** Preventive Maintenance Plan, of this permit, is required for **the** ore dryer and associated baghouse.

**Comment 111**

~~D.-5 6.9~~ Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

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~~(a) Pursuant to SSM033-12992-00076, issued May 15, 2002, within sixty (60) days of achieving maximum production rate, but no later than 18 months after issuance of SSM033-12992-00076 and, in order to demonstrate~~

~~(b) The Permittee shall perform PM/PM<sub>10</sub> testing on the Ore Dryer baghouse Stack 76 every five (5) years after demonstrating compliance, with condition D.5.1, D.5.2 and D.5.3, the Permittee shall perform PM/PM<sub>10</sub>, utilizing testing methods approved by the Commissioner, in accordance with Section C.10 -testing on the Ore Dryer baghouse Stack 76, utilizing a testing method approved by the Commissioner, in accordance with Section C - Performance Testing. PM<sub>10</sub> includes both filterable and condensable components.~~

~~(b) The Permittee shall perform PM/PM<sub>10</sub> testing on the Ore Dryer baghouse Stack 76 every five (5) years after completing the testing required in item (a) of this condition, utilizing testing methods approved by the Commissioner, in accordance with Section C - Performance Testing. PM<sub>10</sub> includes both filterable and condensable components.~~

**Response to Comment 111**

Condition D.5.9 is renumbered D.6.9.

The initial PM/PM<sub>10</sub> stack tests were performed on the Ore Dryer on February 19 and 20, 2004. The testing requirement language in Section D.6.9 is changed. Therefore, the permit is revised as follows:

~~D.5 6.9~~ Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

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~~(a) Pursuant to SSM033-12992-00076, issued May 15, 2002, within sixty (60) days of achieving maximum production rate, but no later than 18 months after issuance of SSM033-12992-00076 and, in order to demonstrate compliance with condition D.6.1, D.6.2 and D.6.3, the Permittee shall perform PM/PM<sub>10</sub> testing on the Ore Dryer baghouse Stack 76, utilizing a testing method approved by the Commissioner, in accordance with Section C - Performance Testing. PM<sub>10</sub> includes both filterable and condensable components.~~

~~(b) The Permittee shall perform PM/PM<sub>10</sub> testing on the Ore Dryer baghouse Stack 76 every five (5) years after completing the testing required in item (a) of this condition, utilizing testing methods approved by the Commissioner, in accordance with Section C - Performance Testing. PM<sub>10</sub> includes both filterable and condensable components.~~

**Within five (5) years from February 19, 2004 and in order to demonstrate compliance with Condition D.6.1, D.6.2 and D.6.3, the Permittee shall perform PM/PM<sub>10</sub> testing on the coal dryer baghouse Stack 75, utilizing testing methods as approved by the Commissioner in accordance with Section C.9 - Performance Testing. These tests shall be repeated at least**

**once every five (5) years. PM<sub>10</sub> includes filterable and condensable components.**

### Comment 112

#### D.-5 6.10 Particulate (PM/PM<sub>10</sub>) Best Available Control Technology [326 IAC 2-2-3]

Pursuant to SSM033-12992-00076, issued May 15, 2002, the baghouse for particulate control shall be in operation and control emissions from the ore dryer at all times the ore dryer is in operation.

### Response to Comment 112

Condition D.5.10 is renumbered D.6.10.

#### D.-5 6.10 Particulate (PM/PM<sub>10</sub>) Best Available Control Technology [326 IAC 2-2-3]

### Comment 113

#### D.5.11 Visible Emission Notations

- ~~(a) — Visible emission notations of the Ore Dryer stack 76, exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. 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) — The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C — Compliance Response Plan, Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit.~~

{NO REGULATORY AUTHORITY}

### Response to Comment 113

Condition D.5.11 is renumbered D.6.11.

326 IAC 2-7-5(1) and 326 IAC 2-7-6(1) provide IDEM the authority to require compliance monitoring conditions as necessary to assure continuous compliance with the emission limits. These rule cites are included as part of the title of the compliance monitoring section of the permit.

The Part 70 permit program is based on the ability of the source to demonstrate continuous compliance with the conditions in this permit. The status of the monitor parameters are necessary to demonstrate continuous compliance with the conditions of the Part 70 permit. Therefore, the permit condition is not revised as a result of this comment.

Upon further review, IDEM has determined that once per day monitoring of the of visible emission notations is generally sufficient to ensure proper operation of the control device. IDEM has also determined that monitoring these parameters once per day is sufficient to satisfy the requirements of the Part 70 rules at 326 IAC 2-7-5 and 326 IAC 2-7-6. Therefore, the permit is revised as follows:

#### D.5.6.11 Visible Emission Notations

- (a) Visible emission notations of the Ore Dryer Stack 76, exhaust shall be performed once per ~~shift~~ **day** during normal daylight operations when exhausting to the atmosphere. 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) ~~The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an~~ **If abnormal emissions is are observed, the Permittee shall take reasonable response steps in accordance with Section C.16 - Response to Excursions or Exceedances.** Failure to take response steps in accordance with ~~Section C.16 - Compliance Response Plan—Preparation, Implementation, Records and Reports~~ **Response to Excursions or Exceedances** shall be considered a deviation from this permit.

#### **Comment 114**

#### D.5.12 Baghouse Inspections

~~An inspection shall be performed each calendar quarter of all bags controlling the Ore Dryer. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.~~

#### D.6.12 Baghouse Inspections {NO REGULATORY AUTHORITY}

An inspection shall be performed annually of all bags controlling the Ore Dryer. All defective bags will be replaced or repaired.

#### D.5.13 Broken or Failed Bag Detection

~~In the event that bag failure has been observed:~~

#### {SINGLE COMPARTMENT BAGHOUSE}

- (a) ~~For multi compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with~~

~~Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. 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.~~

- ~~(b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have 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).~~

#### D.6.13 Broken or Failed Bag Detection {NO REGULATORY AUTHORITY}

In the event that bag failure has been observed, the Compliance Response Plan shall be initiated in accordance with Section C.17 – compliance Response Plan – Preparation, Implementation, Records and Reports.

#### **Response to Comment 114**

Condition D.5.13 is renumbered D.6.12.

326 IAC 2-7-5(1) and 326 IAC 2-7-6(1) provide IDEM the authority to require compliance monitoring conditions as necessary to assure continuous compliance with the emission limits.

These rule cites are included as part of the title of the compliance monitoring section of the permit. The Ore Dryer, baghouse must operate properly in order for the Ore Dryer to achieve compliance.

#### Baghouse Inspection

Upon further review, IDEM has determined that it is the Permittee's responsibility to include routine control device inspection requirements in the applicable preventive maintenance plan. Since the Permittee is in the best position to determine the appropriate frequency of control device inspections and the details regarding which components of the control device should be inspected, the conditions requiring control device inspections have been removed from the permit.

#### Broken or Failed Bag Detection

Paragraph (a) of the Broken or Failed Baghouse condition has been deleted. This baghouse is not a multi-compartment baghouse.

Paragraph (b) of this condition has been revised for those processes that operate in batch mode. The condition required an emission unit to be shut down immediately in case of baghouse failure. However, IDEM is aware there can be safety issues with shutting down a process in the middle of a batch. IDEM also realizes that in some situations, shutting down an emissions unit mid-process can cause equipment damage. Therefore, since it is not always possible to shut down a process with material remaining in the equipment, IDEM has revised the condition to state that in the case of baghouse failure, the feed to the process must be shut off immediately, and the process shall be shut down as soon as practicable.

Therefore, the permit is revised as follows:

~~D.6.12 Baghouse Inspections~~

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~~An inspection shall be performed each calendar quarter of all bags controlling the Ore Dryer. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.~~

~~D.5.13-6.12 Broken or Failed Bag Detection~~

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In the event that bag failure has been observed:

- (a) ~~For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C—Compliance Response Plan—Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. 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.~~
- (b) (a) **For a single compartment baghouses controlling emissions from a process operated continuously**, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then a failed units and the associated process **shall** be shut down immediately until the failed units **have 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.11 - Emergency Provisions).
- (b) ~~For a single compartment baghouses controlling emissions from a batch process~~, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then **the feed to the process failed units and the associated process will shall** be shut down immediately until the failed units **have 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 coal dryer and crusher.** 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.11 - Emergency Provisions).

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

### Comment 115

#### D.-5 6.14 Record Keeping Requirements

- (a) To document compliance with Condition D.5.11, the Permittee shall maintain records of the once per shift visible emission notations of the ore dryer stack 76 exhaust.
- (b) To document compliance with Conditions D.-5 6.12, the Permittee shall maintain records of the results of the inspections ~~required in Condition D.5.12.~~
- (c) To document compliance with Condition D.-5 6.8, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (d) All records shall be maintained in accordance with Section C.22 - General Record Keeping Requirements of this permit.

### Response to Comment 115

Condition D.5.14 is renumbered D.6.13.

Since IDEM changed the frequency of VE notations to once per day, the record keeping requirements in D.6.13 (a) is revised to reflect the change.

Since IDEM deleted the baghouse inspection condition, the requirement to keep records of the inspections in condition D.6.13(b) has been removed.

IDEM has determined that the Permittee is not required to keep records of all preventive maintenance. Therefore, the requirement to keep records of the inspections in Condition D.6.13(c) has been removed.

The references and condition are renumbered as section D.6 and specific reference numbers for Section C requirements have been added to this permit and conditions renumbered as necessary. Therefore the permit is revised as follows:

#### D.-5.14 6.13 Record Keeping Requirements

- (a) To document compliance with Condition D.5 6.11, the Permittee shall maintain records of the once per ~~shift~~ **day** visible emission notations of the ore dryer Stack 76 exhaust.
- ~~(b) To document compliance with Conditions D.5.12, the Permittee shall maintain records of the results of the inspections required in Condition D.5.12.~~
- ~~(c) To document compliance with Condition D.5.6, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.~~
- ~~(d)~~**(b)** All records shall be maintained in accordance with Section C.19 - General Record Keeping Requirements of this permit.

### Comment 116

#### **SECTION D.6 7 FACILITY OPERATION CONDITIONS**

### Response to Comment 116

Section D.6 and all conditions in Section D.6 have been renumbered D.7 and all typos have been revised as follows:

### SECTION D.6 7 FACILITY OPERATION CONDITIONS

#### Comment 117

D.-6 ~~7.1~~ Particulate (PM) (Particulate Emissions Limitations for Manufacturing Processes) [~~40 CFR 52 Subpart P~~][326 IAC 6-3-2]

Pursuant to [~~40 CFR 52 Subpart P, 326 IAC 6-3-2~~] the PM from the Ore Preparation Process 74, shall not exceed the pound per hour emission rate established as E in the following formula:

Process	Process Weight (Lbs/hr)	PM Emission Limit (Lbs/hr)
Ore Prep Process	230,000	52.7

This limit was calculated as follows:

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

$$E = 55.0 P^{0.11} - 40$$

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

### Response to Comment 117

Condition D.6.1 is renumbered D.7.1.

The 326 IAC 6-3 revisions that became effective on June 12, 2002 were approved into the State Implementation Plan on September 23, 2005. These rules replace the previous version of 326 IAC 6-3 (Process Operations) that had been part of the SIP; therefore, the requirements of the previous version of 326 IAC 6-3-2 are no longer applicable to this source. Condition D.7.1 has been revised to remove 40 CFR 52 Subpart P which contained these requirements. The section is renumbered and PM<sub>10</sub> is added to the citation line to match the Table of Contents. Therefore, the permit is revised as follows:

D.-6 ~~7.1~~ Particulate (PM/**PM<sub>10</sub>**) (Particulate Emissions Limitations for Manufacturing Processes)[~~40 CFR 52 Subpart P~~][326 IAC 6-3-2]

Pursuant to ~~40 CFR 52 Subpart P, 326 IAC 6-3-2~~ the PM from the Ore Preparation Process 74, shall not exceed the pound per hour emission rate established as E in the following formula:

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D.-6 ~~7.1~~ Particulate (PM/**PM<sub>10</sub>**) (Particulate Emissions Limitations for Manufacturing Processes)[~~40 CFR 52 Subpart P~~][326 IAC 6-3-2]

### Comment 118

#### D.-6 7.2 Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]

Pursuant to CP-033-8091-00043, issued on June 25, 1997 and 326 IAC 2-2-3, the visible emissions from vents, stacks and building roof monitors, unless otherwise specified, shall not exceed three (3%) percent opacity. Visible emissions shall be determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A) pursuant to 326 IAC 5-1-4.

### Response to Comment 118

Condition D.6.2 is renumbered D.7.2.

326 IAC 5-1-4(a)(1) states that the determination of opacity by means of visible emissions reading in accordance with 40 CFR 60, Appendix A, Method 9. Reference to the 326 IAC 5-1-4 is not removed from the permit. Also, this language is language taken verbatim from the CP-033-8091-00043, issued on June 25, 1997. Therefore, the permit is not revised as a result of this comment.

#### D.-6 7.2 Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]

### Comment 119

#### D.-6 7.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section C- Preventive Maintenance Plan, of this permit, is required for the ore preparation process, ~~and the associated~~ baghouse.

### Response to Comment 119

Condition D.6.3 is renumbered D.7.3.

After further review, IDEM has determined a preventive maintenance plan will be required on the ore preparation process baghouse, because maintaining the control device for PM/PM10 emissions from the ore preparation process will ensure emissions limits are not exceeded

The reference for Preventive Maintenance Plan is revised.

The permit is revised as follows:

#### D.6 7.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section C- ~~B.10~~ Preventive Maintenance Plan, of this permit, is required for **the** ore preparation process ~~and the associated~~ baghouse.

### Comment 120

#### D.-6 7.4 Particulate (PM/PM<sub>10</sub>) Best Available Control Technology [326 IAC 2-2-3]

The ore preparation baghouse for particulate control shall be in operation and control emissions from the ore preparation process at all times the ore preparation process is in operation.

## Response to Comment 120

Condition D.6.4 is renumbered D.7.4.

### D.-6 7.4 Particulate (PM/PM<sub>10</sub>) Best Available Control Technology [326 IAC 2-2-3]

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## Comment 121

### D.6.5 Visible Emission Notations

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- ~~(a) Visible emission notations of the ore preparation stack 74, exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. 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) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C Compliance Response Plan, Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit.~~

{NO REGULATORY AUTHORITY}

## Response to Comment 121

Condition D.6.5 is renumbered D.7.5.

326 IAC 2-7-5(1) and 326 IAC 2-7-6(1) provide IDEM the authority to require compliance monitoring conditions as necessary to assure continuous compliance with the emission limits.

These rule cites are included as part of the title of the compliance monitoring section of the permit.

Upon further review, IDEM has determined that once per day monitoring of the visible emission notations is generally sufficient to ensure proper operation of the control device. IDEM has also determined that monitoring these parameters once per day is sufficient to satisfy the requirements of the Part 70 rules at 326 IAC 2-7-5 and 326 IAC 2-7-6.

### D.6.5 7.5 Visible Emission Notations

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- (a) Visible emission notations of the ore preparation Stack 74, exhaust shall be performed once per **shift day** during normal daylight operations when exhausting to the atmosphere. 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) ~~The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an~~ **If abnormal emissions is are observed, the Permittee shall take reasonable response steps in accordance with Section C.16 - Response to Excursions or Exceedances.** Failure to take response steps in accordance with ~~Section C.16 - Compliance Response Plan—Preparation, Implementation, Records and Reports~~ **Response to Excursions or Exceedances** shall be considered a deviation from this permit.

#### Comment 122

#### D.6.6 Parametric Monitoring NO REGULATORY AUTHORITY

- (a) ~~The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the ore preparation process at least once per shift when the ore preparation process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 and 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C—Compliance Response Plan—Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C—Compliance Response Plan—Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.~~
- (b) ~~The instrument used for determining the pressure shall comply with Section C—Pressure Gauge and Other 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.6.7 Baghouse Inspections

~~An inspection shall be performed each calendar quarter of all bags controlling the Ore Preparation Process. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.~~

#### D.7.6 Baghouse Inspections {NO REGULATORY AUTHORITY}

An inspection shall be performed annually of all bags controlling the Ore Dryer. All defective bags will be replaced or repaired.

#### D.6.8 Broken or Failed Bag Detection

~~In the event that bag failure has been observed:~~  
{SINGLE COMPARTMENT BAGHOUSE}

- (a) ~~For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall~~

~~include a timetable for completion. Failure to take response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. 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.~~

- (b) ~~For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have 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).~~

#### D.7.7 Broken or Failed Bag Detection {NO REGULATORY AUTHORITY}

In the event that bag failure has been observed, the Compliance Response Plan shall be initiated in accordance with Section C.18 – compliance Response Plan – Preparation, Implementation, Records and Reports.

#### **Response to Comment 122**

Conditions D.6.6 and D.6.7 are renumbered D.7.6 and D.7.7.

326 IAC 2-7-5(1) and 326 IAC 2-7-6(1) provide IDEM the authority to require compliance monitoring conditions as necessary to assure continuous compliance with the emission limits.

These rule cites are included as part of the title of the compliance monitoring section of the permit. The Ore Preparation Process, baghouse, must operate properly in order for the Ore Preparation Process to achieve compliance.

#### Parametric Monitoring

Upon further review, IDEM has determined that once per day monitoring of the control device is generally sufficient to ensure proper operation of the control device. IDEM has also determined that monitoring these parameters once per day is sufficient to satisfy the requirements of the Part 70 rules at 326 IAC 2-7-5 and 326 IAC 2-7-6. Therefore the permit is revised as follows:

#### D.67.6 Parametric Monitoring

- (a) ~~The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the ore preparation process at least once per shift day when the ore preparation process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 and 10.0 inches of water or a range established during the latest Stack test, the Permittee shall take reasonable response steps in accordance with Section C.16 - Compliance Response Plan – Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances.** A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C.16 - Compliance Response Plan – Preparation, Implementation, Records, and Reports **Response to**

**Excursions or Exceedances**, shall be considered a deviation from this permit.

- (b) The instrument used for determining the pressure shall comply with Section C.44 **13 - Pressure Gauge and Other Instrument Specifications**, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### Baghouse Inspection

Upon further review, IDEM has determined that it is the Permittee's responsibility to include routine control device inspection requirements in the applicable preventive maintenance plan. Since the Permittee is in the best position to determine the appropriate frequency of control device inspections and the details regarding which components of the control device should be inspected, the conditions requiring control device inspections have been removed from the permit.

#### D.7.7 Baghouse Inspections

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~~An inspection shall be performed each calendar quarter of all bags controlling the Ore Preparation Process. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.~~

#### Broken or Failed Bag Detection

Paragraph (a) of the Broken or Failed Baghouse condition has been deleted. This baghouse is not a multi-compartment baghouse.

Paragraph (b) of this condition has been revised for those processes that operate in batch mode. The condition required an emission unit to be shut down immediately in case of baghouse failure. However, IDEM is aware there can be safety issues with shutting down a process in the middle of a batch. IDEM also realizes that in some situations, shutting down an emissions unit mid-process can cause equipment damage. Therefore, since it is not always possible to shut down a process with material remaining in the equipment, IDEM has revised the condition to state that in the case of baghouse failure, the feed to the process must be shut off immediately, and the process shall be shut down as soon as practicable.

Therefore, the permit is revised as follows:

#### D.6.77.7 Broken or Failed Bag Detection

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In the event that bag failure has been observed:

- (a) ~~For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C—Compliance Response Plan—Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. 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.~~

- (b) (a) For a single compartment baghouses **controlling emissions from a process operated continuously**, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then a failed units and the associated process **shall** be shut down immediately until the failed units ~~have~~ **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.11 - Emergency Provisions).
- (b) For a single compartment baghouses **controlling emissions from a batch process**, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then **the feed to the process** failed units and the associated process ~~will~~ **shall** be shut down immediately until the failed units ~~have~~ **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 coal dryer and crusher.** 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.11 - Emergency Provisions).

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

### Comment 123

#### D.-6 7.9 Record Keeping Requirements

- (a) ~~To document compliance with Condition D.6.5 the Permittee shall maintain records of the once per shift visible emission notations of the ore preparation stack 74 exhaust.~~
- (b) ~~To document compliance with Condition D.6.6 the Permittee shall maintain records of the of the once per shift differential static pressure during normal operation.~~
- (c) To document compliance with Conditions D.-6 7.7, the Permittee shall maintain records of the results of the inspections ~~required in Condition D.6.7.~~
- (d) To document compliance with Condition D.6 7.4, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (e) All records shall be maintained in accordance with Section C.22 - General Record Keeping Requirements, of this permit.

### Response to Comment 123

Condition D.6.9 is renumbered D.7.8.

Since IDEM changed the frequency of VE notations to once per day, the record keeping requirements in D.7.8(a) is revised to reflect the change.

Since IDEM deleted the parametric monitoring and baghouse inspection condition, the requirement to

keep records of the pressure drop and inspections in conditions D.7.8(b) and (c) have been removed.

IDEM has determined that the Permittee is not required to keep records of all preventive maintenance. Therefore, the requirement to keep records of the inspections in Condition D.7.8(d) has been removed.

The references and condition are renumbered as section D.7 and specific reference numbers for Section C requirements have been added to this permit and conditions renumbered as necessary. Therefore the permit is revised as follows:

**D.6.9 7.8 Record Keeping Requirements**

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- (a) To document compliance with Condition D.6.7.5 the Permittee shall maintain records of the once per ~~shift~~ **day** visible emission notations of the ore preparation Stack 74 exhaust.
- (b) To document compliance with Condition D.6.7.6 the Permittee shall maintain records of the once per ~~shift~~ **day** ~~differential static~~ pressure **drop** during normal operation.
- ~~(c) To document compliance with Conditions D.6.7, the Permittee shall maintain records of the results of the inspections required in Condition D.6.7.~~
- ~~(d) To document compliance with Condition D.6.4, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.~~
- ~~(e)~~(c) All records shall be maintained in accordance with Section C.19 - General Record Keeping Requirements, of this permit.

**Comment 124**

**SECTION D.7.8 FACILITY OPERATION CONDITIONS**

**Response to Comment 124**

Section D.7 and all conditions in Section D.7 have been renumbered D.8. All typos have been corrected. Minor Source Modification MSM 033-17936-00076, issued October 9, 2003 containing requirements for the SAF dust recycling system, zinc silo, ash silo, EAF dust unloading process, vacuum system, zinc silo unloading system and ash silo unloading system were omitted from the draft permit prior to public notice. These limits are added to Section D.8 of this permit (see Response to Comment 125). The conditions are renumbered as necessary. The permit is revised as follows:

**SECTION D.7.8 FACILITY OPERATION CONDITIONS**

**Comment 125**

**D.7.8.1 Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]**

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- (a) Pursuant to CP-033-8091-00043, issued on June 25, 1997, and 326 IAC 2-2-3, the visible emissions discharged into the atmosphere from the silos storing coal, iron ore, lime, and rotary hearth furnace dust shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A) ~~pursuant to 326 IAC 5-1-4.~~
- (b) Pursuant to CP-033-8091-00043, issued on June 25, 1997, and 326 IAC 2-2-3, the fugitive particulate emissions into the atmosphere from the coal, iron ore and rotary hearth furnace dust handling system shall not exceed three (3%) percent opacity

determined by a six (6) minute average (24 readings taken accordance with EPA method 9, Appendix A) pursuant to 326 IAC 5-1-4.

### Response to Comment 125

Condition D.7.1 is renumbered D.8.1.

326 IAC 5-1-4(a)(1) states that the determination of opacity by means of visible emissions reading in accordance with 40 CFR 60, Appendix A, Method 9. Reference to the 326 IAC 5-1-4 is not removed from the permit. Also, this language is language taken verbatim from the CP-033-8091-00043, issued on June 25, 1997. Therefore, the permit is not revised as a result of this comment.

### D.7.8.1 Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]

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The requirements from Minor Source Modification 033-17936-00076, issued October 9, 2003 were omitted from the draft permit and are now included as follows:

### D.8.2 Particulate (PM/PM<sub>10</sub>) (PSD) [326 IAC 2-2]

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Pursuant to MSM033-17936-00076, issued October 9, 2003 and 326 IAC 2-2, the PM/PM<sub>10</sub> emissions from units 79 through 85 shall not exceed the emissions limits listed in the table below:

Unit ID	Unit Description	PM Emission Limit (lb/hr)	PM10 Emission Limit (lb/hr)
79	SAF dust recycling system	0.015	0.15
80	zinc silo	0.08	0.08
81	ash silo	0.08	0.08
82	EAF dust unloading process	0.21	0.21
83	vacuum system	0.02	0.02
84	zinc silo unloading system	0.02	0.02
85	ash silo unloading system	0.02	0.02

This is equivalent to 2.54 tons per year of PM/PM<sub>10</sub> emissions from these units. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

### D.8.3 Part 70 Minor Source Modification [326 IAC 2-7-10.5(d)(5)]

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Pursuant to MSM033-17936-00076, issued October 9, 2003 and 326 IAC 2-7-10.5(d)(5) (Part 70 Minor Source Modification), filters equipped with units 79 through 85 shall comply with the following limits when in operation:

- (a) At least 99% control efficiency, and
- (b) No visible emissions.

### D.8.4 Particulate (PM/PM<sub>10</sub>) (Particulate Matter Emissions Limitations for Manufacturing Processes) [326 IAC 6-3-2]

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Pursuant to MSM033-17936-00076, issued October 9, 2003 and 326 IAC 6-3-2 Particulate Matter Emissions Limitations for Manufacturing Processes, particulate matter from each of the units 79 through 85 shall not exceed 8.56 pounds per hour when operating at a process weight rate of 3.0 tons per hour.

The pound per hour limitation was calculated with the following equation:

**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:**

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

#### **Comment 126**

~~D. 7.8.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]~~

~~A Preventive Maintenance Plan, in accordance with Section C- Preventive Maintenance Plan, of this permit, is required for the silo bin vents and their filters used as control devices.~~

[EXTREMELY SMALL EMISSIONS]

#### **Response to Comment 126**

Condition D.7.2 is renumbered D.8.5.

It is clear from the structure of the wording in 326 IAC 1-6-3 that the PMP requirement affects the entirety of the applicable facilities. Only 326 IAC 1-6-3(a)(1) is limited, in that it requires identification of the personnel in charge of only the emission control equipment, and not any other facility equipment. 326 IAC 1-6-3(b) provides that "...as deemed necessary by the commissioner, any person operating a facility shall comply with the requirements of 326 IAC 1-6-3(a)."

Many types of facilities require maintenance in order to prevent excess emissions. In addition to preventive maintenance performed on the control devices, preventive maintenance should be performed on the silo bin vents and filters, because lack of proper maintenance on these can result in increased emissions. The permit is not revised as a result of this comment.

The reference for Preventive Maintenance Plan and condition numbers are revised as shown below.

~~D. 7.2 8.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]~~

~~A Preventive Maintenance Plan, in accordance with Section B.10- Preventive Maintenance Plan, of this permit, is required for the silo bin vents, **units 79, 82 through 85** and their filters used as control devices.~~

#### **Comment 127**

~~D.7.8.3 Particulate (PM/PM<sub>10</sub>) Best Available Control Technology [326 IAC 2-2-3]~~

~~The bin vent filters for particulate control shall be in operation and control emissions from the silos at all times the silos ~~and unloading and loading~~ are in operation.~~

#### **Response to Comment 127**

Condition D.7.3 is renumbered D.8.6.

The condition citation for BACT is removed, because the requirement to operate the controls device at all times is not a BACT requirement in the construction permit CP-033-8091-00043 and Minor Source Modification 033-17936-00076.

The emissions are generated from the bin vents when the silos are loaded and unloaded. Therefore, the

permit is revised as follows:

~~D.7.3 8.6~~ Particulate (PM/PM<sub>10</sub>) Best Available Control Technology [326 IAC 2-2-3]

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- (a) **In order to comply with Condition D.8.1**, the bin vent filters for particulate control shall be in operation and control emissions from the silos at all times the silos ~~and unloading and loading are in operation~~ **are being loaded or unloaded.**
- (b) **In order to comply with Conditions D.8.2, D.8.3 and D.8.4**, the filters for PM/PM<sub>10</sub> control shall be in operation and control emissions from units 79 through 85 at all times that these units are in operation.

**Comment 128**

~~D.7.4~~ 8.4 Filter Inspections

~~{EXHAUST IN THE BUILDING – NO INSPECTION NEEDED FOR 79, 81, 82, 83, 84, 85}~~

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An inspection shall be performed ~~each calendar quarter~~ annually of all filters controlling units 44 through 50, and ~~79 through 80~~. Inspections required by this condition shall not be performed in consecutive months. All defective filters shall be replaced.

**Response to Comment 128**

Upon further review, IDEM has determined that it is the Permittee's responsibility to include routine control device inspection requirements in the applicable preventive maintenance plan. Since the Permittee is in the best position to determine the appropriate frequency of control device inspections and the details regarding which components of the control device should be inspected, the conditions requiring control device inspections have been removed from the permit.

The addition of the MSM033-17963-00076 requirement to conduct VE notations on Stack 80 is included in an additional condition D.8.7.

~~D.7.4~~ Filter Inspections

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~~An inspection shall be performed each calendar quarter annually of all filters controlling units 44 through 50, and consecutive months. All defective filters shall be replaced.~~

**D.8.7 Visible Emission Notations**

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- (a) **Visible emission notations of the Stack 80, exhaust shall be performed once per day during normal daylight operations when exhausting to the atmosphere. 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 ~~is~~ are observed, the Permittee shall take reasonable**

**response steps in accordance with Section C.16 - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C.16 - Response to Excursions or Exceedances shall be considered a deviation from this permit.**

#### **Comment 129**

##### D.7.5 Record Keeping Requirements

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- (a) To document compliance with Conditions D. 7.4, the Permittee shall maintain records of the results of the inspections required in Condition D.7.4.
- (b) To document compliance with Condition D.7.2, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C.22 - General Record Keeping Requirements of this permit.

#### **Response to Comment 129**

Condition D.7.5 is renumbered D.8.8.

Since IDEM deleted the bin vent inspection condition, the requirement to keep records of the inspections in conditions D.8.8(a) has been removed.

IDEM has determined that the Permittee is not required to keep records of all preventive maintenance. Therefore, the requirement to keep records of the inspections in Condition D.8.8(b) has been removed.

The addition of the MSM033-17963-00076 requirement to conduct VE notations in Condition D.8.7 on Stack 80 requires record keeping.

Therefore the permit is revised as follows:

##### D. 7.5 8.8 Record Keeping Requirements

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- (a) ~~To document compliance with Conditions D. 7.4 the Permittee shall maintain records of the results of the inspections required in Condition D. 7.4.~~  
**To document compliance with Condition D.8.7, the Permittee shall maintain records of the once per day visible emission notations of the ore preparation Stack 80 exhaust.**
- (b) ~~To document compliance with Condition D.7.2, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.~~
- (c) All records shall be maintained in accordance with Section C.19 - General Record Keeping Requirements of this permit.

#### **Comment 130**

### **SECTION D.8 9 FACILITY OPERATION CONDITIONS**

## Response to Comment 130

Section D.8 and all conditions in Section D.8 have been renumbered D.9 and all typos have been revised as follows:

### SECTION D.8 9 FACILITY OPERATION CONDITIONS

#### Comment 131

##### D.-8 9.1 Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]

- (a) Pursuant to CP-033-8091-00043, issued June 25, 1997 and 326 IAC 2-2-3, water shall be applied at each transfer and discharge point of the coal and iron ore stacker. ~~The material dropping distance shall be maintained at less than three (3) feet.~~ As needed to comply with the opacity limit set forth in D.9.1(e).
- (b) Pursuant to CP-033-8091-00043, issued on June 25, 1997 and 326 IAC 2-2-3, the coal and iron conveyers shall be covered and the transfer points enclosed. The visible emissions at the ~~discharged~~ discharge and transfer point shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A) ~~pursuant to 326 IAC 5-1-4.~~
- (c) Pursuant to CP-033-9187-00043, issued March 24, 1998 and 326 IAC 2-2-3, the material reclaim hoppers used by the front end loaders to transport material from the storage piles to the conveying system shall be located above ground. ~~The discharge dropping point distance shall be less than three (3) feet.~~
- (d) Pursuant to CP-033-9187-00043, issued on March 24, 1998, water shall be applied to the storage piles as needed to minimize fugitive dust. ~~Water shall be~~ When stacker is unloading ore, the coal pile can't have water applied via the stacker, continuously during stacking. ~~The material drop shall be maintained at less than three (3) feet.~~
- (e) ~~Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the visible emissions from all transfer and discharge points shall be limited to three percent (3%) opacity determined by six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A).~~

##### [DUPLICATES SUBSECTION (B) ABOVE]

- (e) Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the opacity of fugitive particulate emissions from the storage piles shall be limited to ten (10%) percent opacity determined by a six (6) minute average (24 ~~reading~~ readings taken in accordance with EPA Method 9, Appendix A). These limitations may not apply during periods, when application of fugitive particulate matter control measures is either ineffective or unreasonable due to sustained very high wind speeds. During such periods, the Permittee must continue to implement all reasonable fugitive particulate matter control measures.

##### D.-8 9.3 Particulate (PM/PM<sub>10</sub>) Best Available Control Technology [326 IAC 2-2-3]

- [DUPLICATES D.9.1 (a)] ~~Pursuant to CP-033-8091-00043, issued on June 25, 1997, the water sprays for particulate control shall be in operation and control emissions from the coal and iron ore stacker and shall be used to control fugitive dust from the piles at all times the stacker is in operation.~~

- (b) ~~Pursuant to CP 033-8091-00043, issued on June 25, 1997, the water sprays and berms for fugitive dust control shall be in operation and control emissions from the storage piles at all times. [DUPLICATES D.9.1(d)]~~
- (c) ~~Pursuant to CP 033-8091-00043, issued on June 25, 1997, the water sprayer for the coal and iron ore stacker shall be in operation at all times the stacker is in operation to control fugitive dust from the piles. {SAME AS (A)}~~

### Response to Comment 131

Condition D.8.1 is renumbered D.9.1.

The duplicate conditions Condition D.8.3 are deleted. The language in the condition below is language taken verbatim from CP 033-8091-00043 conditions 32 and 34 (neither of these conditions were superseded) and CP 033-9187-00043 conditions 30, 31, 32 and 33. This construction permits were reviewed under PSD 326 IAC 2-2 and BACT. The Part 70 program incorporates all the construction and modifications into one document. In order for a revision to be considered the Permittee can submit an application under 326 IAC 2-7-10.5 and 326 IAC 2-2. Therefore the permit is revised as follows:

#### D.8 9.1 Opacity Limits - Best Available Control Technology [326 IAC 2-2-3]

- (a) Pursuant to CP-033-8091-00043, issued June 25, 1997 and 326 IAC 2-2-3, water shall be applied at each transfer and discharge point of the coal and iron ore stacker. The material dropping distance shall be maintained at less than three (3) feet.
- (b) Pursuant to CP-033-8091-00043, issued on June 25, 1997 and 326 IAC 2-2-3, the coal and iron conveyers shall be covered and the transfer points enclosed. The visible emissions at the discharged and transfer point shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A) pursuant to 326 IAC 5-1-4.
- (c) Pursuant to CP-033-9187-00043, issued March 24, 1998 and 326 IAC 2-2-3, the material reclaim hoppers used by the front end loaders to transport material from the storage piles to the conveying system shall be located above ground. The discharge dropping point distance shall be less than three (3) feet.
- (d) Pursuant to CP-033-9187-00043, issued on March 24, 1998, water shall be applied to the storage piles to minimize fugitive dust. Water shall be applied continuously during stacking. The material drop shall be maintained at less than three (3) feet.
- (e) Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the visible emissions from all transfer and discharge points shall be limited to three percent (3%) opacity determined by six (6) minute average (24 readings taken in accordance with EPA Method 9, Appendix A).
- (f) Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the opacity of fugitive particulate emissions from the storage piles shall be limited to ten (10%) percent opacity determined by a six (6) minute average (24 readings taken in accordance with EPA Method 9, Appendix A). These limitations may not apply during periods, when application of fugitive particulate matter control measures is either ineffective or unreasonable due to sustained very high wind speeds. During such periods, the Permittee must continue to implement all reasonable fugitive particulate matter control measures.

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

~~D.8.3 Particulate (P/PM<sub>10</sub>) Best Available Control Technology [326 IAC 2-2-3]~~

- ~~(a) Pursuant to CP 033-8091-00043, issued on June 25, 1997, the water sprays for particulate control shall be in operation and control emissions from the coal and iron ore stacker and shall be used to control fugitive dust from the piles at all times the stacker is in operation.~~
- ~~(b) Pursuant to CP 033-8091-00043, issued on June 25, 1997, the water sprays and berms for fugitive dust control shall be in operation and control emissions from the storage piles at all times.~~
- ~~(c) Pursuant to CP 033-8091-00043, issued on June 25, 1997, the water sprayer for the coal and iron ore stacker shall be in operation at all times the stacker is in operation to control fugitive dust from the piles.~~

**Comment 132**

**Section D.9 Facility Operations Conditions**  
**{OMIT ENTIRE SECTION}**

~~D.9.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]~~

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

- ~~(a) Equip the cleaner with a cover;~~
- ~~(b) Equip the cleaner with a facility for draining cleaned parts;~~
- ~~(c) Close the degreaser cover whenever parts are not being handled in the cleaner;~~
- ~~(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;~~
- ~~(e) Provide a permanent, conspicuous label summarizing the operation requirements;~~
- ~~(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.~~

~~D.9.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]~~

~~(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser without remote solvent reservoirs constructed after July 1, 1990, shall ensure that the following requirements are met:~~

- ~~(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
  - ~~(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three tenths (0.3) pounds per square inch) measured at thirty eight degrees Celsius (38<sup>o</sup>C) (one hundred degrees Fahrenheit (100<sup>o</sup>F));~~~~

- ~~(B) — The solvent is agitated; or~~
- ~~(C) — The solvent is heated.~~
- ~~(2) — Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three tenths (4.3) kiloPascals (thirty two (32) millimeters of mercury or six tenths (0.6) pounds per square inch) measured at thirty eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.~~
- ~~(3) — Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).~~
- ~~(4) — The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.~~
- ~~(5) — Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three tenths (4.3) kiloPascals (thirty two (32) millimeters of mercury or six tenths (0.6) pounds per square inch) measured at thirty eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty eight and nine tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):~~
  - ~~(A) — A freeboard that attains a freeboard ratio of seventy five hundredths (0.75) or greater.~~
  - ~~(B) — A water cover when solvent is used is insoluble in, and heavier than, water.~~
  - ~~(C) — Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.~~
- ~~(b) — Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:~~
  - ~~(1) — Close the cover whenever articles are not being handled in the degreaser.~~
  - ~~(2) — Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.~~
  - ~~(3) — Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.~~

### Response to Comment 132

Section D.10 now includes all the insignificant activities. 326 IAC 8-3 does not apply to the degreasing operations, because the degreasing operations use non-organic/non-hazardous materials. 326 IAC 8-3

regulates degreasing operations that do use organic hazardous materials. Therefore the permit is revised as follows:

## Section D.10 Facility Operations Conditions

### ~~D.9.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]~~

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

- ~~(a) Equip the cleaner with a cover;~~
- ~~(b) Equip the cleaner with a facility for draining cleaned parts;~~
- ~~(c) Close the degreaser cover whenever parts are not being handled in the cleaner;~~
- ~~(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;~~
- ~~(e) Provide a permanent, conspicuous label summarizing the operation requirements;~~
- ~~(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.~~

### ~~D.9.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]~~

~~(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser without remote solvent reservoirs constructed after July 1, 1990, shall ensure that the following requirements are met:~~

- ~~(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
  - ~~(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three tenths (0.3) pounds per square inch) measured at thirty eight degrees Celsius (38<sup>o</sup>C) (one hundred degrees Fahrenheit (100<sup>o</sup>F));~~
  - ~~(B) The solvent is agitated; or~~
  - ~~(C) The solvent is heated.~~~~
- ~~(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three tenths (4.3) kiloPascals (thirty two (32) millimeters of mercury or six tenths (0.6) pounds per square inch) measured at thirty eight degrees Celsius (38<sup>o</sup>C) (one hundred degrees Fahrenheit (100<sup>o</sup>F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.~~
- ~~(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).~~
- ~~(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a~~

~~pressure which does not cause excessive splashing.~~

~~(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three tenths (4.3) kiloPascals (thirty two (32) millimeters of mercury or six tenths (0.6) pounds per square inch) measured at thirty eight degrees Celsius (38<sup>o</sup>C) (one hundred degrees Fahrenheit (100<sup>o</sup>F)), or if the solvent is heated to a temperature greater than forty eight and nine tenths degrees Celsius (48.9<sup>o</sup>C) (one hundred twenty degrees Fahrenheit (120<sup>o</sup>F)):~~

~~(A) A freeboard that attains a freeboard ratio of seventy five hundredths (0.75) or greater.~~

~~(B) A water cover when solvent is used is insoluble in, and heavier than, water.~~

~~(C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.~~

~~(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:~~

~~(1) Close the cover whenever articles are not being handled in the degreaser.~~

~~(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.~~

~~(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.~~

~~(1) 1. Specifically regulated insignificant activities, which are specifically regulated as defined in 326 IAC 2-7-1(21):~~

~~(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) Bentonite railcar unloading [326 IAC 6-3-2]~~

~~(2) 2. Other insignificant activities~~

~~(a) Space heaters, process heaters, or boilers using the following fuels:~~

~~(i) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.~~

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

~~(b) Combustion source flame safety purging on startup.~~

~~(c) The following VOC and HAP storage containers:~~

~~(i) Storage tanks with capacity less than or equal to one thousand~~

- (1,000) gallons and annual throughputs equal to or less than twelve thousand (12,000) gallons.
- (ii) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
  - (d) Refractory storage not requiring air pollution control equipment.
  - (e) Equipment used exclusively for filling drums, pails, or other packaging containers with the following: Lubricating oils, Waxes and Greases.
  - (f) Application of: oils; greases; lubricants; and nonvolatile material; as temporary protective coatings.
  - (g) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
  - (h) Noncontact cooling tower systems with the following: Forced and induced draft cooling tower system not regulated under a NESHAP.
  - (i) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
  - (j) Stockpiled soils from soil remediation activities that are covered and waiting transport for disposal.
  - (k) Paved and unpaved roads and parking lots with public access.
  - (l) Covered conveyors for limestone conveying of less than or equal to seven thousand two hundred (7,200) tons per day for sources other than mineral processing plants constructed after August 31, 1983.
  - (m) Underground conveyors
  - (n) Coal bunker and coal scale exhausts and associated dust collector vents.
  - (o) Purging of gas lines and vessels that is related to routing maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
  - (p) Flue gas conditioning systems and associated chemicals such as the following: sodium sulfate; ammonia and sulfur trioxide.
  - (q) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
  - (r) On-site fire and emergency response training approved by the department.
  - (s) Purge double block and bleed valves.
  - (t) Filter or coalescer media changeout.
  - (u) A laboratory as defined in 326 IAC 2-7-1(21)(D).

- (v) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
  - (w) Cleaners and solvents characterized as follows: Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100°F).
3. Other Activities less than significant level
- (a) Diesel generators

**D.10.1 Particulate [326 IAC 6-3-2]**

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- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations), the particulate emissions from the brazing equipment, cutting torches, soldering equipment and welding equipment shall not exceed the particulate limitation in Section C.1 - Particulate Emission Limitations for Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour.
- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission pound per hour limitation from the bentonite railcar unloading shall be calculated using the following equation:

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

$$E = 55.0 P^{0.11} - 40$$

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

Comment 134

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**  
**OFFICE OF AIR ~~Quality~~-QUALITY**  
**COMPLIANCE DATA SECTION**  
**100 North Senate Avenue**  
**P.O. Box 6015**  
**Indianapolis, IN 46206-6015**  
**Phone : 317-233-5674**  
**Fax: 233-5967**

**PART 70 OPERATING PERMIT  
CERTIFICATION**

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**  
**OFFICE OF AIR ~~Quality~~-QUALITY**  
**COMPLIANCE BRANCH**  
**100 North Senate Avenue**  
**~~P.O. Box 6015~~**

**Indianapolis, Indiana ~~46206-6015~~ 46204-2251**

**Phone: 317-233-5674**

**Fax: 317-233-5967**

**PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT**

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
100 North Senate Avenue  
P.O. Box 6015**

**Indianapolis, IN ~~46206-6015~~ 46204-2251**

**Phone : 317-233-5674**

**Fax: 233-5967**

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

**Response to Comment 134**

In order to clarify where the Annual Compliance Certification, Emergency Occurrence and Quarterly Deviation and Compliance Monitoring report forms are to be submitted, and correct the typo of Quality. Therefore the permit report forms are revised as follows:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR ~~Quality~~ QUALITY  
COMPLIANCE DATA SECTION  
100 North Senate Avenue  
~~P.O. Box 6015~~**

**Indianapolis, IN ~~46206-6015~~ 46204-2251**

**Phone: 317-233-5674-0178**

**Fax: 317-233-5967-6865**

**PART 70 OPERATING PERMIT  
CERTIFICATION**

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR ~~Quality~~ QUALITY  
COMPLIANCE BRANCH  
100 North Senate Avenue  
~~P.O. Box 6015~~**

**Indianapolis, Indiana ~~46206-6015~~ 46204-2251**

**Phone: 317-233-5674-0178**

**Fax: 317-233-5967-6865**

**PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT**

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, IN ~~46206-6015~~ 46204-2251  
Phone: 317-233-5674-0178  
Fax: 317-233-5967-6865**

**Comment 135**

Steel Dynamics, Inc. is providing supplemental comments to the above draft Part 70 permits covering Steel Dynamics, Inc. – Flat Roll Division (“SDI”) and Iron Dynamics, Inc. (“IDI”). Upon further review of the draft permits we believe it is necessary to clarify the meaning of continuous monitoring and continuous compliance.

Both SDI and IDI employ continuous opacity or emission monitoring equipment. With the advent of collecting over 87,000 opacity and over 8,700 emission data points each year, the current technologies cannot guarantee that a measurement will be accurately taken and recorded every single time. Further, the current control technologies cannot prevent all emission excursions when measuring over such short (eg. six- minute) periods of time. Even the U.S. EPA recognizes that the error band on some required monitoring equipment (e.g., continuous opacity monitor) exceeds the permit limitation, which subjects us to enforcement action when an exceedance may not have actually occurred. Regardless of maintenance and operational practices, upsets do occur.

IDEM has historically allowed a three to five percent grace threshold before taking enforcement action. Indeed, IDEM’s technical support documents appropriately describe compliance “on a more or less continuous basis,” thus acknowledging the technical barriers that should prevent interpreting the word “continuous” too literally. You have also incorporated new Compliance Response Plan requirements into the Part 70 permits, with enforcement capabilities for failure to abide by the Plan when an excursion occurs.

We believe the Part 70 permits for SDI and IDI should contain language that if the Compliance Response Plan is followed and the excursions and downtime do not exceed state guideline (i.e. three to five percent), the unit should be considered in continuous operation and continuous compliance for certification purposes.

**Response to Comment 135**

326 IAC 5-1 does not allow exemptions from the opacity limit of three (3%) to five (5%) percent of the equipment operating time, therefore, IDEM cannot simply create such an exemption where one does not exist in the rule. IDEM will continue to use enforcement discretion; however, the permit will not include the suggested blanket exemption for exceeding the opacity limit up to 3% of the equipment operating time.

Upon further review, the OAQ has decided to make the following revisions to the permit (**bolded** language has been added, the language with a line through it has been deleted). The Table of Contents has been modified to reflect these changes.

Change 1:

The Office of Air Quality reorganized the billing section. Therefore, Condition B.24(c) has been revised to reflect the name change as follows:

**B.24 Annual Fee Payment [326 IAC 2-7-19] [~~326 IAC 2-7-5(7)~~] [326 IAC 2-1.1-7]**

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

Change 2:

Indiana was required to incorporate credible evidence provisions into state rules consistent with the SIP call published by U.S. EPA in 1997 (62 FR 8314). Indiana has incorporated the credible evidence provision in 326 IAC 1-1-6. This rule is effective March 16, 2005; therefore, the condition reflecting this rule will be incorporated into your permit as follows:

**B.25 Credible Evidence [~~326 IAC 2-7-5(3)~~][~~326 IAC 2-7-6~~][62 FR 8314] [326 IAC 1-1-6]**

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

Change 3:

To clarify that deviations required to be reported pursuant to an applicable requirement that exists independent of permit shall be reported according to the schedule stated in the applicable requirement and does not need to be included in the Quarterly Deviation and Compliance Monitoring Report. IDEM is phasing out the use of the P.O. Box in the address. Therefore, the permit report form has been revised as follows:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
100 North Senate Avenue  
~~P.O. Box 6015~~  
Indianapolis, IN ~~46206-6015~~ 46204-2251  
Phone: 317-233-~~5674~~ 0178  
Fax: 317-233-~~5967~~ 6865**

**QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Iron Dynamics, Inc.  
Source Address: 4500 County Road 59, Butler, Indiana 46721  
Mailing Address: 4500 County Road 59, Butler, Indiana 46721  
Part 70 Permit No. T033-12614-00076

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. ~~Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report.~~ **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".

Change 4:

The briquetters are also included in the exemption issued on August 26, 2003, but were omitted from Condition D.3.9. The permit is revised as follows:

D.2 3.9 Applicability [326 IAC 2-1.1-3]

Pursuant to Exemption 033-17200-00076, issued August 6, 2003 and 326 IAC 2-1.1-3, the **SAF briquetters and** conveyors provided in the description information above are classified as exempt from air pollution permit requirements.

Change 5:

The letterhead has been updated to include new Governor and IDEM commissioner. Also, the P.O. Box in the IDEM address has been deleted. Therefore the address is revised throughout the permit and the permit is revised as follows:

~~Joseph E. Kernan~~—Mitchell A. Daniels, Jr.

~~Lori F. Kaplan~~—Thomas A. Easterly

Indiana Department of Environmental Management  
Office of Air Quality  
~~P.O. Box 6015~~  
100 North Senate Avenue  
Indianapolis, IN ~~46206-6015~~ **46204-2251**

Change 6:

Upon further review, IDEM has decided to include the following updates to further address and clarify the permit term and the term of the conditions. With the addition of a new condition B.3, the subsequent section B conditions have been renumbered. Therefore the permit is revised as follows:

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

- (a) This permit, **T033-12614-00076**, 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.13 Prior Permits Superseded [326 IAC 2-1.1-9.5] [326 IAC 2-7-10.5]**

---

- (a) All terms and conditions of ~~previous~~ permits **established prior to T033-12614-00076 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.**

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

**B.514 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]**

---

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

**B.4617 Permit Renewal [326 IAC 2-7-4] [326 IAC 2-7-8(e)]**

---

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015 **46204-2251**

(b) ~~Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)-(1)-(D)]~~

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

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

~~(B) (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.

~~(2) If IDEM, OAQ upon receiving a timely and complete 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.~~

(c) ~~Right to Operate After Application for Renewal [326 IAC 2-7-3]~~

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

(d) ~~United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]~~

~~If IDEM, OAQ fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.~~

**B.2021 Source Modification Requirement [326 IAC 2-7-10.5] [326 IAC 2-2-2]**

(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 2-2-2.**

Change 7:

A statement was added to clarify that the certification form may cover more than one document that is submitted.

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

(a) Where specifically designated by this permit or required by an applicable requirement,

any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. **One certification may cover multiple forms in one (1) submittal.**
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

Change 8:

“Pounds” and “Hour” were capitalized.

C.1 Particulate Matter Emission Limitations for Processes with Process Weight Rates Less Than One Hundred (100) ~~p~~ Pounds per ~~h~~ 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.

Change 9:

To reflect the NSR reform provisions for major sources, there is a change in the record keeping requirements. Therefore the permit is revised as follows:

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] **[326 IAC 2-2]**

- 
- (a) Records of all required monitoring data 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, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance
  - (c) **If there is a reasonable possibility 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 Clean Unit, which is not part of a “major modification” (as defined in 326 IAC 2-2-1 (ee) and/or 326 IAC 2-3-1 (z)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1 (rr) and/or 326 IAC 2-3-1 (mm)), the Permittee shall comply with following:**
    - (1) **Before beginning actual construction of the “project” (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, document and maintain the following records:**
      - (A) **A description of the project.**
      - (B) **Identification of any emissions unit whose emissions of a regulated**

- new source review pollutant could be affected by the project.**
- (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:**
- (i) Baseline actual emissions;**
  - (ii) Projected actual emissions;**
  - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1(mm)(2)(A)(iii) and**
  - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.**
- (2) 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**
- (3) 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.**

Change 10:

To reflect the NSR reform provisions for major sources, there is a change in the reporting requirements. Therefore the permit is revised as follows:

C.20 General Reporting Requirements [326 IAC 2-7-5(3) (C)] [326 IAC 2-1.1-11] [326 IAC 2-2]

- (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. 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:
- Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, ~~P.O. Box 6015~~  
Indianapolis, Indiana ~~46206-6015~~ **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) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) 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.**
- (f) **If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C.19 - General Record Keeping Requirements for any “project” (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll) at an existing emissions unit and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ.**
- (1) **The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and**
  - (2) **The emissions differ from the preconstruction projection as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(ii).**
- (g) **The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:**
- (1) **The name, address, and telephone number of the major stationary source.**
  - (2) **The annual emissions calculated in accordance with (c)(2) and (3) in Section C.19 - 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  
Air Compliance Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251**

- (h) **The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C.19 - 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.**

Change 11:

Pollutant	Status
PM2.5	Attainment or Unclassifiable

- (a) DeKalb County has been classified as unclassifiable or attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions. See the State Rule Applicability – Entire Source section.

Change 12:

On April 15, 2004, the United States Environmental Protection Agency (U.S. EPA) named 23 Indiana counties and one partial county nonattainment for the new 8-hour ozone standard. The designations became effective on June 15, 2004. DeKalb County has been designated as attainment for the 8- hour ozone standard. Therefore, no changes to this permit are necessary.

Pollutant	Status
8-hour ozone	Attainment or Unclassifiable

Change 13:

A Significant Source Modification 033-19160-00076, issued April 13, 2005 revised the PM/PM<sub>10</sub> limits for the Coal Dryer in Section D.5 and the Ore Dryer in Section D.6. Therefore, the permit is revised as follows:

D.5.3 Particulate Matter (PM/PM<sub>10</sub>) - Best Available Control Technology [326 IAC 2-2-3]

~~Pursuant to SSM033-12992-00076, issued May 15, 2002~~ **SSM033-19160-00076, issued April 13, 2005** and 326 IAC 2-2-3, the PM/PM<sub>10</sub> (where PM<sub>10</sub> includes both filterable and condensable components) emissions from the Coal Dryer baghouse B-75 shall not exceed a PM/PM<sub>10</sub> emission rate of ~~0.0052~~ **0.01** grains per dscf through Stacks 75. The PM/PM<sub>10</sub> shall not exceed ~~4.44~~ **0.5** lb per hour from Coal Dryer Stack 75.

D.6.1 Particulate Matter - Best Available Control Technology [326 IAC 2-2-3]

~~Pursuant to SSM033-12992-00076, issued May 15, 2002~~ **SSM033-19160-00076, issued April 13, 2005** and 326 IAC 2-2-3, the PM/PM<sub>10</sub> (where PM<sub>10</sub> includes both filterable and condensable components) emissions from the Ore Dryer baghouse B-76 shall not exceed a PM/PM<sub>10</sub> emission rate of ~~0.0052~~ **0.01** grains per dscf through Stack 76. The PM/PM<sub>10</sub> shall not exceed ~~4.56~~ **1.1** lb per hour from Ore Dryer Stack 76.

Change 14:

Upon further review IDEM has determined that conditions D.1.13, D.1.14, D.2.6, D.3.12, D.4.4, D.5.12, D.6.10, D.7.4 and D.8.2 are the same requirement (to operate the control equipment at all times) that is in C.7 Operation of Equipment. It has been decided that it is best to have this requirement under compliance determination in the specific D conditions, and remove C.7.

~~C.7 Operation of Equipment [326 IAC 2-7-6(6)]~~

~~Except as otherwise provided in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit(s) vented to the control equipment are in operation.~~

Change 15:

The brazing equipment, cutting torches, soldering equipment and welding equipment are insignificant activities and the 0.551 pounds per hour applies. Therefore, the permit is revised as follows:

~~D.10.1 Particulate [326 IAC 6-3-2]~~

~~(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission pound per hour limitation from the brazing equipment, cutting torches, soldering equipment and welding equipment shall be calculated using the following equation:~~

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

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

**(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations), the particulate emissions from the brazing equipment, cutting torches, soldering equipment and welding equipment shall not exceed the particulate limitation in Section C.1 - Particulate Emission Limitations for Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour.**

Change 16:

Upon further review, IDEM has decided to remove (d) concerning nonroad engines from B.18 Permit Amendment or Modification. 40 CFR 89, Appendix A specifically indicates that states are not precluded from regulating the use and operation of nonroad engines, such as regulations on hours of usage, daily mass emission limits, or sulfur limits on fuel; nor are permits regulating such operations precluded, once the engine is no longer new.

~~B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]~~

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

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

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015 **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)]
- (d) ~~No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.~~

Change 17:

After further review, IDEM has determined the Permittee does not have to submit the Annual Compliance Certification in letter form. Therefore the permit is revised as follows:

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

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted ~~in letter form~~ no later than April 15 of each year to:

Change 18:

IDEM has clarified the Section B - Permit Shield Requirements condition as follows:

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

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed ~~in~~ 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.

Change 19:

After further review, IDEM has determined the fugitive dust plan for Steel Dynamics Inc. submitted on October 7, 1994 is only applicable to SDI. During a recent inspection of IDI a problem with fugitive dust was noted by the inspector. It was found that SDI had submitted a fugitive dust plan, but IDI had not been required to submit a plan. Iron Dynamics will be required to submit a fugitive dust plan for IDEM approval no later than 90 days after issuance of this Part 70 permit. Therefore, the permit is revised as follows:

C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

- Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to ~~the~~ **a fugitive dust plan submitted for approval by IDEM no later than ninety (90) days after issuance of this permit for approval**

by IDEM. ~~October 7, 1994.~~

Change 20:

IDEM has clarified the Section D.5 - Preventive Maintenance Plan condition as follows:

D.5.10 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B.10 Preventive Maintenance Plan, of this permit, is required for **the** coal crusher, coal dryer and the associated baghouse.

Change 21:

The EPA has approved the Carbon monoxide rule 326 IAC 9-1 into the State Implementation Plan. The rule is now federally enforceable. Therefore Condition C.4 is revised as follows:

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

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. ~~326 IAC 9-1-2 is not federally enforceable.~~

## Indiana Department of Environmental Management Office of Air Quality

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

#### Source Background and Description

Source Name:	Iron Dynamics, Inc., a contractor for Steel Dynamics, Inc.
Source Location:	4500 County Road 59, Butler, Indiana 46721
County:	Dekalb
Operation Permit No.:	T033-12614-00076
SIC Code:	3312
Permit Reviewer:	Gail McGarrity

The Office of Air Quality (OAQ) has reviewed a Part 70 permit application from Iron Dynamics, Inc. relating to the Direct reduced Iron (DRI) manufacturing operation of an iron and steel manufacturing plant.

#### Source Definition

This steel and iron manufacturing plant consists of :

- (a) Steel Dynamics, Inc., the primary operation, located at 4500 County Road 59, Butler, Indiana 46721; and
- (b) Iron Dynamics, Inc., the supporting operation, located at 4500 County Road 59, Butler, Indiana 46721.

IDEM has determined that Steel Dynamics, Inc. (033-00043) and Iron Dynamics, Inc. (033-00076) are under the common control of Steel Dynamics, Inc. Therefore, the term "source" in the Part 70 documents refers to both Steel Dynamics, Inc. and Iron Dynamics, Inc. as one source.

Separate Part 70 permits will be issued to Steel Dynamics, Inc. (033-8068-00043) and Iron Dynamics, Inc. (033-12614-00076), solely for administrative purposes.

#### Permitted Emission Units and Pollution Control Equipment

Iron Dynamics, Inc. consists of the following permitted emission units and pollution control devices:

##### Rotary Hearth Furnace (RHF)

- (a) One (1) rotary hearth furnace (RHF) constructed in 1998 and modified in 2001 with an addition of ten (10) natural gas fired low-NO<sub>x</sub> burners, having a total furnace nominal heat input of 376 MMBtu per hour. The RHF processes coal and iron ore to produce a nominal throughput of ninety-six (96) tons of direct reduced iron (DRI) per hour. Emissions are controlled by an afterburner for CO and VOC, lime injection in the gas stream for SO<sub>2</sub>, selective non-catalytic reduction for NO<sub>x</sub>, a baghouse pulse jet fiberglass filter for PM/PM<sub>10</sub> and calcium sulfate (formed during reaction of lime and SO<sub>2</sub>). Emissions exhaust through Stack 40.

- (b) Use of Electric Arc Furnace (EAF) baghouse dust and other iron bearing feedstock as a supplemental feed material for the RHF.

### **Rotary Hearth Furnace Additional Emissions Points**

- (a) RHF Fugitives

One (1) 40,000 dscfm air flow fugitive emissions baghouse, added in 2003, to control fugitive emissions from the Rotary Hearth Furnace (RHF), exhausting through Stack 77.

- (b) RHF Briquetters

Two (2) enclosed RHF green briquetters, constructed in 2003, replacing the existing pelletizing equipment, with a nominal throughput of 160 tons per hour, exhausting through the RHF fugitive emissions baghouse, exhausting through stack 77.

### **Submerged Arc Furnace (SAF)**

- (a) Submerged Arc Furnace (SAF)

- (1) One (1) submerged arc furnace (SAF), constructed in 1998, that processes direct reduced iron (DRI) pellets, coke and lime to produce a nominal throughput of one hundred six (106) tons of liquid hot metal (pig iron) per hour. The DRI pellets are stored in a bin above the SAF, where coke and lime are added before being charged through tubes into the SAF. Emissions are exhausted through a hole in the stationary lid, with particulate matter controlled by a wet venturi scrubber and carbon monoxide (CO) controlled by a thermal oxidizer exhausting through Stack 58.

- (2) One (1) desulfurization station, constructed in 1998 with a nominal capacity of 106 tons per hour, uses lime to remove sulfur in the pig iron produced at the SAF. Emissions from the desulfurization station, DRI bins, slag pots and tapping associated with SAF are captured by a canopy hood and particulate matter is controlled by the desulfurization baghouse exhausting through stack 58.

- (b) RHF Discharge Chute

One (1) 60,000 dscfm airflow RHF Discharge Chute baghouse, added in 2003, to control fugitive emissions from the pan conveyor used to transport material from the Rotary Hearth Furnace to the submerged arc furnace exhausting to Stack 58.

- (c) Ladle Preheaters

Two (2) ladle preheaters with a maximum heat input of 9 MMBtu per hour;

- (d) Briquetters

Two (2) enclosed SAF hot briquetters, constructed in 2002, with a nominal throughput of 106 tons per hour, exhausting through stack 58.

- (e) Conveyors

- (1) One (1) Hot Pan Conveyor, identified as Hot Pan Conveyor 1, constructed in 2000, with a nominal throughput rate of 106 tons per hour, and

- (2) One (1) Hot Pan Conveyor, identified as Hot Pan Conveyor 2, constructed in 2003, with a nominal throughput rate of 106 tons per hour.

### **Coal and Iron Ore Unloading**

- (a) One (1) receiving shed, constructed in 1998, with a particulate matter emissions exhaust system controlled by a baghouse exhausting through stacks 67 and 68.
- (b) One (1) rotary railcar dumper, constructed in 1998, with a throughput of 2,500 tons per hour, with the particulate matter emissions captured by a side hood controlled by the shed baghouse exhausting through stacks 67 and 68.

### **Coal Processing**

- (a) One (1) totally enclosed coal crusher identified as a double cone classifier (grinder), constructed in 1998, with the air from the coal collectors that is not recirculated is exhausted through the coal dryer stack 75.
- (b) One (1) coal dryer, identified as 75, constructed in 1998, with a nominal heat capacity of 25 MMBtu per hour and processes 60 tons of coal per hour, with emissions exhausting through Baghouse B-75, then Stack 75.

### **Ore Dryer**

One (1) ore dryer, identified as 76, constructed in 1998, with a nominal heat capacity of 27MMBtu per hour and processes 115 tons of ore per hour, with emissions exhausting through Baghouse B-76, then stack 76.

### **Ore Processing**

One (1) Ore Preparation Process identified as 74, constructed in 1998, consisting of roll screener, ore press (grinder) and magnetic separators with particulate matter emissions controlled by a baghouse, exhausting to stack 74.

### **Material Storage and Handling**

- (a) Silos and Bins

Fourteen (14) material storage silos and bins equipped with air bin vent filters to vent the displaced air for particulate matter emissions control, consisting of the following:

- (1) One (1) storage bin, identified as 44, constructed in 1998, with a nominal capacity of 8,000 cubic feet, exhausts through stack 44.
- (2) One (1) EAF dust silo, identified as 45, constructed in 1998, with a nominal capacity of 7,970 cubic feet, exhausting through stack 45.
- (3) One (1) carbon injection silo, identified as 46, constructed in 1998, with a nominal capacity of 2,300 cubic feet, exhausting through stack 46.
- (4) Four (4) coal silos, identified as 47 through 50, constructed in 1998, with a nominal capacities of 8,909, 23,420, 19,712 and 24,289 cubic feet respectively, exhausting through stacks 47 through 50.
- (5) One (1) SAF bin, identified as 86, constructed in 1998, with a nominal capacity of 7,970 cubic feet, exhausting through stack 86.
- (6) One (1) zinc silo, identified as 80 and constructed in 2003, with a maximum

throughput rate of 3.0 tons of recycled zinc per hour, controlled by one (1) filter, and exhausting through stack 80.

- (7) One (1) ash silo identified as 81 and constructed in 2003, with a maximum throughput rate of 3.0 tons of ash per hour, controlled by one (1) filter, and exhausting into the building.
- (8) Four (4) storage bins, constructed in 1998,

(b) **Material Recycling and Unloading Systems**

- (1) One (1) SAF dust recycling system, identified as 79 and constructed in 2003 with a nominal throughput rate of 3.0 tons of dust per hour, controlled by one (1) filter, and exhausting into the building.
- (2) One (1) zinc silo, identified as 80 and constructed in 2003 with a nominal throughput rate of 3.0 tons of recycled zinc per hour, controlled by one (1) filter, and exhausting through Stack 80.
- (3) One (1) ash silo, identified as 81 and constructed in 2003 with a nominal throughput rate of 3.0 tons of ash per hour, controlled by one (1) filter, and exhausting into the building.
- (4) One (1) EAF dust unloading process, identified as 82 and constructed in 2003 with a nominal throughput rate of 3.0 tons of dust per hour, controlled by one (1) filter, and exhausting into the building.
- (5) One (1) vacuum system, identified as 83 and constructed in 2003 with a maximum throughput rate of 3.0 tons of dust per hour, controlled by one (1) filter, and exhausting into the building.
- (6) One (1) zinc silo unloading process, identified as 84 and constructed in 2003 with a nominal throughput rate of 3.0 tons of zinc per hour, controlled by one (1) filter, and exhausting into the building.
- (7) One (1) ash silo unloading process, identified as 85 and constructed in 2003 with a nominal throughput rate of 3.0 tons of ash per hour, controlled by one (1) filter, and exhausting into the building.

**Outdoor Storage and Handling**

- (a) One (1) coal and ore stacker conveyer with a maximum capacity of 2,500 tons per hour. Fugitive emissions controlled by water sprays, to control fugitive dust at transfer and discharge points.
- (b) One (1) storage pile of coal with a storage capacity of 20, 000 tons and a pile acreage of 1.0 acre and a maximum throughput of 300,000 tons per year.
- (c) One (1) storage pile of iron ore with a storage capacity of 120, 000 tons and a pile acreage of 5.7 acres and a maximum throughput of 900,000 tons per year.
- (d) One (1) storage pile of fluxstone (lime dolomite) with a storage capacity of 30, 000 tons and a pile acreage of 0.5 acres and a maximum throughput of 80, 000 tons per year,.
- (e) Above ground coal and iron ore reclaim hoppers used by the front end loaders to

transport material from the storage piles to the conveying system.

- (f) Closed conveyers with a maximum capacity of one thousand one hundred (1,100) tons per hour to move coal and ore to storage silos or coal crusher.

Fugitive emissions are controlled by water sprays and the piles are built with berms to reduce wind erosion.

### Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

### Insignificant Activities

Iron Dynamics, Inc. also consists of the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (1) Specifically regulated insignificant activities
  - (a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
  - (b) Cleaners and solvents characterized as follows: Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100EF).
- (2) Other insignificant activities
  - (a) Space heaters, process heaters, or boilers using the following fuels:
    - (i) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
    - (ii) Propane or liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour.
  - (b) Combustion source flame safety purging on startup.
  - (c) The following VOC and HAP storage containers:
    - (i) Storage tanks with capacity less than or equal to one thousand (1,000) gallons and annual throughputs equal to or less than twelve thousand (12,000) gallons.
    - (ii) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
  - (d) Refractory storage not requiring air pollution control equipment.
  - (e) Equipment used exclusively for filling drums, pails, or other packaging containers with the following: Lubricating oils, Waxes and Greases.
  - (f) Application of: oils; greases; lubricants; and nonvolatile material; as temporary protective coatings.
  - (g) The following equipment related to manufacturing activities not resulting in the emission of HAPS: brazing equipment, cutting torches, soldering equipment, welding equipment.
  - (h) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
  - (i) Noncontact cooling tower systems with the following: Forced and induced draft cooling tower system not regulated under a NESHAP.
  - (j) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
  - (k) Stockpiled soils from soil remediation activities that are covered and waiting transport for disposal.
  - (l) Paved and unpaved roads and parking lots with public access.

- (m) Covered conveyors for limestone conveying of less than or equal to seven thousand two hundred (7,200) tons per day for sources other than mineral processing plants constructed after August 31, 1983.
- (n) Underground conveyors
- (o) Coal bunker and coal scale exhausts and associated dust collector vents.
- (p) Purging of gas lines and vessels that is related to routing maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (q) Flue gas conditioning systems and associated chemicals such as the following: sodium sulfate; ammonia and sulfur trioxide.
- (r) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (s) On-site fire and emergency response training approved by the department.
- (t) Purge double block and bleed valves.
- (u) Filter or coalescer media changeout.
- (v) A laboratory as defined in 326 IAC 2-7-1(21)(D).
- ( 3 ) Other Activities less than significant level
  - (a) Diesel generators
  - (b) Bentonite railcar unloading

### Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) CP 033-8091-00043, issued on June 25, 1997;
- (b) CP 033-9187-00043, issued on March 24, 1998;
- (c) MSM 033-12756-00076, issued on December 6, 2000;
- (d) SSM 033-12992-00076, issued May 15, 2002;
- (e) MSM033-13911-00076, issued June 13, 2001;
- (f) SSM033-15955-00076, issued December 18, 2002;
- (g) Ex033-17200-00076, issued August 6, 2003;
- (h) A033-17732-00076, issued September 17, 2003 and
- (i) MSM033-17936-00076, issued October 9, 2003.

All conditions from previous approvals were incorporated into this Part 70 permit except the following:

- (a) CP 033-8091-00043, issued on June 25, 1997

Descriptions (a) through(c) and Operation Conditions 10 through 21 and 38 through 40, pertain specifically to Steel Dynamics, Inc. Electric Arc Furnace (EAF #2), Tunnel Furnace (#2) and Continuous Caster #2 processes and equipment.

Reason not incorporated: Steel Dynamics, Inc. Electric Arc Furnace (EAF #2), Tunnel Furnace(#2) and Continuous Caster #2 processes and equipment descriptions, emission standards and limitations, compliance determinations, monitoring and record keeping and

reporting requirements will be incorporated in a separate Part 70 permit 033-8068-00043.

- (b) CP 033-9187-00043, issued on March 24, 1998

Description (c) and Operation Conditions 13 through 20 pertain specifically to Steel Dynamics, Inc. new exhaust and control system for the two continuous casters and the Ladle Metallurgical facility consisting of 3 Ladle metallurgical stations and 2 stir stations.

Reason not incorporated: Steel Dynamics, Inc. new exhaust and control system for the two continuous casters and the Ladle Metallurgical facility consisting of 3 Ladle metallurgical stations and 2 stir stations and equipment descriptions, emission standards and limitations, compliance determinations, monitoring and record keeping and reporting requirements will be incorporated in a separate Part 70 permit 033-8068-00043.

- (c) CP033-8091-00043, issued on June 25, 1997

Condition 35: That pursuant to 326 IAC 2-2-3 (BACT), the coal double cone classifier (grinder) shall be totally enclosed. The air from the product collectors that is not recirculated shall be emitted through the rotary hearth furnace baghouse Stack 40.

Reason not incorporated: The double coal classifier (grinder) also known as the coal crusher now exhausts to the Coal Dryer Stack 75. The coal crusher is totally enclosed and the air from the product collectors that is not recirculated shall be emitted through the coal dryer stack 75. The PM/PM10 limit of 1.11 pounds per hour and outlet grain loading of 0.0052 grains per dry standard cubic foot for the Coal Dryer baghouse and stack 75 will remain the same.

- (d) A033-17732-00076, issued September 17, 2003

The RHF fugitive emissions and RHF briquette baghouses were permitted in A033-17732-00076 for a combined air flow rate not to exceed 100,000 dscfm with an outlet grain loading of 0.0052 grains per dry standard cubic foot consisting of one baghouse with a 60,000 dscfm air flow rate and one baghouse with a 40,000 dscfm air flow rate to control fugitive emissions from the Rotary Hearth furnace, both baghouses exhaust through stack 77. Only the 40,000 dscfm RHF fugitive emissions baghouse was constructed as part of the permitted 100,000 air flow increase and exhausts to Stack 77.

- (e) SSM 033-15995-0076

The Submerged Arc Furnace baghouse was permitted in A033-17732-00076 to increase the air flow rate by 100,000 dscfm with an outlet grain loading no greater than 0.0032 grains per dry standard cubic foot. The RHF discharge chute baghouse with an airflow of 60,000 dscfm, which was to be part of 100,000 dscfm increase of air flow to stack 77, was constructed and has been directed instead to stack 58 and has become part of the permitted 100,000 air flow increase to stack 58.

### **Enforcement Issue**

There are no enforcement actions pending.

### **Recommendation**

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

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

An administratively complete Part 70 permit application for the purposes of this review was received on August 14, 2000.

No notice of completeness letter was mailed to the source.

**Potential to Emit - Steel Dynamics, Inc. and Iron Dynamics, Inc.**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source 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.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	greater than 100
PM-10	greater than 100
SO <sub>2</sub>	greater than 100
VOC	less than 100
CO	greater than 100
NO <sub>x</sub>	greater than 100

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM10, SO2, VOC, CO and NOx are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is less than twenty-five (25) tons per year.
- (c) Fugitive Emissions  
Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2, the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

### Actual Emissions - Iron Dynamics, Inc.

The following table shows the actual emissions from Iron Dynamics, Inc. as reported for 2001. This information reflects the OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	3.30
PM-10	3.30
SO <sub>2</sub>	16.29
VOC	1.67
CO	44.77
NO <sub>x</sub>	180.14
Pb	0.00041

### County Attainment Status

The source is located in Dekalb County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Dekalb County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2
- (b) Dekalb County has been classified as attainment or unclassifiable for PM10, SO2, NOx. CO and lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (c) Fugitive Emissions  
Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2, the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

### Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and

limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.

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

### **Federal Rule Applicability**

#### Coal Dryer 75

- (a) Pursuant to 40 CFR Part 60, Subpart Y (Standards of Performance for Coal Preparation Plants), particulate emissions from the thermal coal dryer 75 shall not exceed 0.031 grains per dry standard cubic feet (dscf) through stack 75.
- (b) The provisions of 40 CFR Part 60, Subpart A (General Provisions), which are incorporated by reference in 326 IAC 12-1, apply to the Coal Dryer 75 except when otherwise specified in 40 CFR Part 60, Subpart Y.
- (c) There are no other New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPS) (326 IAC 20 and 40 CFR Part 63) applicable to this source.

### **State Rule Applicability - Entire Source**

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

The source is subject to ambient air monitoring pursuant to 033-9187-00043, because the source is above the de minimis monitoring level for PM10 and NOx. Therefore, a requirement in CP033-9187-00043, issued March 24, 1998 to perform ambient monitoring of PM10 and NO2 after construction. Since SDI has previously monitored NO2 and PM10 currently (at the time CP 033-9187-00043 was issued), the condition will not extend the minimum time period for monitoring. Rather, the OAQ will consider the air quality data along with the actual and permitted operating practices at SDI when making a decision to allow monitoring sites to be discontinued.

In a letter dated September 7, 2001, signed by IDEM, OAQ, Assistant Commissioner Janet McCabe and sent to SDI, the Office of Air Quality (OAQ), considered and approved a request to temporarily discontinue PM10 monitoring at the Butler plant. This approval is contingent upon reactivation of the monitoring plan whenever Iron Dynamics becomes operational or another permit requires PM10 monitoring. The Permittee will be required to continue to operate the NO<sub>2</sub> monitoring site.

In the letter SDI/IDI agreed to continue the operation of the meteorological parameters (wind speed/wind direction) at the Butler plant.

#### 326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of PM10, NOx, SO<sub>2</sub>, and VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

### 326 IAC 5-1 (Opacity Limitations)

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

- (a) Opacity shall not exceed an average of forty percent (40%) 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.

### 326 IAC 6-4 Fugitive Dust Emissions

Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), all sources of fugitive dust shall not allow the generation of particulate matter such that it escapes beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located.

## State Rule Applicability - Individual Facilities

### Rotary Hearth Furnace

#### 326 IAC 2-2-3 Particulate Limitations - Best Available Control Technology (BACT)

- (a) Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), the PM/PM10 (where PM10 includes both filterable and condensable components) emissions from the rotary hearth furnace process baghouse shall not exceed an air flow rate design of 310,000 dscfm (353,000 acfm) and 0.0052 grains per dscf through Stack 40. The total emissions shall not exceed 13.4 pounds per hour.
- (b) Pursuant to A-033-17732-00076, issued September 17, 2003 and 326 IAC 2-2-3 (BACT), the PM/PM10 (where PM10 includes both filterable and condensable components) emissions from the rotary hearth furnace fugitives baghouse and briquetter baghouse shall not exceed a total air flow rate design of 100,000 dscfm and 0.0052 grains per dscf through Stack 77. The total emissions shall not exceed 4.46 pounds per hour.

#### 326 IAC 2-2-3 Opacity Limits- Best Available Control Technology

- (a) Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), the visible emissions discharged into the atmosphere from the rotary hearth furnace process baghouse Stack 40 and associated baghouses Stack 77 shall be limited to three percent (3%) opacity in accordance with Condition D.1.16 as determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A).
- (b) Pursuant to CP-033-8091-00043, issued June 25, 1997 and 326 IAC 2-2-3, the visible emissions from vents, stacks and building roof monitors, unless otherwise specified, shall not exceed three (3%) percent opacity. Visible emissions shall be determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A) pursuant to 326 IAC 5-1-4.
- (c) Pursuant to SSM-033-17732-00076, issued September 17, 2003 and 326 IAC 2-2-3 (BACT), the visible emissions discharged into the atmosphere from the rotary

hearth furnace associated baghouses Stack 77 shall be limited to three percent (3%) opacity in accordance with Condition D.1.16 as determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A).

### 326 IAC 2-2-3 Sulfur Dioxide (SO<sub>2</sub>) Limitations -Prevention of Significant Deterioration (PSD) (BACT)

Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), the sulfur dioxide emissions from the rotary hearth furnace process baghouse Stack 40 shall be controlled by lime injection, wet scrubber and/or use of EAF dust as supplemental feedstock. The SO<sub>2</sub> emissions shall be limited as follows:

- (a) When using lime injection or wet scrubber as control, SO<sub>2</sub> emissions shall not exceed 0.75 pounds per ton of material charged into the furnace. The SO<sub>2</sub> emissions shall not exceed 78 pounds per hour.
- (b) When using at least 2 tons per hour of EAF dust as supplemental feedstock as control, SO<sub>2</sub> emissions shall not exceed 0.4 pounds per ton of material charged into the furnace. The SO<sub>2</sub> emissions shall not exceed 39.0 pounds per hour. If the stack test shows that this limitation is not achievable in practice, the Permittee can request the Department to re-evaluate the SO<sub>2</sub> emissions and adjust the EAF dust as supplemental feedstock limitation to reflect the control efficiency observed in the test. The Department may, at its discretion, use the authority under IC 13-15-7-2 to re-open and revise the limit to more closely reflect the actual stack test results. The Department will provide an opportunity for public notice and comment prior to finalizing any permit revision. IC 13-15-7-3 (Revocation or Modification of a Permit: Appeal to Board) shall apply to this permit modification.

### 326 IAC 2-2-3 Volatile Organic Compounds (VOC) - Best Available Control Technology

Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), except during periods of start up or shut down, the volatile organic compound emissions from the rotary hearth furnace process baghouse Stack 40 shall be controlled by an afterburner and operated at a temperature exceeding two thousand six hundred (2,600) ° F and emissions shall not exceed 0.06 pounds per ton of material charged into the furnace. The total emissions shall not exceed 6.23 pounds per hour.

### 326 IAC 8-1-6 VOC General Reduction Requirements (BACT):New Facilities

The Rotary Hearth Furnace has VOC potential emissions greater than 25 tons per year and was constructed after January 1, 1980. Therefore, the Rotary Hearth Furnace is subject to Best Available Control Technology (BACT) for VOC. The BACT requirements for 326 IAC 2-2 for VOC emissions are considered equivalent to the BACT requirements under 326 IAC 8-1-6.

### 326 IAC 2-2-3 Carbon Monoxide (CO) Best Available Control Technology

Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), except during periods of start up or shut down, the carbon monoxide emissions from the rotary hearth furnace process baghouse Stack 40 shall be controlled by afterburner and operated at a temperature exceeding two thousand six hundred (2,600)° F and emissions shall not exceed 100 ppm, 114,519 ug/m<sup>3</sup>. The total emissions shall not exceed 146.8 pounds per hour.

### 326 IAC 2-2-3 Nitrogen Oxides (NO<sub>x</sub>) - Best Available Control Technology

Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), the nitrogen oxide(s) emissions from the rotary hearth furnace process baghouse (Stack 40) shall be controlled by the use of low-NO<sub>x</sub> natural gas-fired burners and a selective non-catalytic reduction

unit (SNCR). Except during periods of start up or shut down, the total emissions shall not exceed 1.25 pounds per ton of material charged into the furnace and 120 pounds per hour.

The SNCR system shall be operated in a manner recommended by the manufacturer and good work practices to minimize the NOx emissions and ammonia slip.

#### 326 IAC 2-2-3 Lead Limitations - Best Available Control Technology

- (a) Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), the lead emissions from the rotary hearth furnace process baghouse (Stack 40) shall not exceed 0.00058 pounds per ton of material charged into the furnace and 0.0557 pounds per hour.
- (b) Pursuant to SSM033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3 (BACT), the lead emissions from the rotary hearth furnace associated discharge chute baghouse Stack 77 shall not exceed 0.019 pounds per hour.

#### 326 IAC 2-2-3 Start Up and Shut Down Emissions (BACT)

- (a) Pursuant to SSM 033-15955-00076, issued on December 18, 2002 and 326 IAC 2-2-3, the startup is defined as the duration from the firing of the burners in the RHF to the time when the RHF exhaust gas temperature is within the optimum ranges of the operation control devices for NOX, CO and VOC emissions.
- (b) Shutdown is defined as the duration from first curtailment of fuel input to the RHF burners with the intent of full shutdown to the final complete stop of fuel input and complete cessation of combustion in the RHF.
- (c) The RHF shall be operated in a manner consistent with good air pollution control and work practices to minimize emissions during startup and shutdown by operating in accordance with written procedures developed and maintained by the Permittee, which shall include at a minimum the following measures:
  - (1) Review of operating parameters of the unit startup, or shutdown as necessary to make adjustments to reduce or eliminate excess emissions;
  - (2) Operate emission control equipment as soon as the RHF exhaust gas temperature reaches the lower value of the optimum temperature range for the control equipment. This operation shall continue until the time the RHF shutdown sequence is initiated with the intention of shutdown of the unit; and
  - (3) Implementation of the inspection and repair procedures for the RHF and the emissions control equipment prior to attempting startup to ensure proper operation.

#### 326 IAC 6-3 Particulate Matter Limitation Manufacturing Processes

This facility is not subject to 326 IAC 6-3, because it has applicable particulate matter emissions limitations in previous permits issued pursuant to 326 IAC 2-2-3.

#### 326 IAC 7-1.1 Sulfur Dioxide Limitations

This facility is subject to 326 IAC 7-1.1 and the BACT sulfur dioxide limits satisfy the required emissions limitations in 326 IAC 2-2 (Prevent Significant Deterioration) and 326 IAC 7-1.1 (Sulfur Dioxide Emissions Limitations).

### **Submerged Arc Furnace**

#### 326 IAC 2-2-3 Particulate Matter Emissions Limitations (PM/PM10) - Best Available Control technology

- (a) Pursuant to SSM-033-15955-00076, issued December 18, 2002 and 326 IAC 2-2-3, the PM/PM-10 emissions from the submerged arc furnace (SAF) stack 58 shall not exceed 0.0032 grains per dry standard cubic feet (dscf). At a maximum airflow rate of 300,000 dry standard cubic feet per minute (dscfm), this limit is equivalent to 8.23 pounds of PM/PM-10 per hour.
- (b) Pursuant to CP-033-9187-00043, issued March 24, 1998 and 326 IAC 2-2-3, the PM/PM-10 emissions from the desulfurization station, DRI bins, slag pots and tapping associated with the SAF shall be captured by a canopy hood and exhausted to the SAF baghouse.

#### 326 IAC 2-2-3 Opacity Limits - Best Available Control technology

- (a) Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the visible emissions from the submerged arc furnace (SAF) stack 58 shall not exceed three percent (3%) opacity determined by a six (6) minute average.
- (b) Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the visible emissions from any building opening, shed or storage silo shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A) pursuant to 326 IAC 5-1-4.

#### 326 IAC 2-2-3 Sulfur Dioxide (SO<sub>2</sub>) - - Best Available Control technology

Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the sulfur dioxide emissions from the submerged arc furnace stack (No. 58) shall not exceed 0.084 pounds per ton. At a maximum process throughput of 106 tons per hour, this limit is equivalent to 1.6 pounds of SO<sub>2</sub> per hour.

#### 326 IAC 2-2-3 Volatile Organic Compounds (VOC) - Best Available Control technology

Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the volatile organic compound emissions from the submerged arc furnace stack 58 shall not exceed 0.035 pounds per ton. At a maximum process throughput of 106 tons per hour, this limit is equivalent to 3.7 pounds of VOC per hour.

#### 326 IAC 2-2-3 Carbon Monoxide (CO) - Best Available Control technology

Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the carbon monoxide emissions from the submerged arc furnace stack 58 shall not exceed 1.26 pounds per ton. At a maximum process throughput of 106 tons per hour, this limit is equivalent to 135.5 pounds of CO per hour.

#### 326 IAC 9-1 Carbon Monoxide (CO)

Pursuant to CP033-9187-00043, issued March 24, 1998 and 326 IAC 9-1, the Permittee shall not allow the discharge of CO from the Submerged Arc Furnace unless the waste gas stream is controlled by a direct-flame afterburner, boiler, or other approved method. The Permittee has elected thermal oxidation.

326 IAC 2-2-3 Nitrogen Oxide Emissions Limitations - Best Available Control technology

Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the nitrogen oxide(s) emissions from the submerged arc furnace stack (No. 58) shall not exceed 0.117 pounds per ton. At a maximum process throughput of 106 tons per hour, this limit is equivalent to 12.4 pounds of NOx per hour.

326 IAC 6-3 Particulate Limitation Manufacturing Processes

This facility is not subject to 326 IAC 6-3, because it has applicable particulate matter emissions limitations in previous permits issued pursuant to 326 IAC 2-2-3.

326 IAC 7-1.1 Sulfur Dioxide Limitations

This source is subject to 326 IAC 7-1.1 and the BACT sulfur dioxide limits satisfy the required emissions limitations in 326 IAC 2-2 (Prevent Significant Deterioration) and 326 IAC 7-1.1 (Sulfur Dioxide Emissions Limitations).

326 IAC 2-1.1-3 Applicability

Pursuant to Exemption 033-17200-00076, issued August 6, 2003 and 326 IAC 2-1.1-3, the hot pan conveyors provided in the description information in Section D.9 are classified as exempt from air pollution permit requirements.

40 CFR 52 Subpart P and 326 IAC 6-3-2 Particulate (PM/PM10) (Particulate Emissions Limitations for Manufacturing Processes)

Pursuant to exemption 033-17200-00076, issued August 6, 2003 and 326 IAC 6-3-2] (Particulate Emissions Limitations for Manufacturing Processes), particulate emissions from each hot pan conveyor transfer points shall not exceed 51.9 pounds per hour when operating at a nominal process weight rate of 106 tons per hour.

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

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

## Coal and Iron Ore Processing

326 IAC 2-2-3 Particulate Matter Limitations - Best Available Control technology

- (a) Pursuant to CP-033-9187-00043, issued March 24, 1998, 326 IAC 2-2-3, the coal and iron ore receiving shall be conducted in a shed. The shed shall have closure material over the door openings with air pressure in the shed maintained at a level to ensure the particulate material does not escape through the doors. The drop point and shed shall each have capture systems for particulate matter which are exhausted to a baghouse for control. Particulate matter emissions shall not exceed 0.5 pounds per hour from stacks 67 and 68.
- (b) Pursuant to SSM 033-12992 -00076, issued May 15, 2002 and 326 IAC 2-2-3, the PM/PM10 (where PM10 includes both filterable and Condensable components) emissions from the Coal Dryer baghouse B-75 shall not exceed 0.0052 grains per dscf through stacks 75. The PM/PM10 shall not exceed 1.11 lb per hour from Coal Dryer stack 75.

- (c) Pursuant to SSM 033-12992 -00076, issued May 15, 2002 and 326 IAC 2-2-3, the PM/PM10 (where PM10 includes both filterable and condensible components) emissions from the Ore Dryer baghouses B-76 shall not exceed 0.0052 grains per dscf through stack 76. The PM/PM10 shall not exceed 1.56 lb per hour from Ore Dryer stack 76.

40CFR 52 Subpart P and 326 IAC 6-3-2 Particulate (PM/PM10) Particulate Limitations for Manufacturing Processes

- (a) Pursuant to SSM 033-12992 -00076, issued May 15, 2002, the particulate matter (PM) from the Coal Dryer and ore dryer shall be limited as follows:

Process	Process Weight (Lbs/hr)	PM Emission Limit (Lbs/hr)
Coal Dryer	120,000	46.3
Ore Dryer	230,000	52.7

These limits were calculated as follows:

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

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

- (b) Pursuant to 40CFR 52 Subpart P and 326 IAC 6-3-2 Particulate (PM/PM10) Particulate Limitations for Manufacturing Processes the ore preparation process shall be limited as follows:

Process	Process Weight (Lbs/hr)	PM Emission Limit (Lbs/hr)
Ore Prep Process	230,000	52.7

These limits were calculated as follows:

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

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

326 IAC 2-2-3 Opacity Limits - Best Available Control technology

- (a) Pursuant to CP-033-8091-00043, issued on June 25, 1997 and 326 IAC 2-2-3, the coal and iron conveyers shall be covered and the transfer points enclosed. The visible emissions at the discharged and transfer point shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A) pursuant to 326 IAC 5-1-4.
- (b) Pursuant to CP-033-8091-00043, issued on June 25, 1997 and 326 IAC 2-2-3, the visible emissions from vents, stacks and building roof monitors, unless otherwise specified, shall not exceed three (3%) percent opacity. Visible emissions shall be determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A)

pursuant to 326 IAC 5-1-4.

- (d) Pursuant to CP-033-9187-00043, issued March 24, 1998 and 326 IAC 2-2-3, the visible emissions from any building opening, shed or storage silo shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A) pursuant to 326 IAC 5-1-4.

#### 326 IAC 2-2-3 Sulfur Dioxide (SO<sub>2</sub>) Limitations - Best Available Control technology

Pursuant to SSM 033-12992-00076, issued May 15, 2002 and 326 IAC 2-2-3, the volatile organic compound emissions from the Coal Dryer and Ore Dryer shall not exceed 0.0053 pounds per MMBtu of heat input. The VOC emissions shall not exceed 0.14 pounds per hour and 0.15 pounds per hour from Coal Dryer and Ore Dryer stacks 75 and 76, respectively.

#### 326 IAC 2-2 Volatile Organic Compounds (VOC) Best Available Control Technology

Pursuant to SSM 033-12992-00076, issued May 15, 2002 and 326 IAC 2-2-3, the volatile organic compound emissions from the Coal Dryer and Ore Dryer shall not exceed 0.0053 pounds per MMBtu of heat input. The VOC emissions shall not exceed 0.14 pounds per hour and 0.15 pounds per hour from Coal Dryer and Ore Dryer stacks 75 and 76, respectively.

#### 326 IAC 2-2 Carbon Monoxide (CO) Best Available Control Technology

Pursuant to SSM 033-12992-00076, issued May 15, 2002 and 326 IAC 2-2-3, the carbon monoxide emissions from the Coal Dryer and Ore Dryer shall not exceed 0.082 pounds per MMBtu of heat input. The CO emissions shall not exceed 2.1 pounds per hour and 2.3 pounds per hour from Coal Dryer and Ore Dryer stacks 75 and 76, respectively.

#### 326 IAC 2-2-3 Nitrogen Oxides (NO<sub>x</sub>) - Best Available Control Technology

Pursuant to SSM 033-12992-00076, issued May 15, 2002 and 326 IAC 2-2-3, the nitrogen oxide(s) emissions from the Coal Dryer and Ore Dryer shall be controlled by the use of low-NO<sub>x</sub> natural gas-fired burners and shall not exceed 0.049 pounds per MMBtu of heat input. The NO<sub>x</sub> emissions shall not exceed 1.25 pounds per hour and 1.35 pounds per hour from Coal Dryer and Ore Dryer stacks 75 and 76, respectively.

#### 326 IAC 7-1.1 Sulfur Dioxide Limitations

These coal and ore dryers are subject to 326 IAC 7-1.1 and the BACT sulfur dioxide limits satisfy the required emissions limitations in 326 IAC 2-2 (Prevent Significant Deterioration) and 326 IAC 7-1.1 (Sulfur Dioxide Emissions Limitations).

### **Material Storage and Handling**

#### 326 IAC 2-2-3 Opacity Limits - Prevention of Significant Deterioration (PSD) (BACT)

- (a) Pursuant to CP-033-8091-00043, issued on June 25, 1997, and 326 IAC 2-2-3, the visible emissions discharged into the atmosphere from the silos storing coal, iron ore, lime, and rotary hearth furnace dust shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A) pursuant to 326 IAC 5-1-4.
- (b) Pursuant to CP-033-8091-00043, issued on June 25, 1997, and 326 IAC 2-2-3, the fugitive particulate matter emissions into the atmosphere from the coal, iron ore and rotary hearth furnace dust handling system shall not exceed three (3%) percent opacity determined by a six (6) minute average (34 readings taken accordance with EPA method 9, Appendix A)

pursuant to 326 IAC 5-1-4.

- (c) Pursuant to CP-033-8091-00043, issued June 25, 1997 and 326 IAC 2-2-3, water shall be applied at each transfer and discharge point of the coal and iron ore stacker. The material dropping distance shall be maintained at less than three (3) feet.
- (d) Pursuant to CP-033-8091-00043, issued on June 25, 1997 and 326 IAC 2-2-3, the coal and iron conveyers shall be covered and the transfer points enclosed. The visible emissions at the discharged and transfer point shall not exceed three (3%) percent opacity determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A) pursuant to 326 IAC 5-1-4.
- (e) Pursuant to CP-033-9187-00043, issued March 24, 1998 and 326 IAC 2-2-3, the material reclaim hoppers used by the front end loaders to transport material from the storage piles to the conveying system shall be located above ground. The discharge dropping point distance shall be less than three (3) feet.
- (f) Pursuant to CP-033-9187-00043, issued on March 24, 1998, water shall be applied to the storage piles to minimize fugitive dust. Water shall be applied continuously during stacking. The material drop shall be maintained at less than three (3) feet.
- (g) Pursuant to CP-033-9187-00043, issued on March 24, 1998 and 326 IAC 2-2-3, the visible emissions discharged into the atmosphere from the storage piles shall be limited to ten (10%) percent opacity determined by a six (6) minute average (24 reading taken in accordance with EPA Method 9, Appendix A). These limitations may not apply during periods when application of fugitive particulate control measures are either ineffective or unreasonable due to sustained very high wind speeds. During such periods, the Permittee must continue to implement all reasonable fugitive particulate control measures.

### Specifically Regulated Insignificant Activities

#### 326 IAC 8-3-2 VOC (Cold Cleaner Operations)

This source is subject to 326 IAC 8-3-2 (Cold Cleaner Operations), because the source operates a cold cleaning degreasing operation, constructed after January 1, 1980.

#### 326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control),

This source is subject to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), because the source operates a cold cleaner degreaser without remote solvent reservoirs, constructed after July 1, 1990, constructed after July 1, 1990.

### Testing Requirements

- (a) Rotary Hearth Furnace
  - (1) Pursuant to SSM033-15955-00076, within sixty (60) days of achieving maximum production rate but no later than 18 months after issuance of the operation permit validation letter as per requirements of SSM033-15955-00076, for the rotary hearth furnace process stack 40, and in order to demonstrate compliance with conditions D.1.1(a), D.1.3, D.1.4, D.1.6 and D.1.7, the Permittee shall perform PM/PM10, SO<sub>2</sub>, VOC, CO and NO<sub>x</sub> testing on the RHF process baghouse Stack 40, using a testing methods approved by the Commissioner. PM10 includes both filterable and condensable components.
  - (2) The Permittee shall perform PM/PM10, NO<sub>x</sub>, CO, VOC and SO<sub>2</sub> testing on the RHF process baghouse Stack 40 every two and one-half (2.5) years after completing the testing required in item (1) of this condition, utilizing testing

methods approved by the Commissioner. PM10 includes both filterable and condensible components.

- (3) Pursuant to SSM033-15955-00076, during the time frame mentioned in item (1) of this condition, the Permittee shall perform PM/PM10 testing for the RHF fugitives baghouse and RHF briquetter baghouse Stack 77, in order to demonstrate compliance with condition D.1.1(b), utilizing methods as approved by the commissioner. PM10 includes both filterable and condensable components.
- (4) The Permittee shall perform PM/PM10 testing for the RHF fugitives and RHF briquetter baghouse Stack 77, every two and one-half (2.5) years after completing the testing required in item (c) of this condition, utilizing testing methods approved by the Commissioner. PM10 includes both filterable and condensible components.
- (5) Pursuant to SSM033-15955-00076, during the time frame mentioned in item (1) of this condition, the Permittee shall analyze the EAF baghouse dust for the hazardous components. The Permittee shall calculate the hourly HAP emissions assuming 100% vaporization of the hazardous components identified previously for the Rotary Hearth Furnace process baghouse Stack 40, using the highest throughput rate in tons per hour of EAF baghouse dust achieved during this period. This mass balance computation shall be converted to annual emissions assuming 8760 hours of operation in a year, and used to establish that the single HAP emissions are less than 10 tons per year and the combination of HAPs emissions are less than 25 tons per year pursuant to 326 IAC 2-4.1-1. In the event that the HAP emissions exceed the threshold stated earlier, the Permittee shall inform the IDEM, OAQ about the same, and curtail the operation of the RHF in a manner, not to exceed the thresholds specified in this condition.

All testing (except testing of the EAF baghouse dust, which shall be tested in accordance with SW-846 or other approved methods) shall be conducted in accordance with Section C- Performance Testing.

(b) Submerged Arc Furnace

- (1) Pursuant to SSM033-15955-00076, within sixty (60) days of achieving maximum production rate but no later than 18 months after issuance of this operation permit validation letter as per requirements of SSM033-15955-00076, for the submerged arc furnace Stack 58, and in order to demonstrate compliance with conditions D.2.1, D.2.3, D.2.4, D.2.5 and D.2.7, the Permittee shall perform PM/PM10, SO<sub>2</sub>, VOC, CO and NO<sub>x</sub> testing on the SAF Stack 58, using testing methods approved by the Commissioner. PM10 includes both filterable and condensible components.
- (2) The Permittee shall perform PM/PM10, SO<sub>2</sub>, VOC, CO and NO<sub>x</sub> testing on the SAF Stack 58 every two and one-half (2.5) years after completing the testing required in item (1) of this condition, utilizing testing methods approved by the Commissioner. PM10 includes both filterable and condensable components.

(c) Coal Dryer Stack

- (1) Pursuant to SSM033-12992-00076, issued May 15, 2002, within sixty (60) days of achieving maximum production rate, but no later than 18 months after issuance of SSM033-12992-00076 and, in order to demonstrate compliance with conditions D.4.1, D.4.2 and D.4.3, the Permittee shall perform PM/PM-10 testing

- on the coal dryer baghouse Stack 75, utilizing a testing method approved by the Commissioner in accordance with Section C - Performance Testing and as specified in 40 CFR 60.254. PM10 includes both filterable and condensable components.
- (2) The Permittee shall perform PM/PM10 testing on the Coal Dryer baghouse Stack 75 every five (5) years after completing the testing required in item (1) of this condition, utilizing testing methods approved by the Commissioner, in accordance with Section C - Performance Testing. PM10 includes both filterable and condensable components.
- (d) Ore Dyer Stack
- (1) Pursuant to SSM033-12992-00076, issued May 15, 2002, within sixty (60) days of achieving maximum production rate, but no later than 18 months after issuance of SSM033-12992-00076 and in order to demonstrate compliance with condition D.5.1, D.5.2 and D.5.3, the Permittee shall perform PM/PM-10 testing on the Ore Dryer baghouse Stack 76, utilizing a testing method approved by the Commissioner, in accordance with Section C - Performance Testing. PM10 includes both filterable and condensable components.
- (2) The Permittee shall perform PM/PM10 testing on the Ore Dryer baghouse Stack 76 every five (5) years after completing the testing required in item (1) of this condition, utilizing testing methods approved by the Commissioner, in accordance with Section C - Performance Testing. PM10 includes both filterable and condensable components.

## Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less 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 requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also 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.

Compliance monitoring requirements applicable to this source are as follows:

1. The Rotary Hearth Furnace (RHF) has applicable compliance monitoring conditions as specified below:
  - (a) The Permittee shall maintain a continuous opacity monitoring system for measuring SO<sub>2</sub>, CO and NO<sub>x</sub> emissions in pounds per hour from the RHF baghouse stack 40.
    - (1) The Permittee shall submit to IDEM, OAQ, prior to start of operation, a

complete written continuous monitoring standard operating procedure (SOP), in accordance with the requirements of 326 IAC 3-5-4.

- (2) The Permittee shall record the output of the system and shall perform the required record keeping, pursuant to 326 IAC 3-5-6, and reporting, pursuant to 326 IAC 3-5-7.

(b) Opacity Monitoring on the Rotary Hearth Furnace

The Permittee shall demonstrate compliance with opacity monitoring requirements by using any of the following methods:

- (1) Opacity Readings by certified opacity observer:
  - (A) Opacity from the rotary hearth furnace process baghouse (stack 40) and associated discharge chute baghouse (Stack 77) stacks shall be performed at least once per shift during normal daylight operations. A certified opacity observer shall observe the opacity when the rotary hearth furnace is in operation.
  - (B) These observations shall be taken in accordance with 40 CFR 60 Appendix A, Method 9 for at least two six (6) minute averages.
  - (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) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an excess emission is observed. Failure to take response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit.
  - (E) Conditions (A) through (C) above are not applicable should a continuous opacity monitor be installed which meets 40 CFR 60, Appendix B, Performance Specification or a bag leak detector is installed as provided in this condition.
- (2) Install, calibrate, certify, operate and maintain a continuous opacity monitoring system in accordance with 40 CFR 60 Appendix B, Performance Specification for measuring opacity from the rotary hearth furnace process baghouse Stack 40 and associated discharge chute baghouse Stack 77 stacks in accordance with 326 IAC 3-5-2 through 326 IAC 3-5-7.

The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an excess emission is observed. Failure to take response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit.

- (3) Installation and operation of a bag leak detection system. If bag leak detection system is installed, then parametric monitoring of the RHF baghouse stack and baghouse inspections shall not be applicable. If the bag leak detection system is inoperable, the Permittee shall substitute

certified opacity observer readings to show compliance, until the bag leak detection system is operable.

- (c) The baghouse leak detection system shall meet the following criteria:
- (1) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 0.0052 grains per dry standard cubic foot or less.
  - (2) The bag leak detection system sensor must provide output of relative particulate matter loading.
  - (3) The bag leak detection system must be equipped with an alarm system that will alarm when an increase in relative particulate loading is detected over a preset level established or verified during a stack test.
  - (4) The bag leak detection system shall be installed and operated in a manner consistent with available written guidance from the US Environmental Protection Agency or, in the absence of such written guidance, the manufacturer's written specifications and recommendations for installation, operation, and adjustment of the system.
  - (5) The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the devices, and establishing the alarm set points and the alarm delay time.
  - (6) In no event shall the sensitivity be increased by more than 100 percent or decreased by more than 50 percent over a 326 day period unless such adjustment follows a complete baghouse inspection which demonstrates the baghouse is in good operating condition.
  - (7) The bag leak detection system sensors must be inspected monthly and build-up must be removed from probe and insulator.

The Permittee shall perform monthly QA checks including response tests and electronics drift checks and opacity readings to confirm the operation of the baghouse is in order.

The bag detector must be installed downstream of the baghouse.

In the event of a bag leak detection system alarm is triggered the Permittee shall follow the steps in Condition D.1.21 of this permit.

The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an excess emission is observed. Failure to take response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit.

- (d) The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the rotary hearth furnace, at least once per shift when the RHF is in operation and venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 and 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C-

Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

- (e) The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the rotary hearth furnace fugitives and briquetters at least once per shift when the RHF is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 and 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

These monitoring conditions are necessary because the baghouse for the rotary hearth furnace must operate properly to ensure compliance with PM/PM10 and Visible Emission BACT Emission Limits, and 326 IAC 2-7 (Part 70).

2. The Submerged Arc Furnace (SAF) has applicable compliance monitoring conditions as specified below:

(a) Pursuant to CP 033-9187-00043, issued March 28, 1998, the Permittee shall either:

- (1) The Permittee shall Install, calibrate, operate and maintain a continuous monitoring system for measuring opacity at the exhaust from the SAF stack 58 in accordance with 326 IAC 3-5 and 40 CFR 60, Appendix B. The Permittee shall record the output of the system and provide record keeping and reporting pursuant to 326 IAC 3-5;

or

(2) The Permittee shall do the following:

- (A) Have a certified visible emission observer observe opacity of the visible emissions from the SAF stack 58 at least once per shift when the SAF is operating. These observations shall be taken accordance with 40 CFR 60, Appendix A, Method 9 for at least three six minute averages. Records will be maintained of the visible emission observations;

and

(B) Install, calibrate, operate and maintain continuous monitoring systems for measuring and recording:

- (i) the pressure loss through the venturi constriction of the SAF scrubber. The monitoring device is to be certified by the manufacturer to be accurate within  $\pm 1$  inch of water; and
- (ii) the water supply pressure to the SAF scrubber. The monitoring device is to be certified by the manufacturer to be accurate  $\pm 5$  percent of the design water supply pressure. The monitoring

device's pressure sensor or pressure tap must be located close to the water discharge point. The OAQ, Compliance Data Section must be consulted for approval in advance of selecting alternative locations for the pressure sensor or tap.

All scrubber monitoring devices shall use chart recorders which are operated at a chart speed of 1.5 inches per hour.

- (b) The Permittee shall record the total static pressure drop and flow rate of scrubber used in conjunction with the submerged arc furnace at least once per shift when the SAF is in operation. When for any one reading, the pressure drop across the scrubber is outside the normal range of 40 to 60 inches of water or a range established during the latest stack test and the flow rate of the scrubber is below the minimum of 40 gallons per minute or a minimum rate established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure drop or flow rate reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- (c) The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the desulfurization station at least once per shift when the SAF is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 and 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- (d) Thermal Oxidizer Temperature Monitoring
  - (1) A continuous monitoring system shall be calibrated, maintained and operated on the thermal oxidizer for measuring operating temperature. The output of this system shall be recorded as an hourly average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports whenever the hourly average temperature of the thermal oxidizer is below 1650<sup>EF</sup>. An hourly average temperature that is below 1650<sup>EF</sup> is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a violation from this permit.
  - (2) The Permittee shall determine the hourly average temperature from the most recent valid stack test that demonstrates compliance in condition D.2.5, as approved by IDEM.
  - (3) On and after the date the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports whenever the hourly average temperature of the thermal oxidizer is below the hourly average temperature as observed during the compliant stack test. An hourly average temperature that is below hourly average temperature as

observed during the compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a violation from this permit.

- (e) The thermal oxidizer parametric monitoring includes the following:
- (1) The Permittee shall determine fan amperage or duct pressure from the most recent valid stack test that demonstrates compliance with limits in condition D.2.5, as approved by IDEM.
  - (2) The duct pressure or fan amperage shall be observed at least once per day when the thermal oxidizer is in operation. When for any one reading the duct pressure or fan amperage is outside the normal range as established in the most recent compliant stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports. 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 - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.

These monitoring conditions are necessary because the baghouse, scrubber and thermal oxidizer for the submerged arc furnace must operate properly to ensure compliance with PM/PM10, SO<sub>2</sub>, CO and Visible Emission BACT Emission Limits, and 326 IAC 2-7 (Part 70).

3. The Coal and Iron Ore Processing has applicable compliance monitoring conditions as specified below:
- (a) Once per shift visible emissions notations of the receiving shed and railcar dumper stacks 67 and 68, ore preparation stack 74, Coal Dryer and Ore Dryer stacks 75 and 76 exhaust shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. 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. 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. 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. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan, Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit.
  - (b) The Permittee shall record the total static pressure drop across the Railcar Unloading Shed Baghouse used in conjunction with the Railcar Unloading Shed and Rail Car Dumper, at least once per shift when the Railcar Unloading Shed and Railcar Dumper are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 to 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation

from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

(c) Coal dryer

(1) The Permittee shall install, calibrate, maintain and continuously operate a monitoring device for the measurement of the temperature of the gas stream at the exit of the thermal dryer on a continuous basis. The monitoring device is to be certified by the manufacturer to be accurate within  $\pm 3^{\circ}$  Fahrenheit.

(2) The monitoring device under paragraph (1) shall be recalibrated annually in accordance with procedure under 40 CFR 60.13(b).

(d) The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the ore preparation process at least once per shift when the ore preparation process are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 and 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

(e) Since there are no pressure gauges on the coal dryer and ore dryer baghouses, parametric monitoring is not feasible on these baghouses, but baghouse inspections are still required.

These monitoring conditions are necessary because the ore dryer, coal dryer and ore prep process baghouses must operate properly to ensure compliance with PM/PM10, SO<sub>2</sub>, CO and Visible Emission BACT Emission Limits, and 326 IAC 2-7 (Part 70).

## Conclusion

The operation of this iron and steel manufacturing plant shall be subject to the conditions of the attached proposed Part 70 Permit No.T033-12614-00076.