



*Mitchell E. Daniels, Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

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

TO: Interested Parties / Applicant

DATE: May 13, 2005

RE: Kobelco Metal Powder / 071-20226-00016

FROM: Paul Dubenetzky  
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 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of a Title V operating permit or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was 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 E. Daniels, Jr.*  
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Mr. Shaun Asai  
Kobelco Metal Powder of America, Inc.  
1625 Bateman Drive  
Seymour, Indiana 47274

May 13, 2005

Re: 071-20226-00016  
First Significant Permit Modification to:  
Part 70 permit No.: T071-7315-00016

Dear Mr. Asai:

Kobelco Metal Powder of America, Inc. was issued a permit on January 5, 2004 for a stationary metal powder manufacturing operation. A letter requesting changes to this permit was received on September 29, 2004. Pursuant to the provisions of 326 IAC 2-7-12 a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of the following:

1. The ladle size of the electric arc furnace (EAF) has been increased so that the maximum throughput capacity of the furnace has been increased to 14 tap tons of steel per hour. The throughput will now be listed in terms of the amount of metal poured or tap tons since the CO emission limit pursuant to 326 IAC 2-2-3 (PSD) BACT included in the Part 70 permit is expressed in terms of the liquid steel tapped from the EAF. Additionally, two (2) additional natural gas-fired burners are being added to the existing permitted Coherent Jet injection lance and natural gas-fired burner configuration on the EAF.
2. The source would also like the permit to be amended to reflect that there are a total of five (5) existing baghouses controlling emissions from the blender packaging systems and not four (4) baghouses. The five (5) baghouses are identified as BS-3a, BS-3b, BS-3c, BS-3d1 and BS-3d2. During the original Part 70 permit review, this was an additional comment made by the source after the public comment period. However, the Part 70 permit was already issued before this comment could be addressed. This existing baghouse was present at the source when the Part 70 permit was issued.

Additionally, the source has requested to increase the allowable emission rate from baghouse BS-3a which controls emissions from a portion of the blender packaging systems. A recent stack test on this baghouse indicated that the baghouse could not comply with the existing PM and PM10 PSD minor emission limits in the original Part 70 permit. Since the source can still comply with the PM and PM10 PSD minor emission limits of less than 25 and 15 tons per year, respectively, for the emission units permitted under the original PSD permit (CP 071-2546-00110) issued on December 10, 1993, including all five baghouses on the packaging system and with baghouse BS-3a emitting a slightly greater amount of PM and PM10 emissions, the PSD minor limits for PM and PM10 that were included in the original Title V permit have been adjusted. The limits for baghouse BS-3a have been changed from 0.02 lb/hr for each of PM and PM10 to 0.05 and 0.07 lb/hr for PM and PM10 respectively.

3. Finally, the source has requested to install a second natural gas-fired ladle pre-heater with a maximum heat input capacity of 3.0 MMBtu per hour. This is an insignificant activity.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Trish Earls, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call at (973) 575-2555, ext. 3219 or dial (800) 451-6027, and ask for extension 3-6878.

Sincerely,  
Original signed by

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

Attachments  
TE/EVP

cc: File – Jackson County  
U.S. EPA, Region V  
Jackson County Health Department  
Air Compliance Section Inspector – Richard Sekula  
Compliance Data Section  
Administrative and Development  
Technical Support and Modeling



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## PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**Kobelco Metal Powder of America, Inc.  
1625 Bateman Drive  
Seymour, Indiana 47274**

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

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

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

Operation Permit No.: T071-7315-00016	
Issued by: Janet McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: January 5, 2004  Expiration Date: January 5, 2009

First Significant Permit Modification No.: 071-20226-00016	Pages Affected: 6, 7, 8, 30-38, 40-45, 49, 54-56
Original signed by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: May 13, 2005

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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.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 metal powder manufacturing operation.

Responsible Official:	Shinsuke Asai, President
Source Address:	1625 Bateman Drive, Seymour, Indiana 47274
Mailing Address:	1625 Bateman Drive, Seymour, Indiana 47274
General Source Phone Number:	812-522-3033
SIC Code (NAICS Code):	3311A
County Location:	Jackson
Source Location Status:	Nonattainment for ozone under the 8-hour standard Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules; Minor Source, under Emission Offset Rules Minor Source, Section 112 of the Clean Air Act

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

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This metal powder manufacturing company consists of a source with an on-site support facility:

- (a) Kobelco Metal Powder of America, Inc., Plant ID No. 071-00016, the primary operation, is located at 1625 Bateman Drive, Seymour, Indiana 47274; and
- (b) Praxair's hydrogen plant, the supporting operation, is located at 1625 Bateman Drive, Seymour, Indiana 47274.

IDEM has determined that Kobelco Metal Powder of America, Inc. and the hydrogen plant owned by Praxair are under the common control of Kobelco Metal Powder of America, Inc. because they satisfy the but/for test for common control. These two plants are considered one source because the two plants are on contiguous property, the two plants are under common control, and they belong to the same industrial grouping, since the Praxair plant is a support facility for the Kobelco plant. Therefore, the term "source" in the Part 70 documents refers to both Kobelco Metal Powder of America, Inc. and the hydrogen plant owned by Praxair as one source.

One combined Part 70 permit will be issued to Kobelco Metal Powder of America, Inc. and Praxair. The new plant ID for the combined source is 071-00016.

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

- (a) one (1) electric arc furnace (EAF), constructed in 1989, producing a maximum of 14.0 tap tons of carbon grade steel per hour, equipped with one (1) natural gas-fired oxy-fuel burner, rated at 9.5 million (MM) British thermal units (Btu) per hour, added in 2000, and one (1) Coherent Jet injection lance and natural gas-fired burner configuration, rated at 9.5 MMBtu per hour, to be installed in 2005, and two (2) natural gas-fired burners each rated at 4.0 MMBtu per hour, to be installed in 2005, with a doghouse evacuation system enclosure ducted to a baghouse for particulate matter control, exhausting through one (1) stack (S-6);
- (b) one (1) drying rotary kiln (DRK), constructed in 2002 to replace the original DRK, drying a maximum of 15 tons of wet powdered steel per hour, with a wet scrubber for particulate matter control, exhausting through one (1) stack (S-2);
- (c) one (1) natural gas fired boiler (B1), constructed in 1989, rated at 12.55 million (MM) British thermal units (Btu) per hour, providing steam to the drying rotary kiln, exhausting through one (1) stack (S-3);
- (d) one (1) natural gas fired reduction/annealing furnace (RF-1), constructed in 1989, equipped with multiple natural gas-fired burners that were added in 2000, rated cumulatively at 18.0 MMBtu per hour, processing a maximum of 6.0 tons of semi-finished steel powder per hour, exhausting through one (1) stack (S-4);
- (e) one (1) natural gas fired reduction/annealing furnace (RF-2), constructed in 1995, equipped with multiple natural gas-fired burners that were added in 2000, rated cumulatively at 18.0 MMBtu per hour, processing a maximum of 5.0 tons of semi-finished steel powder per hour, exhausting through one (1) stack (S-5);
- (f) Metal Powder Classifying Facility including the following:
  - (1) One (1) conveyor and one (1) screen, for product sieving and sizing, controlled by one (1) baghouse dust collection system (BS-1);
- (g) Pulverizing, Feather Mills, Classifying, Blending and Packaging Facility including the following:
  - (1) Pulverizing surge hoppers for RF-1 and RF-2, controlled by two (2) baghouse dust collectors (BS-2a and BS-2b);
  - (2) Blender packaging systems controlled by five (5) baghouse dust collectors (BS-3a, BS-3b, BS-3c, BS-3d1, and BS-3d2);
- (h) one (1) Premix line, constructed in 2001, consisting of the following equipment:
  - (1) one (1) blender, identified as BL-1, with a maximum production capacity of 5 tons of product per batch (or 6,666 pounds of product per hour), with a process bag filter (BF-1) used to insure proper condenser operation, and a toluene condenser (HX-1), vacuum pump (Vacuum Pump-4), and chiller unit (CH-1) with pump (Pump-5) to recover toluene solvent, exhausting through one (1) stack (ID No. SS-1);
  - (2) one (1) 245 gallon toluene main storage tank, identified as T-1, with one (1) pump (Pump-1);
  - (3) one (1) 245 gallon toluene and binder storage tank, identified as T-2, with one (1) pump (Pump-2);
  - (4) one (1) 245 gallon condensate return tank, identified as T-3, with one (1) pump (Pump-3);

- (5) one (1) 100 gallon mixing tank, identified as T-4;
  - (6) one (1) 80 gallon charging tank, identified as T-5;
  - (7) one (1) 115 gallon toluene condensate tank, identified as T-6, with one (1) pump (Pump-6); and
  - (8) one (1) area bag filter (BF-2a) for industrial hygiene purposes.
- (i) one (1) base metal powder and additive process for the new Premix line blender, constructed in 2001, consisting of the following:
- (1) one (1) bulk pack lift conveyor (CL-1);
  - (2) one (1) 5 ton base powder charging hopper (H-1); and
  - (3) one (1) base powder lift conveyor (CL-2).
- (j) one (1) laboratory scale pilot blender line (LSP-1), constructed in 2001, consisting of the following equipment:
- (1) one (1) 100 gallon binder preparation tank, identified as T-7;
  - (2) one (1) 10 gallon charging tank, identified as T-8;
  - (3) one (1) blender, identified as BL-2, with a maximum production capacity of 500 pounds of product per batch (or 333.3 pounds of product per hour), with a process dust collector (BF-3) to insure proper condenser operation, and a toluene condenser (HX-2), vacuum pump (Vacuum Pump-2), and chiller unit (CH-2) with pump (Pump-1) to recover toluene solvent; and
  - (4) one (1) 20 gallon condensate tank, identified as T-9.

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

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, including the following:
- (1) one (1) 2.33 MMBtu per hour ladle preheat unit;
  - (2) one (1) 3.0 MMBtu per hour ladle preheat unit;
  - (3) two (2) 1.18 MMBtu per hour tundish preheat units; and
  - (4) one (1) 1.45 MMBtu per hour flame suppression atomizer. [326 IAC 2-2]
- (b) Activities with particulate matter emissions equal to or less than 5 pounds per hour or 25 pounds per day:
- (1) Ladle to tundish teeming. [326 IAC 6-3-2]
  - (2) Fugitive emissions from material handling. [326 IAC 6-4]
  - (3) Fugitive emissions from slag handling in the melt shop building. [326 IAC 6-4]

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

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

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

## SECTION B GENERAL CONDITIONS

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

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

### B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

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This permit 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.3 Enforceability [326 IAC 2-7-7]

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

### B.4 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.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, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

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

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

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

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, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

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.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

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- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, 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

- (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

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) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.

- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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.  

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)]
- (h) 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]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
  - (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deletedby this permit.
- (b) All previous registrations and permits are superseded by this permit.

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 - 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, P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
  
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.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination  
[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

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- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 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.16 Permit Renewal [326 IAC 2-7-3] [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).

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

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
  - (1) A timely renewal application is one that is:
    - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

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

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
  
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.

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

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

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

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

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- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
  - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
  - (3) The changes do not result in emissions which exceed the emissions allowable under 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  
  
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 which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes 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 increases and decreases in emissions in 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.

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

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

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

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

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

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

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:
- Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015
- 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.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

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

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

## SECTION C

## SOURCE OPERATION CONDITIONS

Entire Source

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

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

- (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. This condition is not federally enforceable.

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. 326 IAC 9-1-2 is not federally enforceable.

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 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or 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 units vented to the control equipment are in operation.

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

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

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

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- (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.

### **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, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

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 not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

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

### **C.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 within ninety (90) days of 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 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 unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

### **C.12 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]**

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- (a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous emission monitoring systems (CEMS) and related equipment.
- (b) All continuous emission monitoring systems shall meet all applicable performance specifications of 40 CFR 60 or any other performance specification, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.
- (c) 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.
- (d) 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 ten (10) days of shutdown of the primary CEMS, and shall be operated until such time as the primary CEMS is back in operation.

- (e) 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 (Prevention of Significant Deterioration (PSD)) and CP-071-2546-00110, issued on December 10, 1993 and 326 IAC 3-5.

**C.13 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.14 Pressure Gauge and Other 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) 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 ( 2%) of full scale reading.
- (b) 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.
- (c) 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.

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

**C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

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

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management  
Compliance 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) 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.16 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.17 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

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- (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.
- (e) The Permittee shall record all instances when, in accordance with Section D, response steps 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.

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt 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 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 2-7-19]

### C.19 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(b)(3), starting in 2006 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
  - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Quality  
100 North Senate Avenue, 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).

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

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. 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.21 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. 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

- (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.

### **Stratospheric Ozone Protection**

#### **C.22 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.

## SECTION D.1 FACILITY OPERATION CONDITIONS

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

- (a) one (1) electric arc furnace (EAF), constructed in 1989, producing a maximum of 14.0 tap tons of carbon grade steel per hour, equipped with one (1) natural gas-fired oxy-fuel burner, rated at 9.5 million (MM) British thermal units (Btu) per hour, added in 2000, and one (1) Coherent Jet injection lance and natural gas-fired burner configuration, rated at 9.5 MMBtu per hour, to be installed in 2005, and two (2) natural gas-fired burners each rated at 4.0 MMBtu per hour, to be installed in 2005, with a doghouse evacuation system enclosure ducted to a baghouse for particulate matter control, exhausting through one (1) stack (S-6);

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

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 AAa.

#### D.1.2 Particulate Matter (PM) [40 CFR 60.270a, Subpart AAa] [326 IAC 12]

- (a) Pursuant to 40 CFR 60.272a, Subpart AAa, and CP-071-2546-00110 (PSD Permit), issued on December 10, 1993, the Permittee shall not cause to be discharged into the atmosphere from the EAF any gases which:
- (1) exit from a control device and contain particulate matter in excess of 0.0052 gr/dscf;
  - (2) exit from a control device and exhibit three percent (3%) opacity or greater in any one (1) six (6) minute averaging period; and
  - (3) exit from a shop and, due solely to the operations of any affected EAF(s), exhibit six percent (6%) opacity or greater in any one (1) six (6) minute averaging period.
- (b) The Permittee shall not cause to be discharged into the atmosphere from the dust handling system any gases that exhibit ten percent (10%) opacity or greater.

#### D.1.3 Prevention of Significant Deterioration (PSD) [326 IAC 2-2] [40 CFR 52.21] [40 CFR 52.124]

Pursuant to 326 IAC 2-2-3(2), Best Available Control Technology (BACT) for carbon monoxide (CO) emissions, as determined in CP-071-2546-00110 (PSD Permit), issued on December 10, 1993, and in order to render the requirements of 326 IAC 2-2 (PSD) not applicable for PM and PM10 emissions, the following shall apply to the EAF:

- (a) The EAF shall be operated within the enclosure controlled by a doghouse evacuation system with a minimum flow rate of 86,800 acfm, or a minimum flow rate established in the most recent stack test, ducted to a baghouse with an 85 feet tall dispersion stack. Pursuant to 326 IAC 2-2 and 6-5, the fugitive dust control and baghouse operation and maintenance program (on file with IDEM) shall be used to insure optimum compliance with the limitations contained herein.
- (b) The particulate matter (PM) and PM10 emissions from the melt shop baghouse stack (S-6) shall each be limited to 0.0035 grains per dry standard cubic foot (gr/dscf) and 2.0 pounds per hour (8.8 tons per year).

- (c) The PM/PM10 fugitive emissions generated during furnace operations shall be captured by the doghouse hood or contained within the melt shop building. Furthermore, ladle to tundish teeming PM and PM10 emissions (insignificant activity) shall each not exceed 0.5 pounds per hour.
- (d) The visible emissions from any building opening shall be limited to 6% opacity in any one (1) six (6) minute averaging period.
- (e) Except for scrap steel, slag and raw material handling and storage shall be conducted inside the melt shop building exclusively. Furthermore, slag pot and ladle slag dumping PM and PM10 emissions (insignificant activity) shall each not exceed 0.1 pound per hour.
- (f) Carbon monoxide (CO) emissions from the EAF shall be captured and exhausted from the EAF baghouse stack for proper dispersion. Total melt shop CO emissions shall be limited to 10.5 pounds of CO emitted per ton of metal product based on a twenty-four hour averaging period, 23 tons per month, and 8.5 pounds of CO emitted per ton of metal product based on a one month averaging period from the baghouse.
- (g) Volatile Organic Compound (VOC) emissions shall be controlled through a scrap management program to eliminate steel scrap with high residual oil content. Kobelco Metal Powder of America shall charge only clean scrap, consistent with the Scrap Management Program for Kobelco on file with IDEM. Any changes made to the Scrap Management Program shall be submitted to IDEM, OAQ thirty (30) days prior to implementing the changes.

The PM-10 emission limits include filterable and condensable PM10.

These limits shall also satisfy the requirements of the NSPS, 40 CFR 60.272a, Subpart AAa listed in condition D.1.2(a)(1) and (3).

#### D.1.4 Carbon Monoxide (CO)

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Pursuant to 326 IAC 2-2-3(2), Best Available Control Technology (BACT), and Minor Source Modification No. 071-12222-00016, issued on August 31, 2000, emissions of CO from the EAF baghouse stack shall not exceed 6.37 pounds of CO per ton of liquid steel tapped from the EAF, based on a one month averaging period. Operation of the oxy-fuel burner and Coherent Jet injection lance and burner in conjunction with the EAF will ensure compliance with this limit.

#### D.1.5 PSD Minor Limit [326 IAC 2-2]

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The amount of metal poured from the EAF shall not exceed 85,750 tap tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This limit in addition to the CO emission limit in condition D.1.4 will render the requirements of 326 IAC 2-2 (PSD) not applicable to the modification to increase the ladle size of the EAF.

#### D.1.6 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 this facility and any control devices.

### Compliance Determination Requirements

#### D.1.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

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During the period between 30 and 36 months after issuance of this Part 70 permit, in order to demonstrate compliance with Conditions D.1.2 and D.1.3, the Permittee shall perform PM and PM-10 testing on the existing EAF utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensable PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.

#### D.1.8 Continuous Emission Monitor (CEM) Specifications and Requirements [326 IAC 2-2]

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Pursuant to CP-071-2546-00110 (PSD Permit), issued on December 10, 1993, CEM data shall be made available for carbon monoxide (CO). The CO CEM data will be certified, quality assured, and used as an indicator to determine the frequency of required stack testing and appropriate exhaust system corrections. In order for CEM compliance data to be useful, CO CEMs shall be installed, calibrated, maintained, and operated to record output, documenting compliance with the CO limitations from the electric arc furnace baghouse exhaust stack (see Conditions D.1.3 and D.1.4). Kobelco shall follow the CEM Quality Assurance Plan developed by Kobelco for the CEM equipment. A Relative Accuracy Test Audit (RATA)/Certification procedure for carbon monoxide that was performed by Kobelco is on file with IDEM. Minor changes, including the averaging time over which the relative accuracy is determined, to some aspects of 40 CFR Performance Specifications are acceptable (subject to approval), due to the nature of the process and the emission standard.

Pursuant to 40 CFR 60.273a(c), installation of a CEM system for opacity is not required because the EAF baghouse is a modular filter system. The OAQ reserves the right to require installation of CO or opacity CEMs on the basis of compliance reporting submitted.

#### D.1.9 Particulate Matter (PM)

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- (a) In order to comply with Conditions D.1.2 and D.1.3, the doghouse evacuation system enclosure and the baghouse for PM control shall be in operation and control emissions from the electric arc furnace at all times that the electric arc furnace is in operation.
- (b) Pursuant to 40 CFR 60.275a(e), the Permittee shall determine compliance with the PM emission limitations in Condition D.1.2 using the methods listed in 40 CFR 60.275a(e)(1) through (4).

#### D.1.10 Monitoring [40 CFR 60, Subpart AAa]

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- (a) Pursuant to 40 CFR 60.273a(c), observations of the opacity of the visible emissions from the electric arc furnace baghouse stack exhaust (Stack S-6) shall be performed by a certified visible emission observer as follows: Visible emission observations are conducted at least once per day when the furnace is operating in the melting and refining period. These observations shall be taken in accordance with Method 9, and, for at least three 6-minute periods, the opacity shall be recorded for any point(s) where visible emissions are observed. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emissions, only one set of three 6-minute observations will be required. In this case, Method 9 observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. Records shall be maintained of any 6-minute average that is in excess of the emission limit specified in 40 CFR 60.272a(a).
- (b) Pursuant to 40 CFR 60.274a(b), except as provided under 40 CFR 60.274a(d), the Permittee is required to check and record the furnace static pressure if a direct-shell evacuation control (DEC) system is in use and either (1) check and record the control system fan motor amperes and damper positions on a once-per-shift basis; or (2) install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate through each separately ducted hood. Since a DEC system is not used with the EAF at this source, it is not necessary for the Permittee to check and record the furnace static pressure. However, the source has indicated that of the remaining monitoring requirements listed as (1) or (2) above, it will comply with option (2).

The EAF is enclosed by a doghouse type enclosure. The source will install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate through the doghouse enclosure (which performs the function of a hood). The monitoring device may be installed in any appropriate location in the exhaust duct of the doghouse such that reproducible flow rate monitoring will result. The flow rate monitoring device shall have an accuracy  $\pm 10$  percent over its normal operating range and shall be calibrated according to the manufacturer's instructions. IDEM, OAQ may require the Permittee to demonstrate the accuracy of this monitoring device relative to Methods 1 and 2 of appendix A of 40 CFR Part 60.

- (c) Pursuant to 40 CFR 60.274a(c), when the Permittee is required to demonstrate compliance with the standard under 40 CFR 60.272a(a)(3) and at any other time that IDEM, OAQ may require, that either the control system fan motor amperes and all damper positions or the volumetric flow rate through each separately ducted hood shall be determined during all periods in which a hood is operated for the purpose of capturing emissions from the affected facility subject to paragraph (b)(1) or (b)(2) of 40 CFR 40.274a. The Permittee may petition IDEM, OAQ for reestablishment of these parameters whenever the Permittee can demonstrate to IDEM, OAQ's satisfaction that the affected facility operating conditions upon which the parameters were previously established are no longer applicable. The values of these parameters as determined during the most recent demonstration of compliance shall be maintained at the appropriate level for each applicable period. Operation at other than baseline values may be subject to the requirements of 40 CFR 60.276a(c).
- (d) Pursuant to 40 CFR 60.274a(d), the Permittee shall perform monthly operational status inspections of the equipment that is important to the performances of the total capture system (i.e., pressure sensors, dampers, and damper switches). This inspection shall include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion). Any deficiencies shall be noted and proper maintenance performed.
- (e) Pursuant to 40 CFR 60.274a(e), the Permittee may petition IDEM, OAQ to approve any alternative to monthly operational status inspections that will provide a continuous record of the operation of each emission capture system.
- (f) Pursuant to 40 CFR 60.274a(h), during any performance test required under 40 CFR 60.8, and for any report thereof required by 40 CFR 60.275a(d), or to determine compliance with 40 CFR 60.272a(a)(3), the Permittee shall monitor the following information for all heats covered by the test:
  - (1) Charge weights and materials, and tap weights and materials;
  - (2) Heat times, including start and stop times, and a log of process operation, including periods of no operation during testing;
  - (3) Control device operation log; and
  - (4) Continuous monitor or Reference Method 9 data.
- (g) Pursuant to 40 CFR 60.276a(a), records of the measurements required in 40 CFR 60.274a must be retained for at least 2 years following the date of the measurement.
- (h) Pursuant to 40 CFR 60.276a(b), the Permittee shall submit a written report of exceedances of the control device opacity to IDEM, OAQ semi-annually. For the purposes of these reports, exceedances are defined as all 6-minute periods during which the average opacity is 3 percent or greater.

- (i) Either operation of control system fan motor amperes at values exceeding  $\pm 15$  percent of the value established under 40 CFR 60.274a(c) or operation at flow rates lower than those established under 40 CFR 60.274a(c) may be considered by the IDEM, OAQ to be unacceptable operation and maintenance of the affected facility. Operation at such values shall be reported to IDEM, OAQ semiannually.
- (j) Pursuant to 40 CFR 60.276a(f), the Permittee shall conduct the demonstration of compliance with 40 CFR 60.272a(a) and furnish IDEM, OAQ a written report of the results of the test. The report shall include the information listed in 40 CFR 60.276a(f)(1) through (22).

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

### **D.1.11 Parametric Monitoring**

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The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the electric arc furnace, at least once per shift when the electric arc furnace is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 9.0 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.

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.1.12 Baghouse Inspections**

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An inspection shall be performed each calendar quarter of all bags controlling the electric arc furnace when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

### **D.1.13 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 deviation from 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).

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

### **D.1.14 Record Keeping Requirements**

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- (a) As required in condition D.1.10(a), records shall be maintained of any 6-minute average that is in excess of the emission limit specified in 40 CFR 60.272a(a).
- (b) Pursuant to 40 CFR 60.276a(a), records of the measurements required in 40 CFR 60.274a (paragraphs (b) through (f) of Condition D.1.10) must be retained for at least 2 years following the date of the measurement.
- (c) Records of either operation of control system fan motor amperes at values exceeding  $\pm 15$  percent of the value established under 40 CFR 60.274a(c) or operation at flow rates lower than those established under 40 CFR 60.274a(c) shall be maintained as required in condition D.1.10(i).
- (d) To document compliance with Condition D.1.11, the Permittee shall maintain once per shift records of the total static pressure drop during normal operation when venting to the atmosphere.
- (e) To document compliance with Condition D.1.12, the Permittee shall maintain records of the results of the inspections required under Condition D.1.12.
- (f) Records of the information that shall be submitted in the reports required in condition D.1.15(d) shall be maintained.
- (g) To document compliance with Condition D.1.6, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (h) To document compliance with Condition D.1.5, the Permittee shall maintain monthly records of the amount of metal poured in tap tons from the EAF.
- (i) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

### **D.1.15 Reporting Requirements [40 CFR 60.276]**

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- (a) Pursuant to 40 CFR 60.276a(b), the Permittee shall submit a written report of exceedances of the control device opacity to IDEM, OAQ semi-annually. For the purposes of these reports, exceedances are defined as all 6-minute periods during which the average opacity is 3 percent or greater.
- (b) Either operation of control system fan motor amperes at values exceeding  $\pm 15$  percent of the value established under 40 CFR 60.274a(c) or operation at flow rates lower than those established under 40 CFR 60.274a(c) may be considered by the IDEM, OAQ to be unacceptable operation and maintenance of the affected facility. Operation at such values shall be reported to IDEM, OAQ semiannually.

- (c) Pursuant to 40 CFR 60.276a(f), the Permittee shall conduct the demonstration of compliance with 40 CFR 60.272a(a) and furnish IDEM, OAQ a written report of the results of the test including the information specified in 40 CFR 60.276a(f)(1) through (22).
- (d) Pursuant to CP-071-2546-00110 (PSD Permit), issued on December 10, 1993, reports required pursuant to 40 CFR 60.276a should also include the following information:
  - (1) Calendar dates covered in the reporting period.
  - (2) Description of excess emissions (units of applicable standard) including:
    - (a) Magnitude
    - (b) Conversion factors used
    - (c) Date and time of commencement and completion
    - (d) Corrective and preventive action taken
  - (3) A description of any modifications to the CEMs that could affect the ability of the CEMs to comply with Performance Specifications 2 or 3 (included with CP-071-2546-00110 on file with IDEM).
  - (4) For continuous monitoring systems the following:
    - (a) Date and time when system was inoperative except for zero and span value checks
    - (b) Nature of system repairs or adjustments
    - (c) Results of daily CEMs drift tests and quarterly accuracy assessments
  - (5) Lack of occurrences during a quarter including the following:
    - (a) Absence of excess emissions during quarter
    - (b) Absence of adjustments, repairs, or inoperativeness of continuous monitoring system

#### D.1.16 Reporting Requirements

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A quarterly summary of the information to document compliance with Condition D.1.5 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## SECTION D.2 FACILITY OPERATION CONDITIONS

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

- (b) one (1) drying rotary kiln (DRK), constructed in 2002 to replace the original DRK, drying a maximum of 15 tons of wet powdered steel per hour, with a wet scrubber for particulate matter control, exhausting through one (1) stack (S-2);

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

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

#### D.2.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

Pursuant to CP-071-2546-00110, issued on December 10, 1993, the following shall apply to the drying rotary kiln (DRK) in order to render the requirements of 326 IAC 2-2 (PSD) not applicable for PM and PM10 emissions:

- (a) Process emissions from the DRK shall be exhausted through the 95% efficient wet scrubber exhausting from stack S-2;
- (b) Fugitive emissions from the DRK shall be contained within the building;
- (c) Visible emissions from any building opening as a result of the DRK shall be limited to 6% opacity in any one (1) six (6) minute averaging period.
- (d) Particulate matter (PM) and PM10 emissions from the drying process shall each not exceed 0.2 pounds per hour;
- (e) Pursuant to 326 IAC 2-2 and 6-5, the dryer air pollution control equipment operation and maintenance program (on file with IDEM) shall be used to insure optimum compliance with the limitations contained herein.

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the drying rotary kiln (DRK) shall not exceed 25.16 pounds per hour when operating at a process weight rate of 15 tons per hour. The pounds per hour limitation was 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:

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

#### D.2.3 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 this facility and its control device.

### Compliance Determination Requirements

#### D.2.4 Particulate Control

In order to comply with Conditions D.2.1 and D.2.2, the wet scrubber for PM control shall be in operation and control process emissions from the drying rotary kiln (DRK) at all times that process emissions are exiting the drying rotary kiln (DRK).

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

### D.2.5 Visible Emissions Notations

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- (a) Visible emission notations of the drying rotary kiln (DRK) stack 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 this unit 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.

### D.2.6 Parametric Monitoring

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The Permittee shall record the total static pressure drop and flow rate of the scrubber used in conjunction with the drying rotary kiln (DRK), at least once per shift when the DRK is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the scrubber is outside the normal range of 17.0 and 23.0 inches of water or a range established during the latest stack test, or the flow rate of the scrubber is below a minimum of 30 gallons per minute, 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 or a flow rate that is below the above mentioned flow rate 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.

The instruments used for determining the pressure and flow rate 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.2.7 Wet Scrubber Inspections

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An inspection shall be performed each calendar quarter of the scrubber controlling the drying rotary kiln (DRK). Inspections required by this condition shall not be performed in consecutive months.

### D.2.8 Wet Scrubber Failure Detection

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In the event that scrubber failure has been observed:

The failed unit will be shut down immediately until the failed unit has been repaired or replaced.

## **Record Keeping and Reporting Requirement [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.2.5, the Permittee shall maintain records of visible emission notations of the DRK stack exhaust once per shift.
- (b) To document compliance with Condition D.2.6, the Permittee shall maintain once per shift records of the following operational parameters during normal operation when venting to the atmosphere:
  - (A) Pressure drop across the venturi throat of the scrubber; and
  - (B) Liquid flow rate of supply water to the scrubber.
- (c) To document compliance with Condition D.2.7, the Permittee shall maintain records of the results of the inspections required under Condition D.2.7 and the dates the vents are redirected.
- (d) To document compliance with Condition D.2.3, the Permittee shall maintain 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.

### SECTION D.3 FACILITY OPERATION CONDITIONS

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

- (c) one (1) natural gas fired boiler (B1), constructed in 1989, rated at 12.55 million (MM) British thermal units (Btu) per hour, providing steam to the drying rotary kiln, exhausting through one (1) stack (S-3);

(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 Prevention of Significant Deterioration [326 IAC 2-2]

Pursuant to CP-071-2546-00110, issued on December 10, 1993, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable for PM and PM10 emissions:

- (a) the boiler (B1) shall burn only natural gas and shall be limited to 12.55 MMBtu per hour heat input. Combustion gases shall be vented to the atmosphere through stack S-3.  
(b) PM and PM10 emissions from the boiler (B1) shall each not exceed 0.1 pound per hour.

##### D.3.2 Particulate Matter (PM) [326 IAC 6-2]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), PM emissions from the boiler shall be limited to 0.565 pounds per MMBtu heat input. This emission limit was calculated using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

where: Pt = pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input  
Q = Total source maximum operating capacity rating in MMBtu/hr heat input.  
= 12.55 MMBtu/hr

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

##### D.3.3 Record Keeping Requirements

- (a) To document compliance with Condition D.3.1, the Permittee shall record the amount of natural gas combusted per month, including the average daily natural gas usage in each month.  
(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.4 FACILITY OPERATION CONDITIONS

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

- (d) one (1) natural gas fired reduction/annealing furnace (RF-1), constructed in 1989, equipped with multiple natural gas-fired burners that were added in 2000, rated cumulatively at 18.0 MMBtu per hour, processing a maximum of 6.0 tons of semi-finished steel powder per hour, exhausting through one (1) stack (S-4);
- (e) one (1) natural gas fired reduction/annealing furnace (RF-2), constructed in 1995, equipped with multiple natural gas-fired burners that were added in 2000, rated cumulatively at 18.0 MMBtu per hour, processing a maximum of 5.0 tons of semi-finished steel powder per hour, exhausting through one (1) stack (S-5);
- (f) Metal Powder Classifying Facility including the following:
  - (1) One (1) conveyor and one (1) screen, for product sieving and sizing, controlled by one (1) baghouse dust collection system (BS-1);
- (g) Pulverizing, Feather Mills, Classifying, Blending and Packaging Facility including the following:
  - (1) Pulverizing surge hoppers for RF-1 and RF-2, controlled by two (2) baghouse dust collectors (BS-2a and BS-2b);
  - (2) Blender packaging systems controlled by five (5) baghouse dust collectors (BS-3a, BS-3b, BS-3c, BS-3d1, and BS-3d2);

(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 Prevention of Significant Deterioration [326 IAC 2-2] [40 CFR 52.21]

- (a) Pursuant to 326 IAC 2-2-3(2) BACT, as determined in CP-071-2546-00110, issued on December 10, 1993, and as determined pursuant to the BACT analysis submitted on February 3, 1999, and pursuant to Significant Source Modification No. 071-12450-00016, issued on August 11, 2000, and Minor Source Modification No. 071-12222-00016, issued August 31, 2000, and in order to render the requirements of 326 IAC 2-2 (PSD) not applicable for PM and PM10 emissions, the following shall apply to the two (2) reduction/annealing furnaces (RF-1 and RF-2):
  - (1) RF-1 shall burn only natural gas and shall be limited to 18.0 MMBtu per hour heat input;
  - (2) RF-2 shall burn only natural gas and shall be limited to 18.0 MMBtu per hour heat input;
  - (3) CO emissions from RF-1 shall not exceed 1.0 pounds of CO per ton of semi-finished steel powder; and
  - (4) CO emissions from RF-2 shall not exceed 1.0 pounds of CO per ton of semi-finished steel powder.
  - (5) Visible emissions from stacks S-4 and S-5 shall not exceed 6% opacity in any one (1) six (6) minute averaging period.
  - (6) PM and PM10 emissions from RF-1 shall each not exceed 0.13 pound per hour.
  - (7) PM and PM10 emissions from RF-2 shall each not exceed 0.13 pound per hour.

- (b) Pursuant to CP-071-2546-00110, issued on December 10, 1993, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable for PM and PM10 emissions, the following shall apply to the Metal Powder Classifying facility and the Pulverizing, Feather Mills, Classifying, Blending and Packaging facility:
- (1) Emissions of PM and PM10 from the conveyor and screen for product sieving and sizing shall be controlled by a baghouse dust collection system (BS-1) with a minimum overall control efficiency of 99%.
  - (2) Emissions of PM and PM10 from the product surge hoppers shall be controlled by two (2) baghouse dust collection systems (BS-2a and BS-2b) with a minimum overall control efficiency of 99% and vented to building roof ventilators BS-2a and BS-2b, respectively.
  - (3) Emissions of PM and PM10 from all blender packaging systems shall be controlled by five (5) baghouse dust collection systems (BS-3a, BS-3b, BS-3c, BS-3d1, and BS-3d2) with a minimum overall control efficiency of 99% and vented to building roof ventilators BS-3a, BS-3b, BS-3c, and BS-3d, respectively.
  - (4) Fugitive emissions emitted from any building opening shall be limited to 6% opacity in any one (1) six (6) minute averaging period.
  - (5) Particulate matter (PM) emissions from the baghouse (BS-1) controlling emissions from the Metal Powder Classifying facility shall not exceed 0.03 pound per hour.
  - (6) PM10 emissions from the baghouse (BS-1) controlling emissions from the Metal Powder Classifying facility shall not exceed 0.03 pound per hour;
  - (7) Particulate matter (PM) emissions from each of the two (2) baghouses (BS-2a and BS-2b) controlling emissions from the product surge hoppers shall not exceed 0.02 pound per hour.
  - (8) PM10 emissions from each of the two (2) baghouses (BS-2a and BS-2b) controlling emissions from the product surge hoppers shall not exceed 0.02 pound per hour;
  - (9) Particulate matter (PM) emissions from each of the four (4) baghouses (BS-3b, BS-3c, BS-3d1, and BS-3d2) controlling emissions from the blender packaging systems shall not exceed 0.02 pound per hour.
  - (10) PM10 emissions from each of the four (4) baghouses (BS-3b, BS-3c, BS-3d1, and BS-3d2) controlling emissions from the blender packaging systems shall not exceed 0.02 pound per hour;
  - (11) PM emissions from the one (1) baghouse (BS-3a) controlling emissions from the blender packaging systems shall not exceed 0.05 pound per hour;
  - (12) PM10 emissions from the one (1) baghouse (BS-3a) controlling emissions from the blender packaging systems shall not exceed 0.07 pound per hour.

#### D.4.2 PSD Minor Limit [326 IAC 2-2]

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The combined throughput of semi-finished steel powder to RF-1 and RF-2 shall not exceed 85,750 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This limit in addition to the CO emission limits in condition D.4.1(a)(3) and (4) will render the requirements of 326 IAC 2-2 (PSD) not applicable to the modification to increase the ladle size of the EAF.

**D.4.3 Particulate [326 IAC 6-3-2]**

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the facilities listed below shall be limited as follows:

Emission Unit ID	Process Weight Rate, tons/hr	Allowable Particulate Emissions, lb/hr
Reduction/Annealing Furnace (RF-1)	6.0	13.62
Reduction/Annealing Furnace (RF-2)	5.0	12.05
Metal Powder Classifying Facility	11.0	20.44
Product Surge Hoppers	11.0	20.44
Blender Packaging Systems	11.0	20.44

The pounds per hour limitations were 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:

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

**D.4.4 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 these facilities and their control devices.

**Compliance Determination Requirements**

**D.4.5 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]**

- (a) During the period between 42 and 48 months after issuance of this permit, in order to demonstrate compliance with Condition D.4.1(a), the Permittee shall perform CO testing on both RF-1 and RF-2 utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.
- (b) Within 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Condition D.4.1(b), the Permittee shall perform PM and PM-10 testing on the outlet of each of the baghouse dust collection systems identified as BS-1, BS-2a, BS-2b, BS-3a, BS-3b, BS-3c, and BS-3d utilizing methods as approved by the Commissioner. PM-10 includes filterable and condensable PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.

**D.4.6 Particulate Matter (PM)**

Pursuant to CP-071-2546-00110, issued on December 10, 1993, and in order to comply with Condition D.4.1(b) and D.4.3, the baghouse dust collection systems for PM control shall be in operation and control emissions from the Metal Powder Classifying Facility, product surge hoppers, and all blender packaging systems at all times that these activities are in operation.

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

### **D.4.7 Visible Emissions Notations**

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- (a) Visible emission notations of the exhaust points of the eight (8) baghouse dust collection systems (BS-1, BS-2a, BS-2b, BS-3a, BS-3b, BS-3c, BS-3d1 and BS-3d2) used in conjunction with the conveying, product sieving and sizing, storage, and blending, product surge hoppers, and all packaging systems 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 this unit 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.

### **D.4.8 Parametric Monitoring**

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The Permittee shall record the total static pressure drop across each of the baghouse dust collectors used in conjunction with the conveying, product sieving and sizing, storage, and blending, product surge hoppers, and all packaging systems, at least once per shift when the conveying, product sieving and sizing, storage, and blending, product surge hoppers, and all packaging systems are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse dust collector is outside the normal range of 1.0 and 9.0 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.

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.4.9 Baghouse Inspections**

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An inspection shall be performed each calendar quarter of all bags controlling the conveying, product sieving and sizing, storage, and blending, product surge hoppers, and all packaging systems when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

#### D.4.10 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 deviation from 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).

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

##### D.4.11 Record Keeping Requirements

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- (a) To document compliance with Condition D.4.1(a), the Permittee shall record the amount of natural gas combusted per month, including the average daily natural gas usage in each month.
- (b) The record keeping requirements in condition D.1.14(h) of tap tons of metal throughput to the EAF per month shall be used to document compliance with condition D.4.2.
- (c) To document compliance with Condition D.4.7, the Permittee shall maintain records of visible emission notations of the exhaust points of the eight (8) baghouse dust collection systems (BS-1, BS-2a, BS-2b, BS-3a, BS-3b, BS-3c, BS-3d1 and BS-3d2) once per shift.
- (d) To document compliance with Condition D.4.8, the Permittee shall maintain once per shift records of the total static pressure drop during normal operation when venting to the atmosphere.
- (e) To document compliance with Condition D.4.9, the Permittee shall maintain records of the results of the inspections required under Condition D.4.9 and the dates the vents are redirected.
- (f) To document compliance with Condition D.4.4, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (g) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.5 FACILITY CONDITIONS

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

- (h) one (1) Premix line, constructed in 2001, consisting of the following equipment:
  - (1) one (1) blender, identified as BL-1, with a maximum production capacity of 5 tons of product per batch (or 6,666 pounds of product per hour), with a process bag filter (BF-1) used to insure proper condenser operation, and a toluene condenser (HX-1), vacuum pump (Vacuum Pump-4), and chiller unit (CH-1) with pump (Pump-5) to recover toluene solvent, exhausting through one (1) stack (ID No. SS-1);
  - (2) one (1) 245 gallon toluene main storage tank, identified as T-1, with one (1) pump (Pump-1);
  - (3) one (1) 245 gallon toluene and binder storage tank, identified as T-2, with one (1) pump (Pump-2);
  - (4) one (1) 245 gallon condensate return tank, identified as T-3, with one (1) pump (Pump-3);
  - (5) one (1) 100 gallon mixing tank, identified as T-4;
  - (6) one (1) 80 gallon charging tank, identified as T-5;
  - (7) one (1) 115 gallon toluene condensate tank, identified as T-6, with one (1) pump (Pump-6); and
  - (8) one (1) area bag filter (BF-2a) for industrial hygiene purposes.
- (i) one (1) base metal powder and additive process for the new Premix line blender, constructed in 2001, consisting of the following:
  - (1) one (1) bulk pack lift conveyor (CL-1);
  - (2) one (1) 5 ton base powder charging hopper (H-1); and
  - (3) one (1) base powder lift conveyor (CL-2).
- (j) one (1) laboratory scale pilot blender line (LSP-1), constructed in 2001, consisting of the following equipment:
  - (1) one (1) 100 gallon binder preparation tank, identified as T-7;
  - (2) one (1) 10 gallon charging tank, identified as T-8;
  - (3) one (1) blender, identified as BL-2, with a maximum production capacity of 500 pounds of product per batch (or 333.3 pounds of product per hour), with a process dust collector (BF-3) to insure proper condenser operation, and a toluene condenser (HX-2), vacuum pump (Vacuum Pump-2), and chiller unit (CH-2) with pump (Pump-1) to recover toluene solvent; and
  - (4) one (1) 20 gallon condensate tank, identified as T-9.

(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 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs) [326 IAC 2-7-10.5(d)(5)]

---

Pursuant to Minor Source Modification No. 071-14702-00016, issued on September 14, 2001, the consumption of toluene solvent in the new Premix line, including the base metal powder and additive process, and the laboratory scale pilot blender line shall not exceed 2,656 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month, such that the limited potential to emit of VOC, any single HAP, and total HAPs shall be less than 25, 10, and 25 tons per 12 consecutive month period, respectively. The consumption of toluene solvent shall be calculated as follows:

Toluene solvent consumption (gallons) = [Toluene solvent input to the new Premix line blender (BL-1) (gal) - Toluene solvent recovered in the toluene condenser (HX-1) (gal)] + [Toluene solvent input to the pilot blender (BL-2) (gal) - Toluene solvent recovered in the pilot toluene condenser (HX-2) (gal)]

This consumption limit is required to limit the potential to emit of VOC and total HAPs each to less than 25 tons per 12 consecutive month period, and to limit the potential to emit of any single HAP to less than 10 tons per 12 consecutive month period. Compliance with this limit makes the addition of the new Premix line, including the base metal powder and additive process, and the laboratory scale pilot blender line a Part 70 minor source modification pursuant to 326 IAC 2-7-10.5(d)(5)(A) as permitted in Minor Source Modification No. 071-14702-00016, issued on September 14, 2001.

### D.5.2 Particulate [326 IAC 6-3-2]

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(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the new Premix line shall not exceed 9.19 pounds per hour when operating at a process weight rate of 6,666 pounds per hour.

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

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

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

(b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the laboratory scale pilot blender shall not exceed 1.23 pounds per hour when operating at a process weight rate of 333.3 pounds per hour.

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

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

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

**D.5.3 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 these facilities and their control devices.

**Compliance Determination Requirements**

**D.5.4 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs) [326 IAC 8-1-2][326 IAC 8-1-4]**

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Compliance with the VOC/HAP usage limitations contained in Condition D.5.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a). IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

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

**D.5.5 Record Keeping Requirements**

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- (a) To document compliance with Condition D.5.1, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the toluene consumption limit and/or the HAP and VOC emission limits established in Condition D.5.1. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
- (1) The amount and HAP/VOC content of the solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
  - (2) The total toluene solvent input and total toluene solvent recovered for each month; and
  - (3) The weight of HAPs and VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.5.3, 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 - General Record Keeping Requirements, of this permit.

**D.5.6 Reporting Requirements**

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A quarterly summary of the information to document compliance with Condition D.5.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## SECTION D.6 FACILITY OPERATION CONDITIONS

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

#### Insignificant Activities

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, including the following:
- (1) one (1) 2.33 MMBtu per hour ladle preheat unit;
  - (2) one (1) 3.0 MMBtu per hour ladle preheat unit;
  - (3) two (2) 1.18 MMBtu per hour tundish preheat units; and
  - (4) one (1) 1.45 MMBtu per hour flame suppression atomizer. [326 IAC 2-2]
- (b) Activities with particulate matter emissions equal to or less than 5 pounds per hour or 25 pounds per day:
- (1) Ladle to tundish teeming. [326 IAC 6-3-2]

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

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

#### D.6.1 Prevention of Significant Deterioration [326 IAC 2-2]

Pursuant to CP-071-2546-00110, issued on December 10, 1993, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable for PM and PM10 emissions, the following shall apply:

- (a) the ladle preheat unit, the two (2) tundish preheat units, and the flame suppression atomizer shall each burn only natural gas and shall each be limited to 2.33, 1.18, 1.18, and 1.45 MMBtu per hour heat input, respectively.
- (b) Total PM and PM10 emissions from the ladle preheat unit and the two (2) tundish preheat units shall each not exceed 0.05 pound per hour.
- (c) PM and PM10 emissions from the flame suppression atomizer shall each not exceed 0.01 pound per hour.

#### D.6.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from ladle to tundish teeming shall not exceed 24.03 pounds per hour when operating at a process weight rate of 28,000 pounds per hour. The pounds per hour limitation was 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

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

#### D.6.3 Record Keeping Requirement

- (a) To document compliance with Condition D.6.1, the Permittee shall record the amount of natural gas combusted in the ladle preheat unit, the two (2) tundish preheat units, and the flame suppression atomizer per day.
- (b) These records shall be maintained in accordance with Section C - General Record Keeping Requirements.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

### PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Kobelco Metal Powder of America, Inc.  
Source Address: 1625 Bateman Drive, Seymour, Indiana 47274  
Mailing Address: 1625 Bateman Drive, Seymour, Indiana 47274  
Part 70 Permit No.: T071-7315-00016

**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  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
Phone: 317-233-5674  
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT**

Source Name: Kobelco Metal Powder of America, Inc.  
Source Address: 1625 Bateman Drive, Seymour, Indiana 47274  
Mailing Address: 1625 Bateman Drive, Seymour, Indiana 47274  
Part 70 Permit No.: T071-7315-00016

**This form consists of 2 pages**

**Page 1 of 2**

- |  |
|--|
| <input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12)  |
| X The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and                    |
| X The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16. |

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

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

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

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency?    Y    N
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:

Title / Position:

Date:

Phone:

A certification is not required for this report.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

### Part 70 Quarterly Report

Source Name: Kobelco Metal Powder of America, Inc.  
 Source Address: 1625 Bateman Drive, Seymour, Indiana 47274  
 Mailing Address: 1625 Bateman Drive, Seymour, Indiana 47274  
 Part 70 Permit No.: T071-7315-00016  
 Facility: Premix line blender and laboratory scale pilot blender  
 Parameter: Toluene emissions (VOC and HAP)  
 Limit: The consumption of toluene solvent in the new Premix line, including the base metal powder and additive process, and the laboratory scale pilot blender line shall not exceed 2,656 gallons per twelve (12) consecutive month period such that the limited potential to emit of VOC, any single HAP, and total HAPs shall be less than 25, 10, and 25 tons per 12 consecutive month period, respectively. The consumption of toluene solvent shall be calculated as follows:

Toluene solvent consumption (gallons) = [Toluene solvent input to the new Premix line blender (BL-1) (gal) - Toluene solvent recovered in the toluene condenser (HX-1) (gal)] + [Toluene solvent input to the pilot blender (BL-2) (gal) - Toluene solvent recovered in the pilot toluene condenser (HX-2) (gal)]

YEAR:

Month	Toluene Solvent Consumption This Month (gallons)			Toluene Solvent Consumption Previous 11 Months (gallons)			12 Month Total Toluene Solvent Consumption (gallons)		

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

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

Attach a signed certification to complete this report.

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

## Part 70 Quarterly Report

Source Name: Kobelco Metal Powder of America, Inc.  
Source Address: 1625 Bateman Drive, Seymour, Indiana 47274  
Mailing Address: 1625 Bateman Drive, Seymour, Indiana 47274  
Part 70 Permit No.: T071-7315-00016  
Facility: EAF  
Parameter: Metal Throughput  
Limit: The amount of metal poured from the EAF shall not exceed 85,750 tap tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	Metal Poured This Month (tap tons)	Metal Poured Previous 11 Months (tap tons)	12 Month Total Metal Poured (tap tons)
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.

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

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

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF AIR QUALITY  
 COMPLIANCE DATA SECTION**

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

Source Name: Kobelco Metal Powder of America, Inc.  
 Source Address: 1625 Bateman Drive, Seymour, Indiana 47274  
 Mailing Address: 1625 Bateman Drive, Seymour, Indiana 47274  
 Part 70 Permit No.: T071-7315-00016

Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_

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

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

Form Completed By:

Title/Position:

Date:

Phone:

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 Significant Source Modification and Part 70 Significant Permit Modification

Source Name:	Kobelco Metal Powder of America, Inc.
Source Location:	1625 Bateman Drive, Seymour, Indiana 47274
County:	Jackson
Source Modification No.:	071-20188-00016
Permit Modification No.:	071-20226-00016
SIC Code:	3311A
Permit Reviewer:	Trish Earls/EVP

On March 16, 2005, the Office of Air Quality (OAQ) had a notice published in The Tribune, Seymour, Indiana, stating that Kobelco Metal Powder of America, Inc. had applied for a Significant Source Modification and Significant Permit Modification to increase the size of the ladle in the EAF, add two (2) additional natural gas-fired burners to the EAF, increase the allowable PM and PM10 emissions from baghouse BS-3a, and add a second natural gas-fired ladle preheater. The notice also stated that OAQ proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On April 19, 2005, Leigh Anne Harvey of August Mack Environmental, Inc. submitted comments on the proposed permit on behalf of Kobelco Metal Powder of America, Inc. The summary of the comments and responses is as follows:

#### **Comment #1**

Section A.2 – This portion of the permit is currently being appealed. Praxair should not be included within the Kobelco Part 70 permit because Praxair is not under Kobelco's control.

#### **Response #1**

These issues are under appeal and are currently being reviewed by IDEM. No changes have been made to the permit at this time as a result of this comment.

#### **Comment #2**

Section A.3(g), D.4.1, D.4.7, D.4.11 – This portion of the permit is currently being appealed. These baghouses are used for industrial hygiene purposes only and should not require testing and parametric monitoring as required for air pollution control devices.

#### **Response #2**

These issues are under appeal and are currently being reviewed by IDEM. No changes have been made to the permit at this time as a result of this comment.

**Comment #3**

Section A.5 – Please indicate that the facility is a minor source for hazardous air pollutants.

**Response #3**

Section A.1 is the section of the permit which would indicate whether the source is a major or minor source of hazardous air pollutants (HAPs). Therefore, section A.1 of the permit is revised to indicate that this source is a minor source under Section 112 of the Clean Air Act as follows:

**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 metal powder manufacturing operation.

Responsible Official:	Shinsuke Asai, President
Source Address:	1625 Bateman Drive, Seymour, Indiana 47274
Mailing Address:	1625 Bateman Drive, Seymour, Indiana 47274
General Source Phone Number:	812-522-3033
SIC Code (NAICS Code):	3311A
County Location:	Jackson
Source Location Status:	Nonattainment for ozone under the 8-hour standard Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules; Minor Source, under Emission Offset Rules <b>Minor Source, Section 112 of the Clean Air Act</b>

Upon further review IDEM, OAQ has made the following changes to the Part 70 permit (additions in bold, deletions in strikeout):

1. 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 was effective March 16, 2005; therefore, the condition reflecting this rule has been incorporated into the permit as follows:

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

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

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

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

**Source Background and Description**

<b>Source Name:</b>	<b>Kobelco Metal Powder of America, Inc.</b>
<b>Source Location:</b>	<b>1625 Bateman Drive, Seymour, Indiana 47274</b>
<b>County:</b>	<b>Jackson</b>
<b>SIC Code:</b>	<b>3311A</b>
<b>Operation Permit No.:</b>	<b>T 071-7315-00016</b>
<b>Operation Permit Issuance Date:</b>	<b>January 5, 2004</b>
<b>Source Modification No.:</b>	<b>071-20188-00016</b>
<b>Permit Modification No.:</b>	<b>071-20226-00016</b>
<b>Permit Reviewer:</b>	<b>Trish Earls/EVP</b>

The Office of Air Quality (OAQ) has reviewed a modification application from Kobelco Metal Powder of America, Inc. relating to the operation of a stationary metal powder manufacturing operation.

**History**

On September 29, 2004, Kobelco Metal Powder of America, Inc. submitted an application to the OAQ requesting to increase the ladle size of the electric arc furnace (EAF) and increase the allowable emission rate from baghouse BS-3a which controls emissions from a portion of the blender packaging systems. A recent stack test on this baghouse indicated that the baghouse could not comply with the existing PM and PM10 PSD minor emission limits in the original Part 70 permit. The source plans to re-test this baghouse.

Since the source can still comply with the PM and PM10 PSD minor emission limits of less than 25 and 15 tons per year, respectively, for the emission units permitted under the original PSD permit (CP 071-2546-00110) issued on December 10, 1993, including all five baghouses on the packaging system and with baghouse BS-3a emitting a slightly greater amount of PM and PM10 emissions, the PSD minor limits for PM and PM10 that were included in the original Title V permit have been adjusted. The limits for baghouse BS-3a have been changed from 0.02 lb/hr for each of PM and PM10 to 0.05 and 0.07 lb/hr for PM and PM10 respectively.

An additional request was submitted on November 8, 2004 to add two (2) additional natural gas-fired burners to the existing permitted Coherent Jet injection lance and natural gas-fired burner configuration on the EAF. The Coherent Jet injection lance and 9.5 MMBtu per hour natural-gas fired burner configuration were permitted in the Part 70 permit but were not yet installed on the EAF when the Part 70 permit was issued. The source is now in the process of installing this equipment on the EAF. The purpose for installing the two (2) additional burners, each with a maximum heat input capacity of 4.0 MMBtu per hour, is to improve safety by reducing the use of the oxy-fuel burner. The use of the oxy-fuel burner requires a production associate to manually move this burner around the inside of the EAF in order to detach the steel that becomes attached to the sides of the EAF. For safety purposes, this activity should be minimized; therefore, Kobelco would like to install the two (2) additional burners. Since the oxy-fuel burner requires manual operation, this is being done to increase worker safety by minimizing the amount of time that workers are present at the EAF.

The source would also like the permit to be amended to reflect that there are a total of five (5) existing baghouses controlling emissions from the blender packaging systems and not four (4) baghouses. The five (5) baghouses are identified as BS-3a, BS-3b, BS-3c, BS-3d1 and BS-3d2. During the original Part 70 permit review, an additional comment made by the source after the public comment period that the baghouse identified as BS-3d was actually two (2) baghouses. However, the Part 70 permit was already issued before this comment could be addressed. The five (5) baghouses were all present at the source when the Part 70 permit was issued.

Finally, the source has requested to install a second natural gas-fired ladle pre-heater with a maximum heat input capacity of 3.0 MMBtu per hour. The reason for this is that when they rebuild the refractory in a ladle, it takes about 18 hours of heat applied to cure. For the one in use, they preheat between batches to maintain the refractory at a minimum temperature to prevent thermal shock, which leads to faster break-down of the refractory and has led to molten metal releases where the refractory cracks. By having two preheaters, they can cure one ladle and keep the one in process at the proper temperature to prevent thermal shock. This will increase refractory life.

Since the increase in ladle size of the EAF and the addition of the second ladle pre-heater will result in an increase in metal throughput capacity, increased utilization at the other emission units downstream of the EAF in the production process was evaluated. The source has opted to base the emissions increase on future potential minus baseline actual emissions instead of future actual minus baseline actual emissions. This will represent the worst case emissions increase from this modification.

Kobelco Metal Powder of America, Inc. was issued a Part 70 permit on January 5, 2004.

## Source Definition

This metal powder manufacturing company consists of a source with an on-site support facility:

- (a) Kobelco Metal Powder of America, Inc., Plant ID No. 071-00016, the primary operation, is located at 1625 Bateman Drive, Seymour, Indiana 47274; and
- (b) Praxair's hydrogen plant, the supporting operation, is located at 1625 Bateman Drive, Seymour, Indiana 47274.

IDEM has previously determined in the Part 70 permit T071-7315-00016, issued on January 5, 2004, that Kobelco Metal Powder of America, Inc. and the hydrogen plant owned by Praxair are under the common control of Kobelco Metal Powder of America, Inc. because they satisfy the but/for test for common control. These two plants are considered one source because the two plants are on contiguous property, the two plants are under common control, and they belong to the same industrial grouping, since the Praxair plant is a support facility for the Kobelco plant. Therefore, the term "source" in the Part 70 documents refers to Kobelco Metal Powder of America, Inc. and the hydrogen plant owned by Praxair as one source.

One combined Part 70 permit was issued to Kobelco Metal Powder of America, Inc. and Praxair.

### Existing Approvals

The source was issued a Part 70 Operating Permit T071-7315-00016 on January 5, 2004. The source has not been issued any other approvals since then.

### Enforcement Issue

The source has the following previously existing enforcement actions pending:

(a) Notice of Violation (NOV), Case No. 11078, which was amended on May 21, 2003, was issued to this source as a result of inspections of the source on November 14, 2001, April 25, 2002, and May 2, 2002. The inspections indicated that the source was in violation of the following:

- (1) Pursuant to 326 IAC 12, incorporating by reference 40 CFR 60.272a(a)(3), and Minor Source Modification number 071-12222-00016 condition D.1.1, no owner or operator of an EAF shall cause to be discharged into the atmosphere from the EAF any gases, which exit from the shop due solely to the operation of the EAF, exhibiting six percent (6%) opacity or greater.

The EAF at this facility, on November 14, 2001, allowed a discharge into the atmosphere from the EAF gases, which exited from the roof monitor due solely to the operation of the EAF and exhibited opacity in excess of 6%, violations of 326 IAC 12, incorporating by reference 40 CFR 60.272a(a)(3), and Minor Source Modification number 071-12222-00016 condition D.1.1.

- (2) Pursuant to operation condition number nine (9) of the state construction permit No. CP 071-2546, issued on December 10, 1993, the metal powder classifying facility, consisting of conveying, sieving, sizing, storage, and blending operations shall be controlled by the 95% efficient baghouse, identified as BS-1.

The source failed to control the metal powder classifying facility, while operating it since the facility's original construction, a violation of the construction permit. Another inspection was performed in 2003 and the inspector confirmed that the baghouse dust collection system controlling emissions from the conveying, product sieving and sizing, storage, and blending has been installed.

- (3) Pursuant to operation condition number twelve (12) of the state construction permit, the packaging system, shall be controlled by the 99% efficient baghouse, identified as BS-3.

The source failed to control portions of the packaging facility by the BS-3 baghouse, while operating it since the facility's original construction, a violation of the construction permit. The packaging system is now controlled by five (5) baghouses, identified as BS-3a, BS-3b, BS-3c, BS-3d1 and BS-3d2.

- (4) Pursuant to operation condition number 4.g of the state construction permit, in accordance with 326 IAC 2-2-3(2), volatile organic compounds (VOC) shall be controlled through a Scrap Management Plan. The Scrap Management Plan, on file with IDEM, requires that steel scrap shall not contain paint, coating, glass, rubber, paper, cloth, wood, and other foreign materials.

Respondent allowed foreign materials in the scrap on April 25 and May 2, 2002, violations of the construction permit.

IDEM is taking appropriate action on these matters.

## Recommendation

The staff recommends to the Commissioner that the Significant Source Modification and Significant Permit Modification be approved. This recommendation is based on the following facts and conditions:

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

An application for the purposes of this review was received on September 29, 2004. Additional information was received on November 8, 2004 and November 17, 2004.

## Emission Calculations

See Appendix A of this document for detailed emissions calculations (7 pages).

## Potential To Emit Before Controls (Modification)

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.”

Pollutant	Potential To Emit (tons/year)
PM	3.34
PM-10	4.81
SO <sub>2</sub>	0.75
VOC	9.56
CO	95.80
NO <sub>x</sub>	28.60

Note that these emissions represent the emissions increase (future potential minus past actual emissions) from the modification. Emissions from the new units being installed are also included.

HAPs	Potential To Emit (tons/year)
Hexane	0.09
TOTAL	Less than 25

## Justification for Modification

The Title V permit is being modified through a Significant Source Modification and Significant Permit Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(f)(4) because the potential to emit of NO<sub>x</sub> is greater than 25 tons per year.

**County Attainment Status**

The source is located in Jackson County.

Pollutant	Status
PM-10	Attainment
SO <sub>2</sub>	Attainment
NO <sub>2</sub>	Attainment
1-hour Ozone	Attainment
8-hour Ozone	Basic Nonattainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. Jackson County has been designated as basic nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability for the source section.
- (b) Jackson County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (c) Fugitive Emissions  
 Since there are applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability. This type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3.

**Source Status**

Existing Source PSD Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	Less than 250
PM-10	Less than 250
SO <sub>2</sub>	Less than 250
VOC	Less than 100
CO	Greater than 250
NOx	Less than 100

- (a) This existing source is a major stationary source under 326 IAC 2-2 (PSD) because an attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.
- (b) This existing source is not a major stationary source under 326 IAC 2-3 (Emission Offset) because VOC and NOx are each emitted at a rate of less than 100 tons per year.
- (c) These emissions are based upon Part 70 permit No. T071-7315-00016, issued on January 5, 2004.

**Potential to Emit After Controls for the Modification**

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units for the modification.

Process/facility	Potential to Emit (tons/year)						
	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Electric Arc Furnace (EAF) <sup>(1)</sup>	7.29	7.29	2.14	5.57	273.11	4.29	Negl.
Oxy-fuel and Coherent Jet Burners	0.24	0.94	0.07	0.68	0.00	12.42	0.22
Drying Rotary Kiln (DRK)	0.43	0.43	0.00	0.00	0.00	0.00	0.00
Boiler (B1)	0.11	0.44	0.03	0.32	4.85	5.77	0.10
RF-1 and RF-2	0.31	1.26	0.10	0.91	42.88	21.34	0.30
Metal Powder Classifying Facility	0.13	0.13	0.00	0.00	0.00	0.00	0.00
Product surge hoppers	0.18	0.18	0.00	0.00	0.00	0.00	0.00
Packaging system	0.57	0.66	0.00	0.00	0.00	0.00	0.00
Premix Line and Laboratory Scale Pilot Blender	Negl.	Negl.	0.00	9.64	0.00	0.00	9.64
Ladle Preheater	0.03	0.10	0.01	0.08	1.16	1.38	0.02
Total Future Potential Emissions From Units Affected by Modification <sup>(1)</sup>	9.29	11.43	2.35	17.20	322.00	45.20	10.28
Baseline Actual Emissions from Units Affected by Modification	5.94	6.62	1.61	7.65	226.20	16.60	3.21
Emissions Increase	3.35	4.81	0.74	9.55	95.80	28.60	7.07
PSD Significant Threshold	25	15	40	40	100	40	N/A
Insignificant Activities	3.17	1.60	0.02	0.27	2.87	3.41	0.00
Total Potential Emissions from Entire Source	12.46	13.03	2.37	17.47	324.87	48.61	10.28

(1) Future potential emissions represent emissions at a limited metal throughput to all operations of 85,750 tap tons per year so that the emissions increase of all pollutants are less than the PSD significant modification thresholds.

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

**Federal Rule Applicability**

- (a) This significant modification does involve a pollutant-specific emissions unit as defined in 40 CFR 64.1 for CO:

- (1) with the potential to emit before controls equal to or greater than the major source threshold for CO,
- (2) that is subject to an emission limitation or standard for CO, and
- (3) uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard.

However, pursuant to 40 CFR 64.2(b)(1)(vi), the requirements of this part shall not apply to emission limitations or standards for which a part 70 or 71 permit specifies a continuous compliance determination method, as defined in 40 CFR 64.1. Since the Part 70 permit specifies that the source must demonstrate compliance with the CO emission limit pursuant to 326 IAC 2-2-3(2), PSD BACT, by using a CEM for measuring CO emissions, which is a continuous compliance determination method, the requirements of this rule do not apply to the EAF.

There are no other pollutant-specific emissions units at this source.

- (b) The electric arc furnace (EAF) is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.270a through 276a, Subpart AAa). Pursuant to this rule, the Permittee shall not cause to be discharged into the atmosphere from the EAF any gases which: (1) exit from a control device and contain particulate matter in excess of 0.0052 gr/dscf; (2) exit from a control device and exhibit 3 percent opacity or greater; and (3) exit from a shop and, due solely to the operations of any affected EAF(s), exhibit 6 percent opacity or greater. Also, the Permittee shall not cause to be discharged into the atmosphere from the dust handling system any gases that exhibit 10 percent opacity or greater. The increase in ladle size of the EAF will not affect the source's ability to comply with 40 CFR 60, Subpart AAa.
- (c) There are no other New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this modification.
- (d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

### **State Rule Applicability - Entire Source**

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

This source, which is not one of the twenty-eight (28) listed source categories, is a major stationary source under 326 IAC 2-2 because the potential to emit CO emissions are greater than 250 tons per year. The Part 70 permit (T071-7315-00016) issued to this source on January 5, 2004, includes PSD BACT requirements for CO emissions from the electric arc furnace (EAF), and the two (2) reduction/annealing furnaces (RF-1 and RF-2) pursuant to 326 IAC 2-2-3(2). In order to keep the emissions increase from this modification to less than the significant modification thresholds so that the requirements of this rule do not apply to this modification, the source has accepted a source-wide metal throughput limit not to exceed 85,750 tap tons of metal per twelve (12) consecutive month period, with compliance determined at the end of each month. This metal throughput limit for RF-1 and RF-2 is expressed in terms of throughput of semi-finished steel powder which is the form that the metal is in when it reaches RF-1 and RF-2 and is how the CO limit pursuant to PSD BACT is expressed. The metal throughput limit in addition to the CO emission limits of 6.37 pounds CO per ton of liquid steel tapped from the EAF, and 1.0 pound of CO per ton of semi-finished steel powder for each of RF-1 and RF-2 pursuant to 326 IAC 2-2-3(2) (PSD BACT) will ensure that the CO emissions increase from this modification do not exceed 100 tons per year. Therefore, the requirements of this rule do not apply to this modification.

The PSD minor limits for PM and PM10 emissions for those units permitted under the original PSD permit (CP 071-2546-00110) issued on December 10, 1993, have been adjusted to allow the source to emit the maximum allowable PM and PM10 emissions while maintaining total PM and PM10 emissions from these units at less than 25 and 15 tons per year, respectively. The limits are now as follows:

- (a) The particulate matter (PM/PM10) emissions from the melt shop baghouse stack (S-6) shall be limited to 0.0035 grains per dry standard cubic foot (gr/dscf) and 2.0 pounds per hour (8.8 tons per year);
- (b) The PM and PM10 fugitive emissions from ladle to tundish teeming (an insignificant activity) shall each not exceed 0.5 pounds per hour;
- (c) Particulate matter (PM) and PM10 emissions from the drying process in the drying rotary kiln (DRK) shall each not exceed 0.2 pounds per hour;
- (d) PM and PM10 emissions from the boiler (B1) shall each not exceed 0.1 pound per hour;
- (e) PM and PM10 emissions from RF-1 shall each not exceed 0.13 pound per hour;
- (f) PM and PM10 emissions from RF-2 shall each not exceed 0.13 pound per hour;
- (g) PM emissions from the baghouse (BS-1) controlling emissions from the Metal Powder Classifying facility shall not exceed 0.03 pound per hour;
- (h) PM10 emissions from the baghouse (BS-1) controlling emissions from the Metal Powder Classifying facility shall not exceed 0.03 pound per hour;
- (i) PM emissions from each of the two (2) baghouses (BS-2a and BS-2b) controlling emissions from the product surge hoppers shall not exceed 0.02 pound per hour;
- (j) PM10 emissions from each of the two (2) baghouses (BS-2a and BS-2b) controlling emissions from the product surge hoppers shall not exceed 0.02 pound per hour;
- (k) PM emissions from each of the four (4) baghouses (BS-3b, BS-3c, BS-3d1, and BS-3d2) controlling emissions from the blender packaging systems shall not exceed 0.02 pound per hour;
- (l) PM10 emissions from each of the four (4) baghouses (BS-3b, BS-3c, BS-3d1, and BS-3d2) controlling emissions from the blender packaging systems shall not exceed 0.02 pound per hour;
- (m) PM emissions from the one (1) baghouse (BS-3a) controlling emissions from the blender packaging systems shall not exceed 0.05 pound per hour;
- (n) PM10 emissions from the one (1) baghouse (BS-3a) controlling emissions from the blender packaging systems shall not exceed 0.07 pound per hour;
- (o) Total PM emissions from the ladle preheat unit and the two (2) tundish preheat units shall not exceed 0.05 pound per hour;
- (p) Total PM10 emissions from the ladle preheat unit and the two (2) tundish preheat units shall not exceed 0.05 pound per hour; and
- (q) PM and PM10 emissions from the flame suppression atomizer shall each not exceed 0.01 pound per hour.

These limits will ensure that total PM and PM10 emissions from the equipment permitted under the original PSD permit (CP 071-2546-00110) issued on December 10, 1993, are less than 25 and 15 tons per year, respectively.

#### 326 IAC 2-3 (Emission Offset)

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. Jackson County has been designated as nonattainment for the 8-hour ozone standard. However, since the potential to emit of VOC and NOx are each less than 100 tons per year, this source is a minor source under Emission Offset.

### 326 IAC 2-6 (Emission Reporting)

Since this source is required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, this source is subject to 326 IAC 2-6 (Emission Reporting). Revisions to 326 IAC 2-6 (Emission Reporting) became effective March 27, 2004. In accordance with the compliance schedule in 326 IAC 2-6-3, an emission statement must be submitted triennially by July 1 beginning in 2006 and every 3 years after. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

### 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)

This source is subject to 326 IAC 6-4 for fugitive dust emissions. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), fugitive dust shall not be visible crossing the boundary or property line of a source. Observances of visible emissions crossing property lines may be refuted by factual data expressed in 326 IAC 6-4-2 (1), (2), or (3).

### 326 IAC 2-4.1-1 (New Source Toxics Control)

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, constructed or reconstructed after the rule applicability date of July 27, 1997, which has the potential to emit (PTE) 10 tons per year of any single HAP or 25 tons per year of any combination of HAPs, must be controlled using technologies consistent with the Maximum Achievable Control Technology (MACT). This modification does not include the construction or reconstruction of a major source of HAPs as defined in 40 CFR 63.41, therefore, this modification is not subject to the requirements of this rule.

## **State Rule Applicability - Individual Facilities**

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

Pursuant to 326 IAC 6-3-1(c)(1) and (5), 326 IAC 6-3-2 does not apply if a particulate matter limitation established in 326 IAC 2-2-3, concerning PSD BACT determinations contained in a permit, or 326 IAC 12, concerning new source performance standards, is more stringent than the particulate limitation established in 326 IAC 6-3-2.

Since the applicable PM limit for the EAF established by 326 IAC 12, 40 CFR 60.270a, Subpart AAa, of 0.0052 gr/dscf is more stringent than the particulate limit that would be established by 326 IAC 6-3-2 (24.03 pounds per hour based on a process weight rate of 14 tons per hour), the more stringent limits apply and the limit pursuant to 326 IAC 6-3-2 does not apply. Therefore, the requirements of 326 IAC 6-3-2 do not apply to the EAF.

However, since the PM emission limits for the other emission units at this source are PSD minor limits and not limits pursuant to a PSD BACT determination under 326 IAC 2-2-3, the requirements of this rule are applicable to those units. These limits were erroneously left out of the Part 70 permit. Pursuant to 326 IAC 6-3-2, the particulate from the facilities listed below shall be limited as follows:

Emission Unit ID	Process Weight Rate, tons/hr	Allowable Particulate Emissions, lb/hr	Potential Particulate Emissions, lb/hr	Will Comply?
Drying Rotary Kiln (DRK)	15.0	25.16	0.10 (controlled)	Y
Reduction/Annealing Furnace (RF-1)	6.0	13.62	0.03	Y
Reduction/Annealing Furnace (RF-2)	5.0	12.05	0.03	Y
Metal Powder Classifying Facility	11.0	20.44	0.03 (controlled)	Y
Product Surge Hoppers	11.0	20.44	0.04 (total after control)	Y
Blender Packaging Systems	11.0	20.44	0.13 (total after control)	Y
Ladle to Tundish Teeming	14.0	24.03	0.98	Y

These limits were based on the following:

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

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

The wet scrubber controlling the drying rotary kiln, the baghouse (BS-1) controlling the Metal Powder Classifying Facility, the two (2) baghouses (BS-2a and BS-2b) controlling the product surge hoppers, and the five (5) baghouses (BS-3a, BS-3b, BS-3c, BS-3d1 and BS-3d2) controlling the blender packaging systems shall be in operation at all times their associated facilities are in operation, in order to comply with these limits.

Note that the particulate emission limits pursuant to 326 IAC 6-3-2 for the Premix line and the laboratory scale pilot blender remain unchanged in the Part 70 permit.

### 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.

There are no changes to the compliance monitoring requirements applicable to this source as a result of this modification.

## Changes Proposed

The changes listed below have been made to the Part 70 Operating Permit (T071-7315-00016).

1. 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. Jackson County has been designated as nonattainment for the 8-hour ozone standard. The following has been added to A.1 General Information:

### 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 metal powder manufacturing operation.

Responsible Official:	Shinsuke Asai, <b>President</b>
Source Address:	1625 Bateman Drive, Seymour, Indiana 47274
Mailing Address:	1625 Bateman Drive, Seymour, Indiana 47274
General Source Phone Number:	812-522-3033
SIC Code (NAICS Code):	3311A
County Location:	Jackson
Source Location Status:	<del>Attainment for all criteria pollutants</del> <b>Nonattainment for ozone under the 8-hour standard</b> <b>Attainment for all other criteria pollutants</b>
Source Status:	Part 70 Permit Program Major Source, under PSD Rules; <b>Minor Source, under Emission Offset Rules</b>

2. The equipment descriptions in section A.2 and the associated D sections have been revised as shown below. Because the source is currently in the process of installing the Coherent Jet injection lance on the EAF and will be installing the two (2) additional natural gas-fired burners on the EAF upon issuance of this source modification, they will be listed as being installed in 2005.

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

- (a) one (1) electric arc furnace (EAF), constructed in 1989, producing a maximum of ~~40.0~~ **14.0 tap** tons of carbon grade steel per hour, equipped with one (1) natural gas-fired oxy-fuel burner, rated at 9.5 million (MM) British thermal units (Btu) per hour, added in 2000, and one (1) Coherent Jet injection lance and natural gas-fired burner configuration, rated at 9.5 MMBtu per hour, ~~not yet to be installed in 2005,~~ **and two (2) natural gas-fired burners each rated at 4.0 MMBtu per hour, to be installed in 2005,** with a doghouse evacuation system enclosure ducted to a baghouse for particulate matter control, exhausting through one (1) stack (S-6);
- (b) one (1) drying rotary kiln (DRK), constructed in 2002 to replace the original DRK, drying a maximum of 15 tons of wet powdered steel per hour, with a wet scrubber for particulate matter control, exhausting through one (1) stack (S-2);
- (c) one (1) natural gas fired boiler (B1), constructed in 1989, rated at 12.55 million (MM) British thermal units (Btu) per hour, providing steam to the drying rotary kiln, exhausting through one (1) stack (S-3);

- (d) one (1) natural gas fired reduction/annealing furnace (RF-1), constructed in 1989, equipped with multiple natural gas-fired burners that were added in 2000, rated cumulatively at 18.0 MMBtu per hour, processing a maximum of 6.0 tons of semi-finished steel powder per hour, exhausting through one (1) stack (S-4);
- (e) one (1) natural gas fired reduction/annealing furnace (RF-2), constructed in 1995, equipped with multiple natural gas-fired burners that were added in 2000, rated cumulatively at 18.0 MMBtu per hour, processing a maximum of 5.0 tons of semi-finished steel powder per hour, exhausting through one (1) stack (S-5);
- (f) Metal Powder Classifying Facility including the following:
  - (1) One (1) conveyor and one (1) screen, for product sieving and sizing, controlled by one (1) baghouse dust collection system (BS-1);
- (g) Pulverizing, Feather Mills, Classifying, Blending and Packaging Facility including the following:
  - (1) Pulverizing surge hoppers for RF-1 and RF-2, controlled by two (2) baghouse dust collectors (BS-2a and BS-2b);
  - (2) Blender packaging systems controlled by ~~four (4)~~ **five (5)** baghouse dust collectors (BS-3a, BS-3b, BS-3c, **BS-3d1**, and BS-3d2);
- (h) one (1) Premix line, constructed in 2001, consisting of the following equipment:
  - (1) one (1) blender, identified as BL-1, with a maximum production capacity of 5 tons of product per batch (or 6,666 pounds of product per hour), with a process bag filter (BF-1) used to insure proper condenser operation, and a toluene condenser (HX-1), vacuum pump (Vacuum Pump-4), and chiller unit (CH-1) with pump (Pump-5) to recover toluene solvent, exhausting through one (1) stack (ID No. SS-1);
  - (2) one (1) 245 gallon toluene main storage tank, identified as T-1, with one (1) pump (Pump-1);
  - (3) one (1) 245 gallon toluene and binder storage tank, identified as T-2, with one (1) pump (Pump-2);
  - (4) one (1) 245 gallon condensate return tank, identified as T-3, with one (1) pump (Pump-3);
  - (5) one (1) 100 gallon mixing tank, identified as T-4;
  - (6) one (1) 80 gallon charging tank, identified as T-5;
  - (7) one (1) 115 gallon toluene condensate tank, identified as T-6, with one (1) pump (Pump-6); and
  - (8) one (1) area bag filter (BF-2a) for industrial hygiene purposes.
- (i) one (1) base metal powder and additive process for the new Premix line blender, constructed in 2001, consisting of the following:
  - (1) one (1) bulk pack lift conveyor (CL-1);
  - (2) one (1) 5 ton base powder charging hopper (H-1); and
  - (3) one (1) base powder lift conveyor (CL-2).
- (j) one (1) laboratory scale pilot blender line (LSP-1), constructed in 2001, consisting of the following equipment:
  - (1) one (1) 100 gallon binder preparation tank, identified as T-7;
  - (2) one (1) 10 gallon charging tank, identified as T-8;

- (3) one (1) blender, identified as BL-2, with a maximum production capacity of 500 pounds of product per batch (or 333.3 pounds of product per hour), with a process dust collector (BF-3) to insure proper condenser operation, and a toluene condenser (HX-2), vacuum pump (Vacuum Pump-2), and chiller unit (CH-2) with pump (Pump-1) to recover toluene solvent; and
- (4) one (1) 20 gallon condensate tank, identified as T-9.

3. Section A.4 has been revised to include the new ladle preheater as follows:

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

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, including the following:
  - (1) one (1) 2.33 MMBtu per hour ladle preheat unit;
  - (2) one (1) 3.0 MMBtu per hour ladle preheat unit;**
  - ~~(2)(3)~~ two (2) 1.18 MMBtu per hour tundish preheat units; and
  - ~~(3)(4)~~ one (1) 1.45 MMBtu per hour flame suppression atomizer. [326 IAC 2-2]
- (b) Activities with particulate matter emissions equal to or less than 5 pounds per hour or 25 pounds per day:
  - (1) Ladle to tundish teeming. [326 IAC 6-3-2]
  - (2) Fugitive emissions from material handling. [326 IAC 6-4]
  - (3) Fugitive emissions from slag handling in the melt shop building. [326 IAC 6-4]

The facility description in section D.6 has also been revised as shown above.

4. A statement was added to condition B.8, Certification, in order 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)]

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- (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 (1) certification may cover multiple forms in one (1) submittal.**
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

5. Condition B.23, Annual Fee Payment, has been revised to show the correct name of the section that collects operating fees as follows:

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

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- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

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

6. Condition C.7, Stack Height, has been revised as follows:

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 IAC 1-7-4(d), (e), and (f), and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

7. Paragraph (c) of condition C.9, Performance Testing, has been revised as follows:

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

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

8. Condition C.16, Risk Management Plan, has been revised as follows:

C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

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

9. Paragraph (b)(3) of condition C.17, Compliance Response Plan - Preparation, Implementation, Records, and Reports, has been revised as follows:

- (b)(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.

10. The following revisions were made to Condition C.19, Emission Statement, to incorporate the revisions to 326 IAC 2-6 that became effective March 27, 2004. The revised rule was published in the April 1, 2004 Indiana Register.

C.19 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:~~

- (a) Pursuant to 326 IAC 2-6-3(b)(3), starting in 2006 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

- (1) Indicate estimated actual emissions of ~~criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting)~~ **all pollutants listed in 326 IAC 2-6-4(a)**;
- (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

~~(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:~~

**The 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).

~~(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.

11. Paragraphs (a) and (e) of condition C.21, General Reporting Requirements, have been revised as follows:

C.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The ~~source~~ **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
- (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.**

12. The source has requested that the PSD minor limit for PM and PM10 emissions in condition D.1.3(b) for the EAF be clarified to state that the limit is for each pollutant. Condition D.1.3 is revised to read as follows:

D.1.3 Prevention of Significant Deterioration (PSD) [326 IAC 2-2] [40 CFR 52.21] [40 CFR 52.124]

Pursuant to 326 IAC 2-2-3(2), Best Available Control Technology (BACT) for carbon monoxide (CO) emissions, as determined in CP-071-2546-00110 (PSD Permit), issued on December 10, 1993, and in order to render the requirements of 326 IAC 2-2 (PSD) not applicable for PM and PM10 emissions, the following shall apply to the EAF:

- (a) The EAF shall be operated within the enclosure controlled by a doghouse evacuation system with a minimum flow rate of 86,800 acfm, or a minimum flow rate established in the most recent stack test, ducted to a baghouse with an 85 feet tall dispersion stack. Pursuant to 326 IAC 2-2 and 6-5, the fugitive dust control and baghouse operation and maintenance program (on file with IDEM) shall be used to insure optimum compliance with the limitations contained herein.
- (b) The particulate matter (~~PM/PM10~~) **and PM10** emissions from the melt shop baghouse stack (S-6) shall **each** be limited to 0.0035 grains per dry standard cubic foot (gr/dscf) and 2.0 pounds per hour (8.8 tons per year).
- (c) The PM/PM10 fugitive emissions generated during furnace operations shall be captured by the doghouse hood or contained within the melt shop building. Furthermore, ladle to tundish teeming PM and PM10 emissions (insignificant activity) shall each not exceed 0.5 pounds per hour.
- (d) The visible emissions from any building opening shall be limited to 6% opacity in any one (1) six (6) minute averaging period.
- (e) Except for scrap steel, slag and raw material handling and storage shall be conducted inside the melt shop building exclusively. Furthermore, slag pot and ladle slag dumping PM and PM10 emissions (insignificant activity) shall each not exceed 0.1 pound per hour.
- (f) Carbon monoxide (CO) emissions from the EAF shall be captured and exhausted from the EAF baghouse stack for proper dispersion. Total melt shop CO emissions shall be limited to 10.5 pounds of CO emitted per ton of metal product based on a twenty-four hour averaging period, 23 tons per month, and 8.5 pounds of CO emitted per ton of metal product based on a one month averaging period from the baghouse.
- (g) Volatile Organic Compound (VOC) emissions shall be controlled through a scrap management program to eliminate steel scrap with high residual oil content. Kobelco Metal Powder of America shall charge only clean scrap, consistent with the Scrap Management Program for Kobelco on file with IDEM. Any changes made to the Scrap Management Program shall be submitted to IDEM, OAQ thirty (30) days prior to implementing the changes.

The PM-10 emission limits include filterable and condensable PM10.

These limits shall also satisfy the requirements of the NSPS, 40 CFR 60.272a, Subpart AAa listed in condition D.1.2(a)(1) and (3).

13. A new condition has been added to section D.1 to include the metal throughput limit necessary to render the requirements of 326 IAC 2-2 (PSD) not applicable to this modification. The limit will be expressed in terms of tap tons or tons of metal poured so that this limit and the CO emission limit in condition D.1.4 will ensure that CO emissions do not exceed the PSD significant modification thresholds. The subsequent conditions in section D.1 have been re-numbered accordingly.

### **D.1.5 PSD Minor Limit [326 IAC 2-2]**

**The amount of metal poured from the EAF shall not exceed 85,750 tap tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This limit in addition to the CO emission limit in condition D.1.4 will render the requirements of 326 IAC 2-2 (PSD) not applicable to the modification to increase the ladle size of the EAF.**

14. Condition D.1.13, now re-numbered D.1.14, has been revised as follows:

#### **D.1.134 Record Keeping Requirements**

- (a) As required in condition D.1.910(a), records shall be maintained of any 6-minute average that is in excess of the emission limit specified in 40 CFR 60.272a(a).
- (b) Pursuant to 40 CFR 60.276a(a), records of the measurements required in 40 CFR 60.274a (paragraphs (b) through (f) of Condition D.1.910) must be retained for at least 2 years following the date of the measurement.
- (c) Records of either operation of control system fan motor amperes at values exceeding  $\pm 15$  percent of the value established under 40 CFR 60.274a(c) or operation at flow rates lower than those established under 40 CFR 60.274a(c) shall be maintained as required in condition D.1.910(i).
- (d) To document compliance with Condition D.1.4011, the Permittee shall maintain once per shift records of the total static pressure drop during normal operation when venting to the atmosphere.
- (e) To document compliance with Condition D.1.4412, the Permittee shall maintain records of the results of the inspections required under Condition D.1.4412.
- (f) Records of the information that shall be submitted in the reports required in condition D.1.4415(d) shall be maintained.
- (g) To document compliance with Condition D.1.56, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (h) To document compliance with Condition D.1.5, the Permittee shall maintain monthly records of the amount of metal poured in tap tons from the EAF.**
- ~~(h)~~(i) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

15. A new condition D.1.16 has been added requiring quarterly reporting of the metal throughput to the EAF as follows:

#### **D.1.16 Reporting Requirements**

**A quarterly summary of the information to document compliance with Condition D.1.5 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).**

16. The PSD minor limit in condition D.2.1 for the DRK has been revised to allow for the increase in allowable PM and PM10 emissions from the product surge hoppers and the packaging systems while still maintaining the total PM and PM10 emissions from the equipment permitted under the original PSD permit (CP 071-2546-00110) issued on December 10, 1993, at less than 25 and 15 tons per year, respectively, so that the requirements of 326 IAC 2-2 do not apply for PM and PM10 emissions.

**D.2.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]**

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Pursuant to CP-071-2546-00110, issued on December 10, 1993, the following shall apply to the drying rotary kiln (DRK) in order to render the requirements of 326 IAC 2-2 (PSD) not applicable for PM and PM10 emissions:

- (a) Process emissions from the DRK shall be exhausted through the 95% efficient wet scrubber exhausting from stack S-2;
- (b) Fugitive emissions from the DRK shall be contained within the building;
- (c) Visible emissions from any building opening as a result of the DRK shall be limited to 6% opacity in any one (1) six (6) minute averaging period.
- (d) Particulate matter (PM) and PM10 emissions from the drying process shall each not exceed ~~0.3~~ **0.2** pounds per hour;
- (e) Pursuant to 326 IAC 2-2 and 6-5, the dryer air pollution control equipment operation and maintenance program (on file with IDEM) shall be used to insure optimum compliance with the limitations contained herein.

17. As stated under the rule applicability discussion of 326 IAC 6-3-2 above, since the PM emission limits for the other emission units at this source are PSD minor limits and not limits pursuant to a PSD BACT determination under 326 IAC 2-2-3, the requirements of this rule are applicable to those units. These limits were erroneously left out of the Part 70 permit. Therefore, a new condition D.2.2 has been added to include the allowable particulate emissions pursuant to 326 IAC 6-3-2 for the DRK as follows:

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

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**Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the drying rotary kiln (DRK) shall not exceed 25.16 pounds per hour when operating at a process weight rate of 15 tons per hour. The pounds per hour limitation was 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:**

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

18. Condition D.2.3, now re-numbered D.2.4, has been revised as follows:

**D.2.34 Particulate Control**

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In order to comply with Conditions D.2.1 **and D.2.2**, the wet scrubber for PM control shall be in operation and control process emissions from the drying rotary kiln (DRK) at all times that process emissions are exiting the drying rotary kiln (DRK).

19. Condition D.2.8, now re-numbered D.2.9, has been revised as follows:

**D.2.89 Record Keeping Requirements**

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- (a) To document compliance with Condition D.2.45, the Permittee shall maintain records of visible emission notations of the DRK stack exhaust once per shift.
- (b) To document compliance with Condition D.2.56, the Permittee shall maintain once per shift records of the following operational parameters during normal operation when venting to the atmosphere:
  - (A) Pressure drop across the venturi throat of the scrubber; and
  - (B) Liquid flow rate of supply water to the scrubber.

- (c) To document compliance with Condition D.2.67, the Permittee shall maintain records of the results of the inspections required under Condition D.2.67 and the dates the vents are redirected.
  - (d) To document compliance with Condition D.2.23, the Permittee shall maintain 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.
20. The PSD minor limits for PM and PM10 emissions for those units permitted under the original PSD permit (CP 071-2546-00110) issued on December 10, 1993, have been adjusted to allow the source to emit the maximum allowable PM and PM10 emissions while maintaining total PM and PM10 emissions from these units at less than 25 and 15 tons per year, respectively. Condition D.4.1(b) has been revised to adjust the allowable PM and PM10 emissions for the product surge hoppers and the packaging systems and to include the additional baghouse controlling the packaging systems as follows:

D.4.1 Prevention of Significant Deterioration [326 IAC 2-2] [40 CFR 52.21]

- (b) Pursuant to CP-071-2546-00110, issued on December 10, 1993, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable for PM and PM10 emissions, the following shall apply to the Metal Powder Classifying facility and the Pulverizing, Feather Mills, Classifying, Blending and Packaging facility:
  - (1) Emissions of PM and PM10 from the conveyor and screen for product sieving and sizing shall be controlled by a baghouse dust collection system (BS-1) with a minimum overall control efficiency of 99%.
  - (2) Emissions of PM and PM10 from the product surge hoppers shall be controlled by two (2) baghouse dust collection systems (BS-2a and BS-2b) with a minimum overall control efficiency of 99% and vented to building roof ventilators BS-2a and BS-2b, respectively.
  - (3) Emissions of PM and PM10 from all blender packaging systems shall be controlled by ~~four (4)~~ **five (5)** baghouse dust collection systems (BS-3a, BS-3b, BS-3c, ~~and BS-3d1, and BS-3d2~~) with a minimum overall control efficiency of 99% and vented to building roof ventilators BS-3a, BS-3b, BS-3c, and BS-3d, respectively.
  - (4) Fugitive emissions emitted from any building opening shall be limited to 6% opacity in any one (1) six (6) minute averaging period.
  - (5) Particulate matter (PM) ~~and PM10~~ emissions from **the baghouse (BS-1) controlling emissions from the Metal Powder Classifying facility shall each not exceed 0.03 pound per hour.**
  - (6) **PM10 emissions from the baghouse (BS-1) controlling emissions from the Metal Powder Classifying facility shall not exceed 0.03 pound per hour;**
  - ~~(6)~~(7) Particulate matter (PM) ~~and PM10~~ emissions from **each of the two (2) baghouses (BS-2a and BS-2b) controlling emissions from the product surge hoppers shall each not exceed 0.02 pound per hour.**
  - (8) **PM10 emissions from each of the two (2) baghouses (BS-2a and BS-2b) controlling emissions from the product surge hoppers shall not exceed 0.02 pound per hour;**
  - ~~(7)~~(9) Particulate matter (PM) ~~and PM10~~ emissions from **all each of the four (4) baghouses (BS-3b, BS-3c, BS-3d1, and BS-3d2) controlling emissions from the blender packaging systems shall each not exceed 0.02 pound per hour.**
  - (10) **PM10 emissions from each of the four (4) baghouses (BS-3b, BS-3c, BS-3d1, and BS-3d2) controlling emissions from the blender packaging systems shall not exceed 0.02 pound per hour;**
  - (11) **PM emissions from the one (1) baghouse (BS-3a) controlling emissions from the blender packaging systems shall not exceed 0.05 pound per hour;**

**(12) PM10 emissions from the one (1) baghouse (BS-3a) controlling emissions from the blender packaging systems shall not exceed 0.07 pound per hour.**

21. The metal throughput limit necessary to render the requirements of 326 IAC 2-2 (PSD) not applicable to this modification has been added in a new condition D.4.2 for RF-1 and RF-2. The limit is expressed in terms of semi-finished steel powder since the metal is in powder form when it reaches RF-1 and RF-2 and the limit on CO emissions pursuant to 326 IAC 2-2-3 PSD BACT is in terms of semi-finished steel powder. The new condition D.4.2 reads as follows:

**D.4.2 PSD Minor Limit [326 IAC 2-2]**

**The combined throughput of semi-finished steel powder to RF-1 and RF-2 shall not exceed 85,750 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This limit in addition to the CO emission limits in condition D.4.1(a)(3) and (4) will render the requirements of 326 IAC 2-2 (PSD) not applicable to the modification to increase the ladle size of the EAF.**

22. As stated under the rule applicability discussion of 326 IAC 6-3-2 above, since the PM emission limits for the other emission units at this source are PSD minor limits and not limits pursuant to a PSD BACT determination under 326 IAC 2-2-3, the requirements of this rule are applicable to those units. These limits were erroneously left out of the Part 70 permit. Therefore, a new condition D.4.3 has been added to include the allowable particulate emissions pursuant to 326 IAC 6-3-2 for RF-1, RF-2, the Metal Powder Classifying Facility, the product surge hoppers, and blender packaging systems as follows:

**D.4.3 Particulate [326 IAC 6-3-2]**

**Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the facilities listed below shall be limited as follows:**

Emission Unit ID	Process Weight Rate, tons/hr	Allowable Particulate Emissions, lb/hr
Reduction/Annealing Furnace (RF-1)	6.0	13.62
Reduction/Annealing Furnace (RF-2)	5.0	12.05
Metal Powder Classifying Facility	11.0	20.44
Product Surge Hoppers	11.0	20.44
Blender Packaging Systems	11.0	20.44

The pounds per hour limitations were 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

23. Condition D.4.4, now re-numbered D.4.6, has been revised as follows:

#### D.4.6 Particulate Matter (PM)

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Pursuant to CP-071-2546-00110, issued on December 10, 1993, and in order to comply with Condition D.4.1(b) **and D.4.3**, the baghouse dust collection systems for PM control shall be in operation and control emissions from the Metal Powder Classifying Facility, product surge hoppers, and all blender packaging systems at all times that these activities are in operation.

24. Condition D.4.5, now re-numbered D.4.7, has been revised as follows:

#### D.4.57 Visible Emissions Notations

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- (a) Visible emission notations of the exhaust points of the ~~seven (7)~~ **eight (8)** baghouse dust collection systems (BS-1, BS-2a, BS-2b, BS-3a, BS-3b, BS-3c, ~~and BS-3d1, and BS-3d2~~) used in conjunction with the conveying, product sieving and sizing, storage, and blending, product surge hoppers, and all packaging systems 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 this unit 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.
25. Condition D.4.9, now re-numbered D.4.11, has been revised as shown below. Note that since RF-1 and RF-2 are downstream of the EAF in the production process, the metal throughput limit to the EAF added in condition D.1.5 will automatically limit the metal throughput to RF-1 and RF-2 to less than 85,750 tons per year. The throughput of metal to RF-1 and RF-2 will always be less than the tap tons to the EAF. Therefore, the recordkeeping requirements for the limit in condition D.1.5 will be sufficient to demonstrate compliance with the limit in condition D.4.2 for RF-1 and RF-2. The source will also only be required to report the tap tons of metal throughput to the EAF to demonstrate compliance.

#### D.4.911 Record Keeping Requirements

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- (a) To document compliance with Condition D.4.1(a), the Permittee shall record the amount of natural gas combusted per month, including the average daily natural gas usage in each month.
- (b) **The record keeping requirements in condition D.1.14(h) of tap tons of metal throughput to the EAF per month shall be used to document compliance with condition D.4.2.**
- ~~(b)~~(c) To document compliance with Condition D.4.57, the Permittee shall maintain records of visible emission notations of the exhaust points of the ~~seven (7)~~ **eight (8)** baghouse dust collection systems (BS-1, BS-2a, BS-2b, BS-3a, BS-3b, BS-3c, ~~and BS-3d1 and BS-3d2~~) once per shift.

- (d) To document compliance with Condition D.4.68, the Permittee shall maintain once per shift records of the total static pressure drop during normal operation when venting to the atmosphere.
- (e) To document compliance with Condition D.4.79, the Permittee shall maintain records of the results of the inspections required under Condition D.4.79 and the dates the vents are redirected.
- (f) To document compliance with Condition D.4.24, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (g) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.
26. Condition D.6.2 has been revised to include the revised particulate emission limit pursuant to 326 IAC 6-3-2, which is now based on a process weight rate of 14 tons per hour for ladle to tundish teeming due to the increase in ladle size of the EAF, as follows:

D.6.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from ladle to tundish teeming shall not exceed ~~19.2~~ **24.03** pounds per hour when operating at a process weight rate of ~~20,000~~ **28,000** pounds per hour. The pounds per hour limitation was 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:

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

27. Quarterly report forms have been added to the Part 70 permit for the metal throughput limit for the EAF to render the requirements of 326 IAC 2-2 (PSD) not applicable to this modification.
28. The third sentence on the Quarterly Deviation and Compliance Monitoring report form has been replaced with a sentence that is consistent with the condition in Section B, Deviations from Permit Requirements and Conditions as follows:

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".

29. The letterhead for the Title V permit has been revised to reflect the name of the new Governor of Indiana and the new Commissioner of IDEM.

## Conclusion

The operation of this metal powder manufacturing operation shall be subject to the conditions of the attached proposed Significant Source Modification No. 071-20188-00016 and Significant Permit Modification No. 071-20226-00016.

**Appendix A  
Future Potential Emission Calculations**

**Company Name:** Kobelco Metal Powder of America, Inc.  
**Address City IN Zip:** 1625 Bateman Drive, Seymour, Indiana 47274  
**Permit Modification No.:** 071-20226  
**PI ID:** 071-00016  
**Reviewer:** Trish Earts

Emission Unit	Maximum Hourly Rate (tons/hour)	Proposed usage (tons/year)	Emission Factor	Emission Factor (lb/ton)	Source of Emission Factor	Overall Efficiency %	Future Potential						
							PM (Tons/Year)	PM10 (Tons/Year)	SOx (Tons/Year)	NOx (Tons/Year)	VOC (Tons/Year)	CO (Tons/Year)	PB (Tons/Year)
EAF	14.00	85,750 TAP WEIGHT LIMIT 96,360 11 Bottleneck at RF1 and RF2	PM PM10 SOx NOx VOC CO Pb	0.17 0.17 0.05 0.10 0.13 6.37 0.001	Stack Test <sup>1</sup> Stack Test <sup>1</sup> Title V permit Title V permit Title V permit Title V permit Title V permit	99.90% 99.90% 0.00% 0.00% 0.00% 0.00% 99.90%	7.2888	7.2888	2.1438	4.2875	5.5738	273.1138	9.0E-07
Rotary Kiln Dryer	14.00	85,750	PM PM10	0.20 0.20	Title V permit Title V permit	95.00% 95.00%	0.42875	0.42875	0.0000	0.0000	0.0000	0.0000	0.0000
Boiler SCC: 10300602	12.55 MMBTU	115 MMCF	PM PM10 <sup>2</sup> SOx NOx VOC CO	1.90 7.60 0.60 100.00 5.50 84.00	AP-42 AP-42 AP-42 AP-42 AP-42 AP-42	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0.1097	0.4387	0.0346	5.7717	0.3174	4.8483	0.0000
Metal Classifying Facility	14.00	85,750	PM PM10	0.03 0.03 lbs/hr	Man. Data <sup>3</sup> Man. Data <sup>3</sup>	99.00% 99.00%	0.1314	0.1314	0.0000	0.0000	0.0000	0.0000	0.0000
RF 1 & 2	11.00	85,750	CO	1.00	Stack Test <sup>4</sup>	0.00%	0.0000	0.0000	0.0000	0.0000	0.0000	42.8750	0.0000
RF 1 Natural Gas	18 MMBTU	166 MMCF	PM PM10 SOx NOx VOC CO	1.90 7.60 0.60 99.98 5.50 0.00	AP-42 AP-42 AP-42 Title V permit <sup>5</sup> AP-42 See above	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0.1573	0.6291	0.0497	8.2749	0.4553	0.0000	0.0000
RF 2 Natural Gas	18 MMBTU	166 MMCF	PM PM10 SOx NOx VOC CO	1.90 7.60 0.60 157.83 5.50 0.00	AP-42 AP-42 AP-42 Title V permit <sup>5</sup> AP-42 See above	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0.1573	0.6291	0.0497	13.0655	0.4553	0.0000	0.0000
Product Surge Hoppers (one at RF-1 and RF-2)	11.00	85,750	PM PM10	0.02 0.02 lbs/hr each	Man. Data <sup>6</sup> Man. Data <sup>6</sup>	99.00% 99.00%	0.1752	0.1752	0.0000	0.0000	0.0000	0.0000	0.0000
Packaging (four baghouses limited to 0.02 lbs/hr each)  (PM and PM10 from BS-3a will be limited to 0.05 and 0.07 pound per hour, respectively, based on stack test)	18.00	85,750	PM PM10 PM PM10	0.02 0.02 0.0500 0.0700 lbs/hr	Man. Data <sup>6</sup> Man. Data <sup>6</sup> stack test stack test	99.00% 99.00% 99.00% 99.00%	0.3504	0.3504	0.0000	0.0000	0.0000	0.0000	0.0000
Premix Line and Pilot Blender	6,666.00	85,750	VOC	2656 gal/yr	Permit and Proposed Limit	0.00%	0.0000	0.0000	0.0000	0.0000	9.6479	0.0000	0.0000
Oxy Fuel and Coherent Jet Burners (includes new burners)	27.00 MMBTU	248 MMCF	PM PM10 <sup>2</sup> SOx NOx VOC CO <sup>7</sup>	1.90 7.60 0.60 100.00 5.50 N/A	AP-42 AP-42 AP-42 AP-42 AP-42 N/A	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0.2359	0.9437	0.0745	12.4173	0.6830	0.0000	0.0000
New Ladle Pre-heater	3.00 MMBTU	28 MMCF	PM PM10 <sup>2</sup> SOx NOx VOC CO	1.90 7.60 0.60 100.00 5.50 84.00	AP-42 AP-42 AP-42 AP-42 AP-42 AP-42	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0.0262	0.1049	0.0083	1.3797	0.0759	1.1589	0.0000
<b>Totals</b>							9.2799	11.4266	2.3605	45.1966	17.2086	321.9960	9.0E-07
<b>Future Potential Emissions Before Throughput limit</b>													

1. Stack test performed on July 30, 2003 on EAF.  
2. PM10 refers to condensable portion plus the filterable portion of PM  
3. PM and PM10 emissions each limited to 0.03 lb/hr in Title V permit based on manufacturer's data on dust collector.  
4. CO emissions limited to 1.0 pound CO per ton of semi-finished steel powder in Title V permit based on stack test data.  
5. NOx emission factors used in Title V permit for RF-1 and RF-2 were based on burner manufacturer's specifications.  
6. PM and PM10 emissions from each product surge hopper and each packaging system are each limited to 0.02 lb/hr in Title V permit based on manufacturer's data on dust collector.  
7. CO emissions from these burners were not included because use of this equipment is expected to result in a decrease of CO emissions from the EAF. CO emission factor for EAF includes emissions from burners.

**Appendix A  
Future Potential Minus Baseline Actual Emission Calculations**

**Company Name:** Kobelco Metal Powder of America, Inc.  
**Address City IN Zip:** 1625 Bateman Drive, Seymour, Indiana 47274  
**Permit Modification No.:** 071-20226  
**Pit ID:** 071-00016  
**Reviewer:** Trish Earls

Emission Unit	Future Potential	Past Actual	Net Increase	Future Potential	Past Actual	Net Increase	Future Potential	Past Actual	Net Increase	Future Potential	Past Actual	Net Increase	Future Potential	Past Actual	Net Increase	Future Potential	Past Actual	Net Increase	Future Potential	Past Actual	Net Increase
	PM (Tons/Year)	PM (Tons/Year)	PM	PM10 (Tons/Year)	PM10 (Tons/Year)	PM10	SOx (Tons/Year)	SOx (Tons/Year)	SOx	NOx (Tons/Year)	NOx (Tons/Year)	NOx	VOC (Tons/Year)	VOC (Tons/Year)	VOC	CO (Tons/Year)	CO (Tons/Year)	CO	PB (Tons/Year)	PB (Tons/Year)	PB
EAF	7.2888	5.2351	2.0536	7.2888	5.235116	2.0536	2.1438	1.53874	0.6040	4.2875	3.07948	1.2080	5.5738	4.003324	1.5704	273.1138	196.162876	76.9509	0.0000	0.0000	0.0000
Rotary Kiln Dryer	0.42875	0.30563175	0.1231	0.42875	0.30563175	0.1231	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Boiler SCC: 10300602	0.1097	0.0547	0.0550	0.4387	0.2187	0.2200	0.0346	0.0173	0.0174	5.7717	2.8773	2.8945	0.3174	0.1582	0.1592	4.8483	2.4169	2.4314	0.0000	0.0000	0.0000
Metal Classifying Facility	0.1314	0.0607	0.0707	0.1314	0.0607	0.0707	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
RF 1 & 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	42.8750	27.6192	15.2559	0.0000	0.0000	0.0000
RF 1 & 2 Natural Gas	0.3146	0.1181	0.1965	1.2583	0.4725	0.7858	0.0993	0.0373	0.0620	21.3404	7.7728	13.5675	0.9106	0.3419	0.5687	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Product Surge Hoppers	0.1752	0.05022	0.1250	0.1752	0.0502	0.1250	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Packaging	0.5694	0.0597705	0.5096	0.6570	0.0598	0.5972	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Premix Line and Pilot Blender	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	9.6479	2.9910	6.6569	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Oxy Fuel and Coherent Jet Burners	0.2359	0.05446	0.1815	0.9437	0.2179	0.7259	0.0745	0.0172	0.0573	12.4173	2.8665	9.5508	0.6830	0.1577	0.5253	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
New Ladle Pre-heater	0.0262	N/A	0.0262	0.1049	N/A	0.1049	0.0083	N/A	0.0083	1.3797	N/A	1.3797	0.0759	N/A	0.0759	1.1589	N/A	1.1589	0.0000	N/A	0.0000
<b>Totals</b>	<b>9.2799</b>	<b>5.9387</b>	<b>3.3412</b>	<b>11.4266</b>	<b>6.6205</b>	<b>4.8062</b>	<b>2.3605</b>	<b>1.6115</b>	<b>0.7490</b>	<b>45.1966</b>	<b>16.5961</b>	<b>28.6006</b>	<b>17.2086</b>	<b>7.6522</b>	<b>9.5564</b>	<b>321.9960</b>	<b>226.1989</b>	<b>95.7970</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Appendix A  
Baseline Actual Emission Calculations**

**Company Name:** Kobelco Metal Powder of America, Inc.  
**Address City IN Zip:** 1625 Bateman Drvie, Seymour, Indiana 47274  
**Permit Modification No.:** 071-20226  
**PI ID:** 071-00016  
**Reviewer:** Trish Earls

Emission Unit	Maximum Hourly Rate (tons/hour)	2002 Actual Annual Production (tons/year)	2003 Actual Annual Production (tons/year)	Average actual (2002 and 2003) Capacity (Tons/Year)	Emission Factor	Emission Factor (lb/ton)	Source of Emission Factor	Overall Efficiency %	Past Actual	Past Actual	Past Actual	Past Actual	Past Actual	Past Actual	Past Actual
									PM (Tons/Year)	PM10 (Tons/Year)	SOx (Tons/Year)	NOx (Tons/Year)	VOC (Tons/Year)	CO (Tons/Year)	PB (Tons/Year)
EAF	10.00 metal	61,549 metal TAP WEIGHT	61,631 metal TAP WEIGHT	61,590 metal TAP WEIGHT	PM PM10	0.17 0.17 0.05 0.10 0.13 6.37 0.001	Stack Test <sup>1</sup> Stack Test <sup>1</sup> Title V permit Title V permit Title V permit Title V permit Title V permit	99.90% 99.90% 0.00% 0.00% 0.00% 0.00% 99.90%	5.2351	5.2351	1.5397	3.0795	4.0033	196.1629	0.0000
Rotary Kiln Dryer	15.00 metal	60,622 metal	61,631 metal	61,126 metal	PM PM10	0.20 0.20	Title V permit Title V permit	95.00% 95.00%	0.3056	0.3056	0.0000	0.0000	0.0000	0.0000	0.0000
Boiler SCC: 10300602	12.55 MMBTU	79 MMBTU	36 MMBTU	58 MMBTU	PM PM10 <sup>2</sup> SOx NOx VOC CO	1.90 7.60 0.60 100.00 5.50 84.00	AP-42 AP-42 AP-42 AP-42 AP-42 AP-42	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0.0547	0.2187	0.0173	2.8773	0.1582	2.4169	0.0000
Metal Classifying Facility	15.00 metal	60,622 metal 4,041 hours	60,831 metal 4,055 hours	60,727 metal 4,048 hours	PM PM10	0.03 0.03 lbs/hr	Man. Data <sup>3</sup> Man. Data <sup>3</sup>	99.00% 99.00%	0.0607	0.0607	0.0000	0.0000	0.0000	0.0000	0.0000
RF 1 & 2	11.00	50,863	59,614	55,238	CO	1.00	Stack Test <sup>4</sup>	0.00%	0.0000	0.0000	0.0000	0.0000	0.0000	27.6192	0.0000
RF 1 Natural Gas	18.00 MMBTU	93 MMBTU	48 MMBTU	70 MMBTU	PM PM10 SOx NOx VOC CO	1.90 7.60 0.60 99.96 5.50 0.00	AP-42 AP-42 AP-42 Title V permit <sup>5</sup> AP-42 see above	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0.0669	0.2678	0.0211	3.5221	0.1938	0.0000	0.0000
RF 2 Natural Gas	18.00 MMBTU	70 MMBTU	38 MMBTU	54 MMBTU	PM PM10 SOx NOx VOC CO	1.90 7.60 0.60 157.83 5.50 0.00	AP-42 AP-42 AP-42 Title V permit <sup>5</sup> AP-42 see above	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0.0512	0.2047	0.0162	4.2508	0.1481	0.0000	0.0000
Product Surge Hoppers (one at RF-1 and RF-2)	11.00 metal	50,863 metal 4,624 hours	59,614 metal 5,419 hours	55,238 metal 5,022 hours	PM PM10	0.02 0.02 lbs/hr	Man. Data <sup>6</sup> Man. Data <sup>6</sup>	99.00% 99.00%	0.0502	0.0502	0.0000	0.0000	0.0000	0.0000	0.0000
Packaging (four baghouses)	18.00	50,864 metal 5863.1 hours	51,049 metal 6091 hours	50,956 metal 5977.05 hours	PM PM10	0.02 0.02 lbs/hr	Man. Data <sup>6</sup> Man. Data <sup>6</sup>	99.00% 99.00%	0.0598	0.0598	0.0000	0.0000	0.0000	0.0000	0.0000
Premix Line and Pilot Blender	6,666.00 metal 9.9 Tons toluene	33,329 metal 0.519 Tons toluene	33,632 metal 5.463 Tons toluene	33,481 metal 2.991 Tons toluene	VOC	2656 gal/yr	Permit and Proposed Limit	0.00%	0.0000	0.0000	0.0000	0.0000	2.9910	0.0000	0.0000
Oxy Fuel and Coherent Jet Burners	MMCF/Day 0.034 0.055 0.056	75 MMBTU	40 MMBTU	57 MMBTU	PM PM10 <sup>2</sup> SOx NOx VOC CO <sup>7</sup>	1.90 7.60 0.60 100.00 5.50 N/A	AP-42 AP-42 AP-42 AP-42 AP-42 N/A	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0.0545	0.2179	0.0172	2.8665	0.1577	0.0000	0.0000
<b>Totals</b>									5.9387	6.6205	1.6115	16.5961	7.6522	226.1989	0.0000

1: Stack test performed on July 30, 2003 on EAF.  
2: PM10 refers to condensable portion plus the filterable portion of PM  
3: PM and PM10 emissions each limited to 0.03 lb/hr in Title V permit based on manufacturer's data on dust collector.  
4: CO emissions limited to 1.0 pound CO per ton of semi-finished steel powder in Title V permit based on stack test data.  
5: NOx emission factors used in Title V permit for RF-1 and RF-2 were based on burner manufacturer's specifications.  
6: PM and PM10 emissions from each product surge hopper and each packaging system are each limited to 0.02 lb/hr in Title V permit based on manufacturer's data on dust collector.  
7: CO emissions from these burners were not included because use of this equipment is expected to result in a decrease of CO emissions from the EAF. CO emission factor for EAF includes emissions from burners.

**Appendix A: Emissions Calculations  
 Natural Gas Combustion Only  
 MM BTU/HR <100  
 Small Industrial Boiler**

**Company Name:** Kobelco Metal Powder of America, Inc.  
**Address City IN Zip:** 1625 Bateman Drvie, Seymour, Indiana 47274  
**Permit Modification No.:** 071-20226  
**Pit ID:** 071-00016  
**Reviewer:** Trish Earls

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

8.0

70.1

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	N/A
				**see below		
Potential Emission in tons/yr	0.07	0.27	0.02	3.50	0.19	0.00

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

CO emissions were not included because use of this equipment is expected to result in a decrease of CO emissions from the EAF.

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See next page for HAPs emissions calculations.

**Appendix A: Emissions Calculations  
 Natural Gas Combustion Only  
 MM BTU/HR <100  
 Small Industrial Boiler  
 HAPs Emissions**

**Company Name:** Kobelco Metal Powder of America, Inc.  
**Address City IN Zip:** 1625 Bateman Drvie, Seymour, Indiana 47274  
**Permit Modification No.:** 071-20226  
**Pit ID:** 071-00016  
**Reviewer:** Trish Earls

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	7.358E-05	4.205E-05	2.628E-03	6.307E-02	1.191E-04

HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	1.752E-05	3.854E-05	4.906E-05	1.332E-05	7.358E-05

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors are provided above.  
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations  
 Natural Gas Combustion Only  
 MM BTU/HR <100  
 Small Industrial Boiler**

**Company Name:** Kobelco Metal Powder of America, Inc.  
**Address City IN Zip:** 1625 Bateman Drvie, Seymour, Indiana 47274  
**Permit Modification No.:** 071-20226  
**Pit ID:** 071-00016  
**Reviewer:** Trish Earls

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

3.0

26.3

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.02	0.10	0.01	1.31	0.07	1.10

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See next page for HAPs emissions calculations.

updated 4/99

**Appendix A: Emissions Calculations  
 Natural Gas Combustion Only  
 MM BTU/HR <100  
 Small Industrial Boiler  
 HAPs Emissions**

**Company Name:** Kobelco Metal Powder of America, Inc.  
**Address City IN Zip:** 1625 Bateman Drvie, Seymour, Indiana 47274  
**Permit Modification No.:** 071-20226  
**Pit ID:** 071-00016  
**Reviewer:** Trish Earls

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	2.759E-05	1.577E-05	9.855E-04	2.365E-02	4.468E-05

HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	6.570E-06	1.445E-05	1.840E-05	4.993E-06	2.759E-05

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors are provided above.  
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.