



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
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TO: Interested Parties / Applicant

DATE: January 22, 2009

RE: Kobelco Metal Powder of America, Inc. / 071-26381-00016

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

Notice of Decision: Approval – Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204.

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

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

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

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

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

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

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

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

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

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



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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Commissioner

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PART 70 OPERATING PERMIT RENEWAL 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 Renewal No.: T 071-26381-00016	
Issued by: <i>Tripurari Sinha</i> Tripurari P. Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: January 22, 2009 Expiration Date: January 22, 2014

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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)]

The Permittee owns and operates a stationary metal powder manufacturing operation.

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):	3399 (3311A)
County Location:	Jackson
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules; Minor Source, Section 112 of the Clean Air Act

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

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, Plant ID No. 071-00110, 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.

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

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

- (a) 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, permitted in 2005, and two (2) natural gas-fired burners each rated at 4.0 MMBtu per hour, permitted 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 constructed 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 constructed 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, constructed in 1989, including 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, constructed in 1989, 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)]

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, constructed in 1989;
 - (2) One (1) 3.0 MMBtu per hour ladle preheat unit, constructed in 2005;
 - (3) Two (2) 1.18 MMBtu per hour tundish preheat units, constructed in 1989; and
 - (4) One (1) 1.45 MMBtu per hour flame suppression atomizer, constructed in 1989.
[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, constructed in 1989 and modified in 2005.
[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]

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

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);

- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B

GENERAL CONDITIONS

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

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

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5] [326 IAC 2-7-4(a)(1)(D)] [IC 13-15-3-6(a)]

- (a) This permit, T 071-26381-00016, 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 or of permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

B.3 Term of Condition [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability [326 IAC 2-7-7]

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

B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.6 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.8 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

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

- (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.9 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.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

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

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

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;

- (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
- (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

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

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within 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
MC 61-53, IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

B.12 Emergency Provisions [326 IAC 2-7-16]

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

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

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

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

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

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

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

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

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(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.13 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)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5] [326 IAC 2-7-10.5]

- (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 under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this permit except for permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).

B.15 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
MC 61-53, IGCN 1003
Indianapolis, Indiana 46204-2251

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

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

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

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

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-3] [326 IAC 2-7-4] [326 IAC 2-7-8(e)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require 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
MC 61-53, IGCN 1003
Indianapolis, Indiana 46204-2251
- (b) A timely renewal application is one that is:
 - (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.

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

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

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

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

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

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

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

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
 - (3) The changes do not result in emissions which exceed the 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
MC 61-53, IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emissions trades 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 emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

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

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

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

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

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

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

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

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

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

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

B.25 Credible Evidence [326 IAC 1-1-6] [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [62 FR 8314]

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

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

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

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

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (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 Stack Height [326 IAC 1-7]

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

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52, IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

- (g) Indiana 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.8 Performance Testing [326 IAC 3-6]

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

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

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require 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.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

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

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

Unless otherwise specified in this permit, 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 constructed 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
MC 61-53, IGCN 1003
Indianapolis, Indiana 46204-2251

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

The notification which shall be submitted by the Permittee does require 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.11 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous emission monitoring systems (CEMS) and related equipment.
- (b) 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.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

C.13 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

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

C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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
MC 61-53, IGCN 1003
Indianapolis, Indiana 46204-2251

within ninety (90) days after the date of issuance of this permit.

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

- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

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

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

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or

- (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records;
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
 - (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

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

- (a) When the results of a stack test performed in conformance with Section C - 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 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.18 Emission Statement [326 IAC 2-6] [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)]

- (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
MC 61-50, IGCN 1003
Indianapolis, Indiana 46204-2251

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

- (b) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

C.19 General Record Keeping Requirements [326 IAC 2-2] [326 IAC 2-3] [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) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:
 - (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, document and maintain the following records:
 - (A) A description of the project.
 - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
 - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
 - (i) Baseline actual emissions;

- (ii) Projected actual emissions;
 - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1(mm)(2)(A)(iii); and
 - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
- (d) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:
- (1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
 - (2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.20 General Reporting Requirements [326 IAC 2-2] [326 IAC 2-3] [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
MC 61-53, IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- (f) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C – General Record Keeping Requirements for any “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II) at an existing emissions unit other than an Electric Utility Steam Generating Unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:
 - (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C – General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C – General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1(xx) and/or 326 IAC 2-3-1(qq), for that regulated NSR pollutant, and
 - (2) The emissions differ from the preconstruction projection as documented and maintained under Section C – General Record Keeping Requirements (c)(1)(C)(ii).
- (g) The report for a project at an existing emissions unit other than Electric Utility Steam Generating Unit shall be submitted within sixty (60) days after the end of the year and contain the following:
 - (1) The name, address, and telephone number of the major stationary source.
 - (2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C – General Record Keeping Requirements.
 - (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).
 - (4) Any other information that the Permittee deems fit to include in this report,

Reports required in this part shall be submitted to:

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

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

Stratospheric Ozone Protection

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

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

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

SECTION D.1

FACILITY OPERATION CONDITIONS

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

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, permitted in 2005, and two (2) natural gas-fired burners each rated at 4.0 MMBtu per hour, permitted 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 CO PSD BACT [326 IAC 2-2]

- (a) 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, the following shall apply to the EAF:
- (1) 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 (24) 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. If there are less than four (4) heats in one (1) day, the CO emissions on that day shall be averaged with the CO emissions on the next day that there are four (4) or more heats for purposes of determining compliance with the twenty-four (24) hour average.
 - (2) 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. 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.
- (b) 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.

D.1.2 PSD Minor Limits [326 IAC 2-2]

- (a) The amount of metal poured from the EAF shall not exceed 82,750 tap tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

- (b) The lead (Pb) emissions from the EAF shall be limited to 0.013 pounds per tap tons of metal poured.
 - (c) The NO_x emissions from the EAF shall be limited to 0.55 pounds per tap tons of metal poured.
 - (d) Particulate Emissions:
 - (1) 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.
 - (2) The visible emissions from any building opening shall be limited to 6% opacity in any one (1) six (6) minute averaging period.
 - (3) The particulate matter (PM) emissions from the melt shop baghouse stack (S-6) shall be limited to 3.96 pounds per hour (lb/hr).
 - (4) The PM₁₀ emissions from the melt shop baghouse stack (S-6) shall be limited to 1.76 pounds per hour (lb/hr).
 - (5) The PM 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 emissions (insignificant activity) shall not exceed 0.83 pounds per hour (lb/hr).
 - (6) The 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 PM₁₀ emissions (insignificant activity) shall not exceed 0.5 pounds per hour (lb/hr).
 - (7) 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 emissions (insignificant activity) shall not exceed 0.17 pounds per hour (lb/hr).
 - (8) 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 PM₁₀ emissions (insignificant activity) shall not exceed 0.1 pounds per hour (lb/hr).
- The PM₁₀ emission limits include filterable and condensable PM₁₀.
- (e) The VOC emissions from the EAF shall be limited to 0.85 pounds per tap tons of metal poured.
 - (f) Natural Gas Combustion:
 - (1) The burners for the EAF shall burn only natural gas.
 - (2) Source-wide natural gas usage shall be limited to 706.56 million cubic feet (MMCF) per twelve (12) consecutive month period, with compliance determined at the end of each month.

- (3) CO emissions from natural gas combustion shall not exceed 84 pounds per million cubic feet (lb/MMCF).
- (4) NO_x emissions from natural gas combustion shall not exceed 100 pounds per million cubic feet (lb/MMCF).
- (5) PM emissions from natural gas combustion shall not exceed 1.9 pounds per million cubic feet (lb/MMCF).
- (6) PM₁₀ emissions from natural gas combustion shall not exceed 7.6 pounds per million cubic feet (lb/MMCF).
- (7) VOC emissions from natural gas combustion shall not exceed 5.5 pounds per million cubic feet (lb/MMCF).

Compliance with the limits in Conditions D.1.1, D.1.2, D.2.1, D.3.1, D.4.1, D.4.2, D.5.1, D.5.3, and D.6.1, in combination with potential emissions from other emission units, will limit the potential to emit from the modification to increase the ladle size of the EAF to less than

- (A) one hundred (100) tons CO per twelve (12) consecutive month period,
- (B) 0.6 tons lead (Pb) per twelve (12) consecutive month period,
- (C) forty (40) tons NO_x per twelve (12) consecutive month period,
- (D) twenty-five (25) tons PM per twelve (12) consecutive month period,
- (E) fifteen (15) tons PM₁₀ per twelve (12) consecutive month period, and
- (F) forty (40) tons VOC per twelve (12) consecutive month period,

and shall render 326 IAC 2-2 (PSD) not applicable to the modification to increase the ladle size of the EAF (Source Modification No.: 071-20188-00016, issued April 21, 2005).

D.1.3 VOC BACT Limits [326 IAC 8-1-6]

Volatile Organic Compound (VOC) emissions shall be controlled through a scrap management plan to eliminate steel scrap with high residual oil content. Kobelco Metal Powder of America shall charge only scrap consistent with the Scrap Pollution Prevention Plan submitted on June 28, 2008, or subsequent revisions to the plan. Any changes made to the Scrap Pollution Prevention Plan shall be submitted to IDEM, OAQ thirty (30) days prior to implementing the changes.

D.1.4 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 this facility and any control devices.

Compliance Determination Requirements

D.1.5 Testing Requirements [326 IAC 2-1.1-11] [326 IAC 2-7-6(1),(6)]

- (a) In order to demonstrate compliance with Conditions D.1.1, D.1.2, and D.1.3, the Permittee shall perform CO, lead, NO_x, PM, and VOC testing on the existing EAF within 270 days of issuance of the Part 70 Operating Permit Renewal, T 071-26381-00016, utilizing methods as approved by the Commissioner.

- (b) To demonstrate compliance with Condition D.1.2, the Permittee shall perform PM₁₀ testing within 270 days of issuance of the Part 70 Operating Permit Renewal, T 071-26381-00016, or within 180 days of publication of the new or revised condensible PM test method(s) referenced in the U.S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM_{2.5}), signed on May 8, 2008, whichever is later, utilizing methods as approved by the Commissioner. PM₁₀ includes filterable and condensible PM₁₀.

Testing shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

D.1.6 Particulate Matter (PM) [40 CFR 64]

- (a) In order to comply with Condition D.1.2, 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) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

D.1.7 Visible Emissions Notations [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)] [40 CFR 64]

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

D.1.8 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] [40 CFR 64]

The Permittee shall record the pressure drop across the baghouse used in conjunction with the EAF, at least once per day when the EAF 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 - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.1.9 Broken or Failed Bag Detection [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] [40 CFR 64]

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

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

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

D.1.10 Record Keeping Requirements

- (a) To document compliance with Condition D.1.2, the Permittee shall maintain monthly records of the amount of metal poured in tap tons from the EAF.
- (b) To document compliance with Condition D.1.7 – Visible Emissions Notations, the Permittee shall maintain records of the daily visible emission notations of the EAF building stack (S-6) exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (i.e. the process did not operate that day).
- (c) To document compliance with Condition D.1.8 – Baghouse Parametric Monitoring, the Permittee shall maintain records of the daily pressure drop readings of the EAF baghouse. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (i.e. the process did not operate that day).
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.11 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.2 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 PSD Minor Limits [326 IAC 2-2]

The following shall apply to the Drying Rotary Kiln (DRK):

- (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) PM emissions from each heater in the drying process shall not exceed 0.52 pounds per hour;
- (e) PM₁₀ emissions from each heater in the drying process shall not exceed 0.3 pounds per hour;

Compliance with the limits in Conditions D.1.1, D.1.2, D.2.1, D.3.1, D.4.1, D.4.2, D.5.1, D.5.3, and D.6.1, in combination with potential emissions from other emission units, will limit the potential to emit from the modification to increase the ladle size of the EAF to less than

- (A) one hundred (100) tons CO per twelve (12) consecutive month period,
- (B) 0.6 tons lead (Pb) per twelve (12) consecutive month period,
- (C) forty (40) tons NO_x per twelve (12) consecutive month period,
- (D) twenty-five (25) tons PM per twelve (12) consecutive month period,
- (E) fifteen (15) tons PM₁₀ per twelve (12) consecutive month period, and
- (F) forty (40) tons VOC per twelve (12) consecutive month period,

and shall render 326 IAC 2-2 (PSD) not applicable to the modification to increase the ladle size of the EAF (Source Modification No.: 071-20188-00016, issued April 21, 2005).

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.

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 [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)] [40 CFR 64]

- (a) Visible emission notations of the Drying Rotary Kiln (DRK) stack (S-2) exhaust shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, shall be considered a deviation from this permit.

D.2.6 Scrubber Parametric Monitoring [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)] [40 CFR 64]

The Permittee shall record the pressure drop and flow rate of the scrubber used in conjunction with the Drying Rotary Kiln (DRK), at least once per day 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 (GPM), or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range 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 – Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.2.7 Wet Scrubber Failure Detection [40 CFR 64]

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.2.8 Record Keeping Requirements

- (a) To document compliance with Condition D.2.5 – Visible Emissions Notations, the Permittee shall maintain records of the daily visible emission notations of the Drying Rotary Kiln (DRK) stack (S-2) exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (i.e. the process did not operate that day).
- (b) To document compliance with Condition D.2.6 – Scrubber Parametric Monitoring and Condition D.2.7 – Wet Scrubber Failure Detection, the Permittee shall maintain daily 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.

The Permittee shall include in its daily record when a pressure drop or flow rate reading is not taken and the reason for the lack of a reading, (i.e. the process did not operate that day).

- (c) 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 PSD Minor Limits - Natural Gas Combustion [326 IAC 2-2]

Boiler (B1) shall burn only natural gas.

- (a) Source-wide natural gas usage shall be limited to 706.56 million cubic feet (MMCF) per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) CO emissions from natural gas combustion shall not exceed 84 pounds per million cubic feet (lb/MMCF).
- (c) NO_x emissions from natural gas combustion shall not exceed 100 pounds per million cubic feet (lb/MMCF).
- (d) PM emissions from natural gas combustion shall not exceed 1.9 pounds per million cubic feet (lb/MMCF).
- (e) PM₁₀ emissions from natural gas combustion shall not exceed 7.6 pounds per million cubic feet (lb/MMCF).
- (f) VOC emissions from natural gas combustion shall not exceed 5.5 pounds per million cubic feet (lb/MMCF).

Compliance with the limits in Conditions D.1.1, D.1.2, D.2.1, D.3.1, D.4.1, D.4.2, D.5.1, D.5.3, and D.6.1, in combination with potential emissions from other emission units, will limit the potential to emit from the modification to increase the ladle size of the EAF to less than

- (A) one hundred (100) tons CO per twelve (12) consecutive month period,
- (B) 0.6 tons lead (Pb) per twelve (12) consecutive month period,
- (C) forty (40) tons NO_x per twelve (12) consecutive month period,
- (D) twenty-five (25) tons PM per twelve (12) consecutive month period,
- (E) fifteen (15) tons PM₁₀ per twelve (12) consecutive month period, and
- (F) forty (40) tons VOC per twelve (12) consecutive month period,

and shall render 326 IAC 2-2 (PSD) not applicable to the modification to increase the ladle size of the EAF (Source Modification No.: 071-20188-00016, issued April 21, 2005).

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 constructed 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 constructed 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, constructed in 1989, including the 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, constructed in 1989, 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 CO PSD BACT for RF-1 and RF-2 [326 IAC 2-2]

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, the following shall apply to the two (2) Reduction / Annealing Furnaces (RF-1 and RF-2):

- (a) RF-1 shall burn only natural gas and shall be limited to 18.0 MMBtu per hour heat input;
- (b) RF-2 shall burn only natural gas and shall be limited to 18.0 MMBtu per hour heat input;
- (c) CO emissions from RF-1 shall not exceed 1.0 pounds of CO per ton of semi-finished steel powder; and
- (d) CO emissions from RF-2 shall not exceed 1.0 pounds of CO per ton of semi-finished steel powder.

D.4.2 PSD Minor Limits [326 IAC 2-2]

- (a) The combined throughput of semi-finished steel powder to RF-1 and RF-2 shall not exceed 82,750 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) Particulate Matter:

- (1) Visible emissions from stacks S-4 and S-5 of the two (2) Reduction / Annealing Furnaces (RF-1 and RF-2) shall not exceed 6% opacity in any one (1) six (6) minute averaging period.
- (2) The following shall apply to the Metal Powder Classifying facility and the Pulverizing, Feather Mills, Classifying, Blending and Packaging facility:
 - (i) 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).
 - (ii) 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).
 - (iii) 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).
 - (iv) Fugitive emissions emitted from any building opening shall be limited to 6% opacity in any one (1) six (6) minute averaging period.
 - (v) PM emissions from the baghouse (BS-1) controlling emissions from the Metal Powder Classifying facility shall not exceed 0.05 pounds per hour (lb/hr).
 - (vi) PM₁₀ emissions from the baghouse (BS-1) controlling emissions from the Metal Powder Classifying facility shall not exceed 0.03 pounds per hour (lb/hr);
 - (vii) PM emissions from each of the two (2) baghouses (BS-2a and BS-2b) controlling emissions from the product surge hoppers shall not exceed 0.03 pounds per hour (lb/hr).
 - (viii) 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 pounds per hour (lb/hr);
 - (ix) PM emissions from each of the five (5) baghouses (BS-3a, BS-3b, BS-3c, BS-3d1, and BS-3d2) controlling emissions from the Blender Packaging Systems shall not exceed 0.03 pounds per hour (lb/hr).
 - (x) PM₁₀ emissions from each of the five (5) baghouses (BS-3a, BS-3b, BS-3c, BS-3d1, and BS-3d2) controlling emissions from the Blender Packaging Systems shall not exceed 0.02 pounds per hour (lb/hr);
- (c) Natural Gas Combustion:
 - (1) The burners for RF-1 and RF-2 shall burn only natural gas.
 - (2) Source-wide natural gas usage shall be limited to 706.56 million cubic feet (MMCF) per twelve (12) consecutive month period, with compliance determined at the end of each month.
 - (3) CO emissions from natural gas combustion shall not exceed 84 pounds per million cubic feet (lb/MMCF).

- (4) NO_x emissions from natural gas combustion shall not exceed 100 pounds per million cubic feet (lb/MMCF).
- (5) PM emissions from natural gas combustion shall not exceed 1.9 pounds per million cubic feet (lb/MMCF).
- (6) PM₁₀ emissions from natural gas combustion shall not exceed 7.6 pounds per million cubic feet (lb/MMCF).
- (7) VOC emissions from natural gas combustion shall not exceed 5.5 pounds per million cubic feet (lb/MMCF).

Compliance with the limits in Conditions D.1.1, D.1.2, D.2.1, D.3.1, D.4.1, D.4.2, D.5.1, D.5.3, and D.6.1, in combination with potential emissions from other emission units, will limit the potential to emit from the modification to increase the ladle size of the EAF to less than

- (A) one hundred (100) tons CO per twelve (12) consecutive month period,
- (B) 0.6 tons lead (Pb) per twelve (12) consecutive month period,
- (C) forty (40) tons NO_x per twelve (12) consecutive month period,
- (D) twenty-five (25) tons PM per twelve (12) consecutive month period,
- (E) fifteen (15) tons PM₁₀ per twelve (12) consecutive month period, and
- (F) forty (40) tons VOC per twelve (12) consecutive month period,

and shall render 326 IAC 2-2 (PSD) not applicable to the modification to increase the ladle size of the EAF (Source Modification No.: 071-20188-00016, issued April 21, 2005).

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	14.0	24.03
Pulverizing Surge Hoppers	11.0	20.44
Blender Packaging Systems	18.0	28.43

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) In order to demonstrate compliance with Condition D.4.1, the Permittee shall perform CO testing on both RF-1 and RF-2 within 270 days of issuance of the Part 70 Operating Permit Renewal, T 071-26381-00016, utilizing methods as approved by the Commissioner.
- (b) In order to demonstrate compliance with Condition D.4.2, the Permittee shall perform PM 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 within 270 days of issuance of the Part 70 Operating Permit Renewal, T 071-26381-00016, utilizing methods as approved by the Commissioner.
- (c) To demonstrate compliance with Condition D.4.2, the Permittee shall perform PM₁₀ 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 within 270 days of issuance of the Part 70 Operating Permit Renewal, T 071-26381-00016, or within 180 days of publication of the new or revised condensible PM test method(s) referenced in the U.S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM_{2.5}), signed on May 8, 2008, whichever is later, utilizing methods as approved by the Commissioner. PM₁₀ includes filterable and condensible PM₁₀.

Testing shall be repeated at least once every five (5) years from the date of a valid compliance demonstration, and shall be conducted in accordance with Section C - Performance Testing.

D.4.6 Particulate Matter (PM)

- (a) In order to comply with Condition D.4.2, 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.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

D.4.7 Visible Emissions Notations [40 CFR 64]

- (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 week during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, shall be considered a deviation from this permit.

D.4.8 Baghouse Parametric Monitoring [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)] [40 CFR 64]

The Permittee shall record the 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 week 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 - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.4.9 Broken or Failed Bag Detection [40 CFR 64]

For a single compartment controlling emissions from a process operated continuously, the failed unit and the associated process shall 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.4.10 Record Keeping Requirements

- (a) The record keeping requirements in condition D.3.3 of the amount of natural gas combusted per month, including the average daily natural gas usage in each month, shall be used to document compliance with Condition D.4.1, paragraphs (a) and (b), and Condition D.4.2.
- (b) The record keeping requirements in condition D.1.9 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 – Visible Emissions Notations, the Permittee shall maintain records of the weekly 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). The Permittee shall include in its weekly record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (i.e. the process did not operate that week).

- (d) To document compliance with Condition D.4.8 – Baghouse Parametric Monitoring, the Permittee shall maintain records of the weekly pressure drop readings 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). The Permittee shall include in its weekly record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (i.e. the process did not operate that week).
- (e) 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 2-4.1] [326 IAC 2-7-10.5(d)(5)] [326 IAC 8-1-6]

The consumption of toluene solvent in the 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)]

Compliance with this toluene consumption limit for the Premix Line, including the base metal powder and additive process, and the laboratory scale pilot Blender line will limit the potential to emit from this modification to less than ten (10) tons per year of any single HAP and less than twenty-five (25) tons per year of any combination of HAPs. Therefore the requirements of 326 IAC 2-4.1 and the Clean Air Act Section 112 are not applicable to the addition of the Premix Line, including the base metal powder and additive process, and the laboratory scale pilot Blender line.

Compliance with this toluene consumption limit for the Premix Line, including the base metal powder and additive process, and the laboratory scale pilot Blender line will limit the potential to emit from this modification to less than twenty-five (25) tons per year of VOC. Therefore the requirements of 326 IAC 8-1-6 are not applicable to the addition of the Premix Line, including the base metal powder and additive process, and the laboratory scale pilot Blender line.

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

- (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.
- (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.
- (c) The pounds per hour limitations were calculated with the following equation:

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

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

D.5.3 PSD Minor Limit [326 IAC 2-2]

- (a) PM emissions from the Process Bag Filter (BF-1) for Blender, BL-1, shall not exceed 1.6 pounds per hour (lb/hr).
- (b) PM₁₀ emissions from the Process Bag Filter (BF-1) for Blender, BL-1, shall not exceed 1.8 pounds per hour (lb/hr).

- (a) PM emissions from the Process Bag Filter (BF-3) for Blender, BL-2, shall not exceed 1.6 pounds per hour (lb/hr).
- (b) PM₁₀ emissions from the Process Bag Filter (BF-3) for Blender, BL-2, shall not exceed 1.8 pounds per hour (lb/hr).

Compliance with the limits in Conditions D.1.1, D.1.2, D.2.1, D.3.1, D.4.1, D.4.2, D.5.1, D.5.3, and D.6.1, in combination with potential emissions from other emission units, will limit the potential to emit from the modification to increase the ladle size of the EAF to less than

- (A) one hundred (100) tons CO per twelve (12) consecutive month period,
- (B) 0.6 tons lead (Pb) per twelve (12) consecutive month period,
- (C) forty (40) tons NO_x per twelve (12) consecutive month period,
- (D) twenty-five (25) tons PM per twelve (12) consecutive month period,
- (E) fifteen (15) tons PM₁₀ per twelve (12) consecutive month period, and
- (F) forty (40) tons VOC per twelve (12) consecutive month period,

and shall render 326 IAC 2-2 (PSD) not applicable to the modification to increase the ladle size of the EAF (Source Modification No.: 071-20188-00016, issued April 21, 2005).

D.5.4 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.5.5 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs) [326 IAC 8-1-2] [326 IAC 8-1-4]

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.

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

- (a) In order to demonstrate compliance with Conditions D.5.2 and D.5.3, the Permittee shall perform PM testing on the outlet of the Process Bag Filter (BF-1) and Process Dust Collector (BF-3) within 270 days of issuance of the Part 70 Operating Permit Renewal, T 071-26381-00016, utilizing methods as approved by the Commissioner.
- (b) To demonstrate compliance with Conditions D.5.2 and D.5.3, the Permittee shall perform PM₁₀ testing on the outlet of the Process Bag Filter (BF-1) and Process Dust Collector (BF-3) within 270 days of issuance of the Part 70 Operating Permit Renewal, T 071-26381-00016, or within 180 days of publication of the new or revised condensible PM test method(s) referenced in the U.S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM_{2.5}), signed on May 8, 2008, whichever is later, utilizing methods as approved by the Commissioner. PM₁₀ includes filterable and condensible PM₁₀.

Testing shall be repeated at least once every five (5) years from the date of a valid compliance demonstration, and shall be conducted in accordance with Section C - Performance Testing.

D.5.7 Particulate Matter (PM)

- (a) In order to comply with Conditions D.5.2 and D.5.3, the Process Bag Filter (BF-1) and Process Dust Collector (BF-3) for PM control shall be in operation and control emissions from the Blenders, BL-1 and BL-2, at all times that these activities are in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

D.5.8 Visible Emissions Notations [40 CFR 64]

- (a) Visible emission notations of the exhaust points of the Process Bag Filter (BF-1) and Process Dust Collector (BF-3) used in conjunction with the Blenders, BL-1 and BL-2, shall be performed once per week during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, shall be considered a deviation from this permit.

D.5.9 Baghouse Parametric Monitoring [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)] [40 CFR 64]

The Permittee shall record the pressure drop across each of the Process Bag Filter (BF-1) and Process Dust Collector (BF-3) used in conjunction with the Blenders, BL-1 and BL-2, at least once per week when the Blenders, BL-1 and BL-2, 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 - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.5.10 Broken or Failed Bag Detection [40 CFR 64]

For a single compartment controlling emissions from a process operated continuously, the failed unit and the associated process shall 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.5.11 Record Keeping Requirements

- (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.5.8 – Visible Emissions Notations, the Permittee shall maintain records of the weekly visible emission notations of the exhaust points of the Process Bag Filter (BF-1) and Process Dust Collector (BF-3). The Permittee shall include in its weekly record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (i.e. the process did not operate that week).
- (c) To document compliance with Condition D.5.9 – Baghouse Parametric Monitoring, the Permittee shall maintain records of the weekly pressure drop readings of the exhaust points of the Process Bag Filter (BF-1) and Process Dust Collector (BF-3). The Permittee shall include in its weekly record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (i.e. the process did not operate that week).
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.5.12 Reporting Requirements

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, constructed in 1989;
 - (2) One (1) 3.0 MMBtu per hour ladle preheat unit, constructed in 2005;
 - (3) Two (2) 1.18 MMBtu per hour tundish preheat units, constructed in 1989; and
 - (4) One (1) 1.45 MMBtu per hour flame suppression atomizer, constructed in 1989. [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, constructed in 1989. [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 PSD Minor Limits - Natural Gas Combustion [326 IAC 2-2]

The two (2) ladle preheat units, the two (2) tundish preheat units, and the flame suppression atomizer shall burn only natural gas.

- (a) Source-wide natural gas usage shall be limited to 706.56 million cubic feet (MMCF) per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) CO emissions from natural gas combustion shall not exceed 84 pounds per million cubic feet (lb/MMCF).
- (c) NO_x emissions from natural gas combustion shall not exceed 100 pounds per million cubic feet (lb/MMCF).
- (d) PM emissions from natural gas combustion shall not exceed 1.9 pounds per million cubic feet (lb/MMCF).
- (e) PM₁₀ emissions from natural gas combustion shall not exceed 7.6 pounds per million cubic feet (lb/MMCF).
- (f) VOC emissions from natural gas combustion shall not exceed 5.5 pounds per million cubic feet (lb/MMCF).

Compliance with the limits in Conditions D.1.1, D.1.2, D.2.1, D.3.1, D.4.1, D.4.2, D.5.1, D.5.3, and D.6.1, in combination with potential emissions from other emission units, will limit the potential to emit from the modification to increase the ladle size of the EAF to less than

- (A) one hundred (100) tons CO per twelve (12) consecutive month period,

- (B) 0.6 tons lead (Pb) per twelve (12) consecutive month period,
- (C) forty (40) tons NO_x per twelve (12) consecutive month period,
- (D) twenty-five (25) tons PM per twelve (12) consecutive month period,
- (E) fifteen (15) tons PM₁₀ per twelve (12) consecutive month period, and
- (F) forty (40) tons VOC per twelve (12) consecutive month period,

and shall render 326 IAC 2-2 (PSD) not applicable to the modification to increase the ladle size of the EAF (Source Modification No.: 071-20188-00016, issued April 21, 2005).

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.

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

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

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

D.6.3 Record Keeping Requirements

- (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 month, including the average daily natural gas usage in each month.
- (b) These records shall be maintained in accordance with Section C - General Record Keeping Requirements.

SECTION E.1 Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 17, 1983

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

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, permitted in 2005, and two (2) natural gas-fired burners each rated at 4.0 MMBtu per hour, permitted 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.)

E.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 Electric Arc Furnace (EAF) except when otherwise specified in 40 CFR Part 60, Subpart AAa.

E.1.2 Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 17, 1983 [326 IAC 12] [40 CFR 60, Subpart AAa]

The Electric Arc Furnace (EAF) shall comply with the following provisions of 40 CFR Part 60, Subpart AAa (included as Attachment A of this permit):

- (1) 40 CFR 60.270a.
- (2) 40 CFR 60.271a.
- (3) 40 CFR 60.272a.
- (4) 40 CFR 60.273a.
- (5) 40 CFR 60.274a.
- (6) 40 CFR 60.275a.
- (7) 40 CFR 60.276a.

**SECTION E.2 National Emission Standards for Hazardous Air Pollutants for Area Sources:
Electric Arc Furnace Steelmaking Facilities**

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

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, permitted in 2005, and two (2) natural gas-fired burners each rated at 4.0 MMBtu per hour, permitted 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.)

E.2.1 General Provisions Relating to NESHAP [326 IAC 20-1] [40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the Electric Arc Furnace (EAF) except when otherwise specified in Table 1 to Subpart YYYYYY of 40 CFR Part 63.

E.2.2 National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities [40 CFR 63, Subpart YYYYYY]

The Electric Arc Furnace (EAF) shall comply with the following provisions of the National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities (40 CFR Part 63, Subpart YYYYYY) with a compliance date of June 30, 2008, which are included as Attachment B of this permit:

- (1) 40 CFR 63.10680(a), (b)(1), (c), and (d).
- (2) 40 CFR 63.10681(a) and (b).
- (3) 40 CFR 63.10685.
- (4) 40 CFR 63.10686.
- (5) 40 CFR 63.10690.
- (6) 40 CFR 63.10691.
- (7) 40 CFR 63.10692.
- (8) Table 1

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.: T 071-26381-00016

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
MC 61-53, IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865**

PART 70 OPERATING PERMIT EMERGENCY OCCURRENCE REPORT

Source Name: 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.: T 071-26381-00016

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) <ul style="list-style-type: none">• The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and• The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.
--

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

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

If 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? <input type="checkbox"/> Y <input type="checkbox"/> N Describe:
Type of Pollutants Emitted: <input type="checkbox"/> TSP <input type="checkbox"/> PM-10 <input type="checkbox"/> SO ₂ <input type="checkbox"/> VOC <input type="checkbox"/> NO _x <input type="checkbox"/> CO <input type="checkbox"/> Pb <input type="checkbox"/> 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: _____

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.: T 071-26381-00016
Facility: EAF
Parameter: Metal Throughput
Limit: The amount of metal poured from the EAF shall not exceed 82,750 tap tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR: _____

Month	Metal Poured This Month (tap tons)	Metal Poured Previous 11 Months (tap tons)	12-Month Total Metal Poured (tap tons)

- No deviation occurred in this quarter.
- Deviations 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.: T 071-26381-00016
 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)		

- No deviation occurred in this quarter.
- Deviations 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.: T 071-26381-00016

Months: _____ to _____ Year: _____

Page 1 of 2

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

NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

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

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Attachment A: Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 17, 1983 [326 IAC 12] [40 CFR 60, Subpart AAa]

Source Description and Location	
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Source Name:	Kobelco Metal Powder of America, Inc.
Source Location:	1625 Bateman Drive, Seymour, IN 47274
County:	Jackson
SIC Code (NAICS Code):	3399 (3311A)
Operation Permit Renewal No.:	T 071-26381-00016
Permit Reviewer:	Kimberly Cottrell

NSPS - 40 CFR 60, Subpart AAa

Subpart AAa—Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 17, 1983

§ 60.270a Applicability and designation of affected facility.

(a) The provisions of this subpart are applicable to the following affected facilities in steel plants that produce carbon, alloy, or specialty steels: electric arc furnaces, argon-oxygen decarburization vessels, and dust-handling systems.

(b) The provisions of this subpart apply to each affected facility identified in paragraph (a) of this section that commences construction, modification, or reconstruction after August 17, 1983.

§ 60.271a Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

Argon-oxygen decarburization vessel (AOD vessel) means any closed-bottom, refractory-lined converter vessel with submerged tuyeres through which gaseous mixtures containing argon and oxygen or nitrogen may be blown into molten steel for further refining.

Bag leak detection system means a system that is capable of continuously monitoring relative particulate matter (dust) loadings in the exhaust of a baghouse to detect bag leaks and other conditions that result in increases in particulate loadings. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, electrodynamic, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

Capture system means the equipment (including ducts, hoods, fans, dampers, etc.) used to capture or transport particulate matter generated by an electric arc furnace or AOD vessel to the air pollution control device.

Charge means the addition of iron and steel scrap or other materials into the top of an electric arc furnace or the addition of molten steel or other materials into the top of an AOD vessel.

Control device means the air pollution control equipment used to remove particulate matter from the effluent gas stream generated by an electric arc furnace or AOD vessel.

Direct-shell evacuation control system (DEC system) means a system that maintains a negative pressure within the electric arc furnace above the slag or metal and ducts emissions to the control device.

Dust-handling system means equipment used to handle particulate matter collected by the control device for an electric arc furnace or AOD vessel subject to this subpart. For the purposes of this subpart, the dust-handling system shall consist of the control device dust hoppers, the dust-conveying equipment, any central dust storage equipment, the dust-treating equipment (e.g., pug mill, pelletizer), dust transfer equipment (from storage to truck), and any secondary control devices used with the dust transfer equipment.

Electric arc furnace (EAF) means a furnace that produces molten steel and heats the charge materials with electric arcs from carbon electrodes. For the purposes of this subpart, an EAF shall consist of the furnace shell and roof and the transformer. Furnaces that continuously feed direct-reduced iron ore pellets as the primary source of iron are not affected facilities within the scope of this definition.

Heat cycle means the period beginning when scrap is charged to an empty EAF and ending when the EAF tap is completed or beginning when molten steel is charged to an empty AOD vessel and ending when the AOD vessel tap is completed.

Meltdown and refining period means the time period commencing at the termination of the initial charging period and ending at the initiation of the tapping period, excluding any intermediate charging periods and times when power to the EAF is off.

Melting means that phase of steel production cycle during which the iron and steel scrap is heated to the molten state.

Negative-pressure fabric filter means a fabric filter with the fans on the downstream side of the filter bags.

Positive-pressure fabric filter means a fabric filter with the fans on the upstream side of the filter bags.

Refining means that phase of the steel production cycle during which undesirable elements are removed from the molten steel and alloys are added to reach the final metal chemistry.

Shop means the building which houses one or more EAF's or AOD vessels.

Shop opacity means the arithmetic average of 24 observations of the opacity of emissions from the shop taken in accordance with Method 9 of appendix A of this part.

Tap means the pouring of molten steel from an EAF or AOD vessel.

Tapping period means the time period commencing at the moment an EAF begins to pour molten steel and ending either three minutes after steel ceases to flow from an EAF, or six minutes after steel begins to flow, whichever is longer.

§ 60.272a Standard for particulate matter.

(a) On and after the date of which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from an EAF or an AOD vessel any gases which:

- (1) Exit from a control device and contain particulate matter in excess of 12 mg/dscm (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) or AOD vessel(s), exhibit 6 percent opacity or greater.

(b) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from the dust-handling system any gases that exhibit 10 percent opacity or greater.

§ 60.273a Emission monitoring.

(a) Except as provided under paragraphs (b) and (c) of this section, a continuous monitoring system for the measurement of the opacity of emissions discharged into the atmosphere from the control device(s) shall be installed, calibrated, maintained, and operated by the owner or operator subject to the provisions of this subpart.

(b) No continuous monitoring system shall be required on any control device serving the dust-handling system.

(c) A continuous monitoring system for the measurement of the opacity of emissions discharged into the atmosphere from the control device(s) is not required on any modular, multi-stack, negative-pressure or positive-pressure fabric filter if observations of the opacity of the visible emissions from the control device are performed by a certified visible emission observer; or on any single-stack fabric filter if visible emissions from the control device are performed by a certified visible emission observer and the owner installs and continuously operates a bag leak detection system according to paragraph (e) of this section. Visible emission observations shall be conducted at least once per day for at least three 6-minute periods when the furnace is operating in the melting and refining period. All visible emissions observations shall be conducted in accordance with Method 9. If visible emissions occur from more than one point, the opacity shall be recorded for any points 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 emission, only one set of three 6-minute observations will be required. In that case, the 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 §60.272a(a).

(d) A furnace static pressure monitoring device is not required on any EAF equipped with a DEC system if observations of shop opacity are performed by a certified visible emission observer as follows: Shop opacity observations shall be conducted at least once per day when the furnace is operating in the meltdown and refining period. Shop opacity shall be determined as the arithmetic average of 24 consecutive 15-second opacity observations of emissions from the shop taken in accordance with Method 9. Shop 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 visible emissions, only one observation of shop opacity will be required. In this case, the shop opacity 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.

(e) A bag leak detection system must be installed and continuously operated on all single-stack fabric filters if the owner or operator elects not to install and operate a continuous opacity monitoring system as provided for under paragraph (c) of this section. In addition, the owner or operator shall meet the visible emissions observation requirements in paragraph (c) of this section. The bag leak detection system must meet the specifications and requirements of paragraphs (e)(1) through (8) of this section.

(1) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 1 milligram per actual cubic meter (0.00044 grains per actual cubic foot) or less.

(2) The bag leak detection system sensor must provide output of relative particulate matter loadings and the owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (e.g., using a strip chart recorder or a data logger.)

(3) The bag leak detection system must be equipped with an alarm system that will sound when an increase in relative particulate loading is detected over the alarm set point established according to paragraph (e)(4) of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.

(4) For each bag leak detection system required by paragraph (e) of this section, the owner or operator shall develop and submit to the Administrator or delegated authority, for approval, a site-specific monitoring plan that addresses the items identified in paragraphs (i) through (v) of this paragraph (e)(4). For each bag leak detection system that operates based on the triboelectric effect, the monitoring plan shall be consistent with the recommendations contained in the U.S. Environmental Protection Agency guidance document "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015). The owner or operator shall operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe the following:

(i) Installation of the bag leak detection system;

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

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

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

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

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

(6) Following initial adjustment, the owner or operator shall not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided for in paragraphs (e)(6)(i) and (ii) of this section.

(i) Once per quarter, the owner or operator may adjust the sensitivity of the bag leak detection system to account for seasonal effects including temperature and humidity according to the procedures identified in the site-specific monitoring plan required under paragraphs (e)(4) of this section.

(ii) If opacities greater than zero percent are observed over four consecutive 15-second observations during the daily opacity observations required under paragraph (c) of this section and the alarm on the bag leak detection system does not sound, the owner or operator shall lower the alarm set point on the bag leak detection system to a point where the alarm would have sounded during the period when the opacity observations were made.

(7) For negative pressure, induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detection sensor must be installed downstream of the baghouse and upstream of any wet scrubber.

(8) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(f) For each bag leak detection system installed according to paragraph (e) of this section, the owner or operator shall initiate procedures to determine the cause of all alarms within 1 hour of an alarm. Except as provided for under paragraph (g) of this section, the cause of the alarm must be alleviated within 3 hours of the time the alarm occurred by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to, the following:

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

(2) Sealing off defective bags or filter media;

(3) Replacing defective bags or filter media or otherwise repairing the control device;

(4) Sealing off a defective baghouse compartment;

(5) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; and

(6) Shutting down the process producing the particulate emissions.

(g) In approving the site-specific monitoring plan required in paragraph (e)(4) of this section, the Administrator or delegated authority may allow owners or operators more than 3 hours to alleviate specific conditions that cause an alarm if the owner or operator identifies the condition that could lead to an alarm in the monitoring plan, adequately explains why it is not feasible to alleviate the condition within 3 hours of the time the alarm occurred, and demonstrates that the requested additional time will ensure alleviation of the condition as expeditiously as practicable.

§ 60.274a Monitoring of operations.

(a) The owner or operator subject to the provisions of this subpart shall maintain records of the following information:

(1) All data obtained under paragraph (b) of this section; and

(2) All monthly operational status inspections performed under paragraph (c) of this section.

(b) Except as provided under paragraph (e) of this section, the owner or operator subject to the provisions of this subpart shall check and record on a once-per-shift basis the furnace static pressure (if DEC system is in use, and a furnace static pressure gauge is installed according to paragraph (f) of this section) and either: check and record the control system fan motor amperes and damper position on a once-per-shift basis; install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate through each separately ducted hood; or install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate at the control device inlet and check and record damper positions on a once-per-shift basis. The monitoring device(s) may be installed in any appropriate location in the exhaust duct such that reproducible flow rate monitoring will result. The flow rate monitoring device(s) shall have an accuracy of ± 10 percent over its normal operating range and shall be calibrated according to the manufacturer's instructions. The Administrator may require the owner or operator to demonstrate the accuracy of the monitoring device(s) relative to Methods 1 and 2 of appendix A of this part.

(c) When the owner or operator of an affected facility is required to demonstrate compliance with the standards under §60.272a(a)(3) and at any other time that the Administrator may require (under section 114 of the CAA, as amended) either: the control system fan motor amperes and all damper positions, the volumetric flow rate through each separately ducted hood, or the volumetric flow rate at the control device inlet and all damper positions 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) of this section. The owner or operator may petition the Administrator for reestablishment of these parameters whenever the owner or operator can demonstrate to the Administrator'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 §60.276a(c).

(d) Except as provided under paragraph (e) of this section, the owner or operator shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture system (*i.e.* , pressure sensors, dampers, and damper switches). This inspection 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) The owner or operator may petition the Administrator to approve any alternative to either the monitoring requirements specified in paragraph (b) of this section or the monthly operational status inspections specified in paragraph (d) of this section if the alternative will provide a continuous record of operation of each emission capture system.

(f) Except as provided for under §60.273a(d), if emissions during any phase of the heat time are controlled by the use of a DEC system, the owner or operator shall install, calibrate, and maintain a monitoring device that allows the pressure in the free space inside the EAF to be monitored. The pressure shall be recorded as 15-minute integrated averages. The monitoring device may be installed in any appropriate location in the EAF or DEC duct prior to the introduction of ambient air such that reproducible results will be obtained. The pressure monitoring device shall have an accuracy of ± 5 mm of water gauge over its normal operating range and shall be calibrated according to the manufacturer's instructions.

(g) Except as provided for under §60.273a(d), when the owner or operator of an EAF controlled by a DEC is required to demonstrate compliance with the standard under §60.272a(a)(3), and at any other time the Administrator may require (under section 114 of the Clean Air Act, as amended), the pressure in the free space inside the furnace shall be determined during the meltdown and refining period(s) using the monitoring device required under paragraph (f) of this section. The owner or operator may petition the Administrator for reestablishment of the pressure whenever the owner or operator can demonstrate to the Administrator's satisfaction that the EAF operating conditions upon which the pressures were previously established are no longer applicable. The pressure determined during the most recent demonstration of compliance shall be maintained at all times when the EAF is operating in a meltdown and refining period. Operation at higher pressures may be considered by the Administrator to be unacceptable operation and maintenance of the affected facility.

(h) During any performance test required under §60.8, and for any report thereof required by §60.276a(f) of this subpart, or to determine compliance with §60.272a(a)(3) of this subpart, the owner or operator 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 and the pressure inside an EAF when direct-shell evacuation control systems are used;

- (3) Control device operation log; and
- (4) Continuous opacity monitor or Method 9 data.

§ 60.275a Test methods and procedures.

- (a) During performance tests required in §60.8, the owner or operator shall not add gaseous diluents to the effluent gas stream after the fabric in any pressurized fabric filter collector, unless the amount of dilution is separately determined and considered in the determination of emissions.
- (b) When emissions from any EAF(s) or AOD vessel(s) are combined with emissions from facilities not subject to the provisions of this subpart but controlled by a common capture system and control device, the owner or operator shall use either or both of the following procedures during a performance test (see also §60.276a(e)):
 - (1) Determine compliance using the combined emissions.
 - (2) Use a method that is acceptable to the Administrator and that compensates for the emissions from the facilities not subject to the provisions of this subpart.
- (c) When emission from any EAF(s) or AOD vessel(s) are combined with emissions from facilities not subject to the provisions of this subpart, the owner or operator shall demonstrate compliance with §60.272(a)(3) based on emissions from only the affected facility(ies).
- (d) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).
- (e) The owner or operator shall determine compliance with the particulate matter standards in §60.272a as follows:

- (1) Method 5 shall be used for negative-pressure fabric filters and other types of control devices and Method 5D shall be used for positive-pressure fabric filters to determine the particulate matter concentration and volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 4 hours and 4.50 dscm (160 dscf) and, when a single EAF or AOD vessel is sampled, the sampling time shall include an integral number of heats.
- (2) When more than one control device serves the EAF(s) being tested, the concentration of particulate matter shall be determined using the following equation:

$$c_{st} = \left[\sum_{i=1}^n (c_{si} Q_{sdi}) \right] \sum_{i=1}^n Q_{sdi}$$

where:

- c_{st} =average concentration of particulate matter, mg/dscm (gr/dscf).
- c_{si} =concentration of particulate matter from control device "i", mg/dscm (gr/dscf).
- n =total number of control devices tested.
- Q_{sdi} =volumetric flow rate of stack gas from control device "i", dscm/hr (dscf/hr).

- (3) Method 9 and the procedures of §60.11 shall be used to determine opacity.
- (4) To demonstrate compliance with §60.272a(a) (1), (2), and (3), the Method 9 test runs shall be conducted concurrently with the particulate matter test runs, unless inclement weather interferes.
- (f) To comply with §60.274a (c), (f), (g), and (h), the owner or operator shall obtain the information required in these paragraphs during the particulate matter runs.
- (g) Any control device subject to the provisions of the subpart shall be designed and constructed to allow measurement of emissions using applicable test methods and procedures.

(h) Where emissions from any EAF(s) or AOD vessel(s) are combined with emissions from facilities not subject to the provisions of this subpart but controlled by a common capture system and control device, the owner or operator may use any of the following procedures during a performance test:

- (1) Base compliance on control of the combined emissions;
- (2) Utilize a method acceptable to the Administrator that compensates for the emissions from the facilities not subject to the provisions of this subpart, or;
- (3) Any combination of the criteria of paragraphs (h)(1) and (h)(2) of this section.

(i) Where emissions from any EAF(s) or AOD vessel(s) are combined with emissions from facilities not subject to the provisions of this subpart, determinations of compliance with §60.272a(a)(3) will only be based upon emissions originating from the affected facility(ies).

(j) Unless the presence of inclement weather makes concurrent testing infeasible, the owner or operator shall conduct concurrently the performance tests required under §60.8 to demonstrate compliance with §60.272a(a) (1), (2), and (3) of this subpart.

§ 60.276a Recordkeeping and reporting requirements.

(a) Records of the measurements required in §60.274a must be retained for at least 2 years following the date of the measurement.

(b) Each owner or operator shall submit a written report of exceedances of the control device opacity to the Administrator 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.

(c) Operation at a furnace static pressure that exceeds the value established under §60.274a(g) and either operation of control system fan motor amperes at values exceeding ± 15 percent of the value established under §60.274a(c) or operation at flow rates lower than those established under §60.274a(c) may be considered by the Administrator to be unacceptable operation and maintenance of the affected facility. Operation at such values shall be reported to the Administrator semiannually.

(d) The requirements of this section remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with this section, provided that they comply with the requirements established by the State.

(e) When the owner or operator of an EAF or AOD is required to demonstrate compliance with the standard under §60.275 (b)(2) or a combination of (b)(1) and (b)(2) the owner or operator shall obtain approval from the Administrator of the procedure(s) that will be used to determine compliance. Notification of the procedure(s) to be used must be postmarked at least 30 days prior to the performance test.

(f) For the purpose of this subpart, the owner or operator shall conduct the demonstration of compliance with §60.272a(a) of this subpart and furnish the Administrator a written report of the results of the test. This report shall include the following information:

- (1) Facility name and address;
- (2) Plant representative;
- (3) Make and model of process, control device, and continuous monitoring equipment;
- (4) Flow diagram of process and emission capture equipment including other equipment or process(es) ducted to the same control device;
- (5) Rated (design) capacity of process equipment;
- (6) Those data required under §60.274a(h) of this subpart;
- (i) List of charge and tap weights and materials;

- (ii) Heat times and process log;
 - (iii) Control device operation log; and
 - (iv) Continuous opacity monitor or Method 9 data.
 - (7) Test dates and test times;
 - (8) Test company;
 - (9) Test company representative;
 - (10) Test observers from outside agency;
 - (11) Description of test methodology used, including any deviation from standard reference methods;
 - (12) Schematic of sampling location;
 - (13) Number of sampling points;
 - (14) Description of sampling equipment;
 - (15) Listing of sampling equipment calibrations and procedures;
 - (16) Field and laboratory data sheets;
 - (17) Description of sample recovery procedures;
 - (18) Sampling equipment leak check results;
 - (19) Description of quality assurance procedures;
 - (20) Description of analytical procedures;
 - (21) Notation of sample blank corrections; and
 - (22) Sample emission calculations.
- (g) The owner or operator shall maintain records of all shop opacity observations made in accordance with §60.273a(d). All shop opacity observations in excess of the emission limit specified in §60.272a(a)(3) of this subpart shall indicate a period of excess emission, and shall be reported to the administrator semi-annually, according to §60.7(c).
- (h) The owner or operator shall maintain the following records for each bag leak detection system required under §60.273a(e):
- (1) Records of the bag leak detection system output;
 - (2) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and
 - (3) An identification of the date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, if procedures were initiated within 1 hour of the alarm, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and if the alarm was alleviated within 3 hours of the alarm.

Attachment B: National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities [40 CFR 63, Subpart YYYYYY]

Source Description and Location	
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Source Name:	Kobelco Metal Powder of America, Inc.
Source Location:	1625 Bateman Drive, Seymour, IN 47274
County:	Jackson
SIC Code (NAICS Code):	3399 (3311A)
Operation Permit Renewal No.:	T 071-7315-00016
Permit Reviewer:	Kimberly Cottrell

NSPS - 40 CFR 63, Subpart YYYYYY

Subpart YYYYYY—National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities

Applicability and Compliance Dates

§ 63.10680 Am I subject to this subpart?

- (a) You are subject to this subpart if you own or operate an electric arc furnace (EAF) steelmaking facility that is an area source of hazardous air pollutant (HAP) emissions.
- (b) This subpart applies to each new or existing affected source. The affected source is each EAF steelmaking facility.
- (1) An affected source is existing if you commenced construction or reconstruction of the affected source on or before September 20, 2007.
- (2) An affected source is new if you commenced construction or reconstruction of the affected source after September 20, 2007.
- (c) This subpart does not apply to research and development facilities, as defined in section 112(c)(7) of the Clean Air Act (CAA).
- (d) If you own or operate an area source subject to this subpart, you must have or obtain a permit under 40 CFR part 70 or 40 CFR part 71.

§ 63.10681 What are my compliance dates?

- (a) Except as provided in paragraph (b) of this section, if you own or operate an existing affected source, you must achieve compliance with the applicable provisions of this subpart by no later than June 30, 2008.
- (b) If you own or operate an existing affected source, you must achieve compliance with opacity limit in §63.10686(b)(2) or (c)(2) by no later than December 28, 2010 if you demonstrate to the satisfaction of the permitting authority that additional time is needed to install or modify emission control equipment.
- (c) If you start up a new affected source on or before December 28, 2007, you must achieve compliance with the applicable provisions of this subpart by no later than December 28, 2007.
- (d) If you start up a new affected source after December 28, 2007, you must achieve compliance with the applicable provisions of this subpart upon startup of your affected source.

Standards and Compliance Requirements

§ 63.10685 What are the requirements for the control of contaminants from scrap?

(a) *Chlorinated plastics, lead, and free organic liquids* . For metallic scrap utilized in the EAF at your facility, you must comply with the requirements in either paragraph (a)(1) or (2) of this section. You may have certain scrap at your facility subject to paragraph (a)(1) of this section and other scrap subject to paragraph (a)(2) of this section provided the scrap remains segregated until charge make-up.

(1) *Pollution prevention plan* . For the production of steel other than leaded steel, you must prepare and implement a pollution prevention plan for metallic scrap selection and inspection to minimize the amount of chlorinated plastics, lead, and free organic liquids that is charged to the furnace. For the production of leaded steel, you must prepare and implement a pollution prevention plan for scrap selection and inspection to minimize the amount of chlorinated plastics and free organic liquids in the scrap that is charged to the furnace. You must submit the scrap pollution prevention plan to the permitting authority for approval. You must operate according to the plan as submitted during the review and approval process, operate according to the approved plan at all times after approval, and address any deficiency identified by the permitting authority within 60 days following disapproval of a plan. You may request approval to revise the plan and may operate according to the revised plan unless and until the revision is disapproved by the permitting authority. You must keep a copy of the plan onsite, and you must provide training on the plan's requirements to all plant personnel with materials acquisition or inspection duties. Each plan must include the information in paragraphs (a)(1)(i) through (iii) of this section:

(i) Specifications that scrap materials must be depleted (to the extent practicable) of undrained used oil filters, chlorinated plastics, and free organic liquids at the time of charging to the furnace.

(ii) A requirement in your scrap specifications for removal (to the extent practicable) of lead-containing components (such as batteries, battery cables, and wheel weights) from the scrap, except for scrap used to produce leaded steel.

(iii) Procedures for determining if the requirements and specifications in paragraph (a)(1) of this section are met (such as visual inspection or periodic audits of scrap providers) and procedures for taking corrective actions with vendors whose shipments are not within specifications.

(iv) The requirements of paragraph (a)(1) of this section do not apply to the routine recycling of baghouse bags or other internal process or maintenance materials in the furnace. These exempted materials must be identified in the pollution prevention plan.

(2) *Restricted metallic scrap* . For the production of steel other than leaded steel, you must not charge to a furnace metallic scrap that contains scrap from motor vehicle bodies, engine blocks, oil filters, oily turnings, machine shop borings, transformers or capacitors containing polychlorinated biphenyls, lead-containing components, chlorinated plastics, or free organic liquids. For the production of leaded steel, you must not charge to the furnace metallic scrap that contains scrap from motor vehicle bodies, engine blocks, oil filters, oily turnings, machine shop borings, transformers or capacitors containing polychlorinated biphenyls, chlorinated plastics, or free organic liquids. This restriction does not apply to any post-consumer engine blocks, post-consumer oil filters, or oily turnings that are processed or cleaned to the extent practicable such that the materials do not include lead components, chlorinated plastics, or free organic liquids. This restriction does not apply to motor vehicle scrap that is charged to recover the chromium or nickel content if you meet the requirements in paragraph (b)(3) of this section.

(b) *Mercury requirements* . For scrap containing motor vehicle scrap, you must procure the scrap pursuant to one of the compliance options in paragraphs (b)(1), (2), or (3) of this section for each scrap provider, contract, or shipment. For scrap that does not contain motor vehicle scrap, you must procure the scrap pursuant to the requirements in paragraph (b)(4) of this section for each scrap provider, contract, or shipment. You may have one scrap provider, contract, or shipment subject to one compliance provision and others subject to another compliance provision.

(1) *Site-specific plan for mercury switches* . You must comply with the requirements in paragraphs (b)(1)(i) through (v) of this section.

(i) You must include a requirement in your scrap specifications for removal of mercury switches from vehicle bodies used to make the scrap.

(ii) You must prepare and operate according to a plan demonstrating how your facility will implement the scrap specification in paragraph (b)(1)(i) of this section for removal of mercury switches. You must submit the plan to the permitting authority for approval. You must operate according to this plan as submitted during the review and approval process, operate according to the approved plan at all times after approval, and address any deficiency identified by the permitting authority within 60 days following disapproval of a plan. You may request approval to revise the plan and may operate according to the revised plan unless and until the revision is disapproved by the permitting authority. The permitting authority may change the approval status of the plan upon 90-days written notice based upon the semiannual compliance report or other information. The plan must include:

(A) A means of communicating to scrap purchasers and scrap providers the need to obtain or provide motor vehicle scrap from which mercury switches have been removed and the need to ensure the proper management of the mercury switches removed from that scrap as required under the rules implementing subtitle C of the Resource Conservation and Recovery Act (RCRA) (40 CFR parts 261 through 265 and 268). The plan must include documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need to promote the removal of mercury switches from end-of-life vehicles. Upon the request of the permitting authority, you must provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols;

(B) Provisions for obtaining assurance from scrap providers that motor vehicle scrap provided to the facility meet the scrap specification;

(C) Provisions for periodic inspections or other means of corroboration to ensure that scrap providers and dismantlers are implementing appropriate steps to minimize the presence of mercury switches in motor vehicle scrap and that the mercury switches removed are being properly managed, including the minimum frequency such means of corroboration will be implemented; and

(D) Provisions for taking corrective actions (i.e., actions resulting in scrap providers removing a higher percentage of mercury switches or other mercury-containing components) if needed, based on the results of procedures implemented in paragraph (b)(1)(ii)(C) of this section).

(iii) You must require each motor vehicle scrap provider to provide an estimate of the number of mercury switches removed from motor vehicle scrap sent to your facility during the previous year and the basis for the estimate. The permitting authority may request documentation or additional information at any time.

(iv) You must establish a goal for each scrap provider to remove at least 80 percent of the mercury switches. Although a site-specific plan approved under paragraph (b)(1) of this section may require only the removal of convenience light switch mechanisms, the permitting authority will credit all documented and verifiable mercury-containing components removed from motor vehicle scrap (such as sensors in anti-locking brake systems, security systems, active ride control, and other applications) when evaluating progress towards the 80 percent goal.

(v) For each scrap provider, you must submit semiannual progress reports to the permitting authority that provide the number of mercury switches removed or the weight of mercury recovered from the switches, the estimated number of vehicles processed, an estimate of the percent of mercury switches removed, and certification that the removed mercury switches were recycled at RCRA-permitted facilities or otherwise properly managed pursuant to RCRA subtitle C regulations referenced in paragraph (b)(1)(ii)(A) of this section. This information can be submitted in aggregated form and does not have to be submitted for each scrap provider, contract, or shipment. The permitting authority may change the approval status of a site-specific plan following 90-days notice based on the progress reports or other information.

(2) *Option for approved mercury programs.* You must certify in your notification of compliance status that you participate in and purchase motor vehicle scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the Administrator based on the criteria in paragraphs (b)(2)(i) through (iii) of this section. If you purchase motor vehicle scrap from a broker, you must certify that all scrap received from that broker was obtained from other scrap providers who participate in a program for the removal of mercury switches that has been approved by the Administrator based on the criteria in paragraphs (b)(2)(i) through (iii) of this section. The National Vehicle Mercury Switch Recovery Program and the Vehicle Switch Recovery Program mandated by Maine State law are EPA-approved programs under paragraph (b)(2) of this section unless and until the Administrator disapproves the program (in part or in whole) under paragraph (b)(2)(iii) of this section.

(i) The program includes outreach that informs the dismantlers of the need for removal of mercury switches and provides training and guidance for removing mercury switches;

(ii) The program has a goal to remove at least 80 percent of mercury switches from the motor vehicle scrap the scrap provider processes. Although a program approved under paragraph (b)(2) of this section may require only the removal of convenience light switch mechanisms, the Administrator will credit all documented and verifiable mercury-containing components removed from motor vehicle scrap (such as sensors in anti-locking brake systems, security systems, active ride control, and other applications) when evaluating progress towards the 80 percent goal; and

(iii) The program sponsor agrees to submit progress reports to the Administrator no less frequently than once every year that provide the number of mercury switches removed or the weight of mercury recovered from the switches, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and certification that the recovered mercury switches were recycled at facilities with permits as required under the rules implementing subtitle C of RCRA (40 CFR parts 261 through 265 and 268). The progress reports must be based on a database that includes data for each program participant; however, data may be aggregated at the State level for progress reports that will be publicly available. The Administrator may change the approval status of a program or portion of a program (e.g., at the State level) following 90-days notice based on the progress reports or on other information.

(iv) You must develop and maintain onsite a plan demonstrating the manner through which your facility is participating in the EPA-approved program.

(A) The plan must include facility-specific implementation elements, corporate-wide policies, and/or efforts coordinated by a trade association as appropriate for each facility.

(B) You must provide in the plan documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need to promote the removal of mercury switches from end-of-life vehicles. Upon the request of the permitting authority, you must provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols.

(C) You must conduct periodic inspections or provide other means of corroboration to ensure that scrap providers are aware of the need for and are implementing appropriate steps to minimize the presence of mercury in scrap from end-of-life vehicles.

(3) *Option for specialty metal scrap.* You must certify in your notification of compliance status that the only materials from motor vehicles in the scrap are materials recovered for their specialty alloy (including, but not limited to, chromium, nickel, molybdenum, or other alloys) content (such as certain exhaust systems) and, based on the nature of the scrap and purchase specifications, that the type of scrap is not reasonably expected to contain mercury switches.

(4) *Scrap that does not contain motor vehicle scrap.* For scrap not subject to the requirements in paragraphs (b)(1) through (3) of this section, you must certify in your notification of compliance status and maintain records of documentation that this scrap does not contain motor vehicle scrap.

(c) *Recordkeeping and reporting requirements.* In addition to the records required by §63.10, you must keep records to demonstrate compliance with the requirements for your pollution prevention plan in paragraph (a)(1) of this section and/or for the use of only restricted scrap in paragraph (a)(2) of this section and for mercury in paragraphs (b)(1) through (3) of this section as applicable. You must keep records documenting compliance with paragraph (b)(4) of this section for scrap that does not contain motor vehicle scrap.

(1) If you are subject to the requirements for a site-specific plan for mercury under paragraph (b)(1) of this section, you must:

(i) Maintain records of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, and an estimate of the percent of mercury switches recovered; and

(ii) Submit semiannual reports of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and a certification that the recovered mercury switches were recycled at RCRA-permitted facilities. The semiannual reports must include a certification that you have conducted inspections or taken other means of corroboration as required under paragraph (b)(1)(ii)(C) of this section. You may include this information in the semiannual compliance reports required under paragraph (c)(3) of this section.

(2) If you are subject to the option for approved mercury programs under paragraph (b)(2) of this section, you must maintain records identifying each scrap provider and documenting the scrap provider's participation in an approved mercury switch removal program. If you purchase motor vehicle scrap from a broker, you must maintain records identifying each broker and documentation that all scrap provided by the broker was obtained from other scrap providers who participate in an approved mercury switch removal program.

(3) You must submit semiannual compliance reports to the Administrator for the control of contaminants from scrap according to the requirements in §63.10(e). The report must clearly identify any deviation from the requirements in paragraphs (a) and (b) of this section and the corrective action taken. You must identify which compliance option in paragraph (b) of this section applies to each scrap provider, contract, or shipment.

§ 63.10686 What are the requirements for electric arc furnaces and argon-oxygen decarburization vessels?

(a) You must install, operate, and maintain a capture system that collects the emissions from each EAF (including charging, melting, and tapping operations) and argon-oxygen decarburization (AOD) vessel and conveys the collected emissions to a control device for the removal of particulate matter (PM).

(b) Except as provided in paragraph (c) of this section, you must not discharge or cause the discharge into the atmosphere from an EAF or AOD vessel any gases which:

(1) Exit from a control device and contain in excess of 0.0052 grains of PM per dry standard cubic foot (gr/dscf); and

(2) Exit from a melt shop and, due solely to the operations of any affected EAF(s) or AOD vessel(s), exhibit 6 percent opacity or greater.

(c) If you own or operate a new or existing affected source that has a production capacity of less than 150,000 tons per year (tpy) of stainless or specialty steel (as determined by the maximum production if specified in the source's operating permit or EAF capacity and maximum number of operating hours per year), you must not discharge or cause the discharge into the atmosphere from an EAF or AOD vessel any gases which:

(1) Exit from a control device and contain particulate matter (PM) in excess of 0.8 pounds per ton (lb/ton) of steel. Alternatively, the owner or operator may elect to comply with a PM limit of 0.0052 grains per dry standard cubic foot (gr/dscf); and

(2) Exit from a melt shop and, due solely to the operations of any affected EAF(s) or AOD vessel(s), exhibit 6 percent opacity or greater.

(d) Except as provided in paragraph (d)(6) of this section, you must conduct performance tests to demonstrate initial compliance with the applicable emissions limit for each emissions source subject to an emissions limit in paragraph (b) or (c) of this section.

(1) You must conduct each PM performance test for an EAF or AOD vessel according to the procedures in §63.7 and 40 CFR 60.275a using the following test methods in 40 CFR part 60, appendices A-1, A-2, A-3, and A-4:

(i) Method 1 or 1A of appendix A-1 of 40 CFR part 60 to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.

(ii) Method 2, 2A, 2C, 2D, 2F, or 2G of appendix A-1 of 40 CFR part 60 to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B of appendix A-3 of 40 CFR part 60 to determine the dry molecular weight of the stack gas. You may use ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses" (incorporated by reference—see §63.14) as an alternative to EPA Method 3B.

(iv) Method 4 of appendix A-3 of 40 CFR part 60 to determine the moisture content of the stack gas.

(v) Method 5 or 5D of appendix A-3 of 40 CFR part 60 to determine the PM concentration. Three valid test runs are needed to comprise a PM performance test. For EAF, sample only when metal is being melted and refined. For AOD vessels, sample only when the operation(s) are being conducted.

(2) You must conduct each opacity test for a melt shop according to the procedures in §63.6(h) and Method 9 of appendix A-4 of 40 CFR part 60. When emissions from any EAF or AOD vessel are combined with emissions from emission sources not subject to this subpart, you must demonstrate compliance with the melt shop opacity limit based on emissions from only the emission sources subject to this subpart.

(3) During any performance test, you must monitor and record the information specified in 40 CFR 60.274a(h) for all heats covered by the test.

(4) You must notify and receive approval from the Administrator for procedures that will be used to determine compliance for an EAF or AOD vessel when emissions are combined with those from facilities not subject to this subpart.

(5) To determine compliance with the PM emissions limit in paragraph (c) of this section for an EAF or AOD vessel in a lb/ton of steel format, compute the process-weighted mass emissions (E_p) for each test run using Equation 1 of this section:

$$E_p = \frac{C \times Q \times T}{P \times K} \quad (\text{Eq. 1})$$

Where:

E_p = Process-weighted mass emissions of PM, lb/ton;

C = Concentration of PM or total metal HAP, gr/dscf;

Q = Volumetric flow rate of stack gas, dscf/hr;

T = Total time during a test run that a sample is withdrawn from the stack during steel production cycle, hr;

P = Total amount of metal produced during the test run, tons; and

K = Conversion factor, 7,000 grains per pound.

(6) If you own or operate an existing affected source that is subject to the emissions limits in paragraph (b) or (c) of this section, you may certify initial compliance with the applicable emission limit for one or more emissions sources based on the results of a previous performance test for that emissions source in lieu of the requirement for an initial performance test provided that the test(s) were conducted within 5 years of the compliance date using the methods and procedures specified in paragraph (d)(1) or (2) of this section; the test(s) were for the affected facility; and the test(s) were representative of current or anticipated operating processes and conditions. Should the permitting authority deem the prior test data unacceptable to demonstrate compliance with an applicable emissions limit, the owner or operator must conduct an initial performance test within 180 days of the compliance date or within 90 days of receipt of the notification of disapproval of the prior test, whichever is later.

(e) You must monitor the capture system and PM control device required by this subpart, maintain records, and submit reports according to the compliance assurance monitoring requirements in 40 CFR part 64. The exemption in 40 CFR 64.2(b)(1)(i) for emissions limitations or standards proposed after November 15, 1990 under section 111 or 112 of the CAA does not apply. In lieu of the deadlines for submittal in 40 CFR 64.5, you must submit the monitoring information required by 40 CFR 64.4 to the applicable permitting authority for approval by no later than the compliance date for your affected source for this subpart and operate according to the approved plan by no later than 180 days after the date of approval by the permitting authority.

Other Information and Requirements

§ 63.10690 What parts of the General Provisions apply to this subpart?

(a) You must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) as provided in Table 1 of this subpart.

(b) The notification of compliance status required by §63.9(h) must include each applicable certification of compliance, signed by a responsible official, in paragraphs (b)(1) through (6) of this section.

- (1) For the pollution prevention plan requirements in §63.10685(a)(1): “This facility has submitted a pollution prevention plan for metallic scrap selection and inspection in accordance with §63.10685(a)(1)”;
- (2) For the restrictions on metallic scrap in §63.10685(a)(2): “This facility complies with the requirements for restricted metallic scrap in accordance with §63.10685(a)(2)”;
- (3) For the mercury requirements in §63.10685(b):
 - (i) “This facility has prepared a site-specific plan for mercury switches in accordance with §63.10685(b)(1)”;
 - (ii) “This facility participates in and purchases motor vehicle scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the EPA Administrator in accordance with §63.10685(b)(2)” and has prepared a plan demonstrating how the facility participates in the EPA-approved program in accordance with §63.10685(b)(2)(iv);
 - (iii) “The only materials from motor vehicles in the scrap charged to an electric arc furnace at this facility are materials recovered for their specialty alloy content in accordance with §63.10685(b)(3) which are not reasonably expected to contain mercury switches”; or
 - (iv) “This facility complies with the requirements for scrap that does not contain motor vehicle scrap in accordance with §63.10685(b)(4).”
- (4) This certification of compliance for the capture system requirements in §63.10686(a), signed by a responsible official: “This facility operates a capture system for each electric arc furnace and argon-oxygen decarburization vessel that conveys the collected emissions to a PM control device in accordance with §63.10686(a)”.
- (5) If applicable, this certification of compliance for the performance test requirements in §63.10686(d)(6): “This facility certifies initial compliance with the applicable emissions limit in §63.10686(a) or (b) based on the results of a previous performance test in accordance with §63.10686(d)(6)”.
- (6) This certification of compliance for the monitoring requirements in §63.10686(e), signed by a responsible official: “This facility has developed and submitted proposed monitoring information in accordance with 40 CFR part 64”.

§ 63.10691 Who implements and enforces this subpart?

- (a) This subpart can be implemented and enforced by the EPA or a delegated authority such as a State, local, or tribal agency. If the EPA Administrator has delegated authority to a State, local, or tribal agency, then that Agency has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.
- (b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator and are not transferred to the State, local, or tribal agency.
- (c) The authorities that will not be delegated to State, local, or tribal agencies are listed in paragraphs (c)(1) through (6) of this section.
 - (1) Approval of an alternative non-opacity emissions standard under 40 CFR 63.6(g).
 - (2) Approval of an alternative opacity emissions standard under §63.6(h)(9).
 - (3) Approval of a major change to test methods under §63.7(e)(2)(ii) and (f). A “major change to test method” is defined in 40 CFR 63.90.
 - (4) Approval of major change to monitoring under 40 CFR 63.8(f). A “major change to monitoring” is defined in 40 CFR 63.90.
 - (5) Approval of a major change to recordkeeping/reporting under 40 CFR 63.10(f). A “major change to recordkeeping/reporting” is defined in 40 CFR 63.90.
 - (6) Approval of a program for the removal of mercury switches under §63.10685(b)(2).

§ 63.10692 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, in §63.2, and in this section as follows:

Argon-oxygen decarburization (AOD) vessel means any closed-bottom, refractory-lined converter vessel with submerged tuyeres through which gaseous mixtures containing argon and oxygen or nitrogen may be blown into molten steel for further refining.

Capture system means the equipment (including ducts, hoods, fans, dampers, etc.) used to capture or transport emissions generated by an electric arc furnace or argon-oxygen decarburization vessel to the air pollution control device.

Chlorinated plastics means solid polymeric materials that contain chlorine in the polymer chain, such as polyvinyl chloride (PVC) and PVC copolymers.

Control device means the air pollution control equipment used to remove particulate matter from the effluent gas stream generated by an electric arc furnace or argon-oxygen decarburization vessel.

Deviation means any instance where an affected source subject to this subpart, or an owner or operator of such a source:

- (1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emissions limitation or work practice standard;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
- (3) Fails to meet any emissions limitation in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Electric arc furnace (EAF) means a furnace that produces molten steel and heats the charge materials with electric arcs from carbon electrodes. An electric arc furnace consists of the furnace shell, roof, and the transformer.

Electric arc furnace (EAF) steelmaking facility means a steel plant that produces carbon, alloy, or specialty steels using an EAF. This definition excludes EAF steelmaking facilities at steel foundries and EAF facilities used to produce nonferrous metals.

Free organic liquids means material that fails the paint filter test by EPA Method 9095B, (revision 2, dated November 1994) (incorporated by reference—see §63.14) after accounting for water using a moisture determination test by ASTM Method D2216–05 (incorporated by reference—see §63.14). If, after conducting a moisture determination test, if any portion of the material passes through and drops from the filter within the 5-minute test period, the material contains *free organic liquids*.

Leaded steel means steel that must meet a minimum specification for lead content (typically 0.25 percent or more) and for which lead is a necessary alloy for that grade of steel.

Mercury switch means each mercury-containing capsule or switch assembly that is part of a convenience light switch mechanism installed in a vehicle.

Motor vehicle means an automotive vehicle not operated on rails and usually operated with rubber tires for use on highways.

Motor vehicle scrap means vehicle or automobile bodies, including automobile body hulks, that have been processed through a shredder. *Motor vehicle scrap* does not include automobile manufacturing bundles, or miscellaneous vehicle parts, such as wheels, bumpers or other components that do not contain mercury switches.

Nonferrous metals means any pure metal other than iron or any metal alloy for which an element other than iron is its major constituent by percent in weight.

Scrap provider means the person (including a broker) who contracts directly with a steel mill to provide scrap that contains motor vehicle scrap. Scrap processors such as shredder operators or vehicle dismantlers that do not sell scrap directly to a steel mill are not *scrap providers*.

Specialty steel means low carbon and high alloy steel other than stainless steel that is processed in an argon-oxygen decarburization vessel.

Stainless steel means low carbon steel that contains at least 10.5 percent chromium.

Table 1 to Subpart YYYYY of Part 63—Applicability of General Provisions to Subpart YYYYY

As required in §63.10691(a), you must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) shown in the following table.

Citation	Subject	Applies to subpart YYYYY?	Explanation
§63.1(a)(1), (a)(2), (a)(3), (a)(4), (a)(6), (a)(10)–(a)(12), (b)(1), (b)(3), (c)(1), (c)(2), (c)(5), (e)	Applicability	Yes	
§63.1(a)(5), (a)(7)–(a)(9), (b)(2), (c)(3), (c)(4), (d)	Reserved	No	
§63.2	Definitions	Yes	
§63.3	Units and Abbreviations	Yes	
§63.4	Prohibited Activities and Circumvention	Yes	
§63.5	Preconstruction Review and Notification Requirements	Yes	
§63.6(a), (b)(1)–(b)(5), (b)(7), (c)(1), (c)(2), (c)(5), (e)(1), (e)(3)(i), (e)(3)(iii)–(e)(3)(ix), (f), (g), (h)(1), (h)(2), (h)(5)–(h)(9), (i), (j)	Compliance with Standards and Maintenance Requirements	Yes	
§63.6(b)(6), (c)(3), (c)(4), (d), (e)(2), (e)(3)(ii), (h)(3), (h)(5)(iv)	Reserved	No	
§63.7	Applicability and Performance Test Dates	Yes	
§63.8(a)(1), (a)(2), (b), (c), (d), (e), (f)(1)–(5), (g)	Monitoring Requirements	Yes	Requirements apply if a COMS or CEMS is used.
§63.8(a)(3)	[Reserved]	No	
§63.8(a)(4)	Additional Monitoring Requirements for Control Devices in §63.11	No	
§63.8(c)(4)	Continuous Monitoring System Requirements	Yes	Requirements apply if a COMS or CEMS is used.
§63.8(f)(6)	RATA Alternative	Yes	Requirements apply if a CEMS is used.
§63.9(a), (b)(1), (b)(2), (b)(5), (c), (d), (f), (g), (h)(1)–(h)(3), (h)(5), (h)(6), (i), (j)	Notification Requirements	Yes	

Citation	Subject	Applies to subpart YYYYYY?	Explanation
§63.9(b)(3), (h)(4)	Reserved	No	
§63.9(b)(4)		No	
§63.10(a), (b)(1), (b)(2)(i)–(v), (b)(2)(xiv), (b)(3), (c)(1), (c)(5)–(c)(8), (c)(10)–(c)(15), (d), (e)(1)–(e)(4), (f)	Recordkeeping and Reporting Requirements	Yes	Additional records for CMS in §63.10(c) (1)–(6), (9)–(15), and reports in §63.10(d)(1)–(2) apply if a COMS or CEMS is used.
§63.10(b)(2)(xiii)	CMS Records for RATA Alternative	Yes	Requirements apply if a CEMS is used.
§63.10(c)(2)–(c)(4), (c)(9)	Reserved	No	
§63.11	Control Device Requirements	No	
§63.12	State Authority and Delegations	Yes	
§§63.13–63.16	Addresses, Incorporations by Reference, Availability of Information, Performance Track Provisions	Yes	

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit Renewal

Source Description and Location

Source Name:	Kobelco Metal Powder of America, Inc.
Source Location:	1625 Bateman Drive, Seymour, IN 47274
County:	Jackson
SIC Code (NAICS Code):	3399 (3311A)
Operation Permit Renewal No.:	T 071-26381-00016
Permit Reviewer:	Kimberly Cottrell

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

History and Existing Approvals

On April 4, 2008, Kobelco Metal Powder of America, Inc., submitted an application to the OAQ requesting to renew its operating permit. Since the issuance of the Part 70 Operating Permit No. T 071-7315-00016 on January 5, 2004, the source has constructed or has been operating under the following approvals:

- (a) Significant Source Modification No. 071-20188-00016, issued on April 21, 2005;
- (b) Significant Permit Modification No. 071-20226-00016, issued on May 13, 2005; and
- (c) Significant Permit Modification No. 071-22828-00016, issued on September 11, 2006.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

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, Plant ID No. 071-00110, 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 is issued to Kobelco Metal Powder of America, Inc. and Praxair.

Permitted Emission Units and Pollution Control Equipment

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, installed in 2005, and two (2) natural gas-fired burners each rated at 4.0 MMBtu per hour, 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), installed 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), installed 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), installed in 1989, equipped with multiple natural gas-fired burners that were installed 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), installed in 1995, equipped with multiple natural gas-fired burners that were installed 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 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, installed 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, installed 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), installed 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.

Insignificant Activities

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]

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

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

County Attainment Status

The source is located in Jackson County

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Attainment effective December 29, 2005, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.

¹Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.
Unclassifiable or attainment effective April 5, 2005, for PM_{2.5}.

(a) Ozone Standards

- (1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, St. Joseph as attainment for the 8-hour ozone standard.
- (3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.
- (4) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Jackson County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) PM_{2.5}

Jackson County has been classified as attainment for PM_{2.5}. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5} emissions, and the effective date of these rules was July 15th, 2008. Indiana has three years from the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM₁₀ emissions as a surrogate for PM_{2.5} emissions until 326 IAC 2-2 is revised.

(c) Other Criteria Pollutants

Jackson County has been classified as attainment or unclassifiable in Indiana for CO, NO₂, PM₁₀, SO₂, and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(d) Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	Emissions (ton/yr)
CO	>100
NO _x	<100
PM	>100
PM ₁₀	>100
SO ₂	<100
VOC	>100

Pollutant	Emissions (ton/yr)
HAP (Pb)	>10
Total HAP	>25

The Permittee has agreed that they are major for Part 70 Permits 326 IAC 2-7 for CO, PM, and PM₁₀ and major for Prevention of Significant Deterioration (PSD) 326 IAC 2-2 for CO. Emissions calculations are included in Appendix A of this Technical Support Document.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of CO, PM, and PM₁₀ is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of lead (Pb) is greater than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is greater than twenty-five (25) tons per year.
- (c) Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are not counted toward the determination of Part 70 applicability.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Potential to Emit After Issuance

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

Process/ Emission Unit	CO	NO_x	PM	PM₁₀	SO₂	VOC	Single HAP	Total HAP
EAF	263.56	22.76	21.72	10.34	15.72	35.17	0.54 (lead)	0.54
Rotary Kiln Dryer	0	0	1.08	0.62	0	0	0	0
Boiler B1	4.40	5.24	0.10	0.40	0.03	0.29	0	0
Metal Classifying Facility	0	0	0.22	0.13	0	0	0	0
RF 1 & 2	41.38	0	0	0	0	0	0	0

Process/ Emission Unit	CO	NO_x	PM	PM₁₀	SO₂	VOC	Single HAP	Total HAP
RF 1 Burners	6.31	7.51	0.14	0.57	0.05	0.41	0	0
RF 2 Burners	6.31	7.51	0.14	0.57	0.05	0.41	0	0
Pulverizing Surge Hoppers	0	0	0.26	0.18	0	0	0	0
Packaging (5 BH)	0	0	0.66	0.44	0	0	0	0
Premix Line and Pilot Blender	0	0	7.01	7.88	0	9.65	9.65 (toluene)	9.65
Oxy Fuel and Coherent Jet Burners	9.46	11.26	0.21	0.86	0.07	0.62	0	0
Tundish Preheat, Flame Suppression Atomizer and Ladle Preheat 1	1.74	2.07	0.04	0.16	0.01	0.11	0	0
Ladle Preheat 2	1.05	1.25	0.02	0.10	0.01	0.07	0	0
Total Emissions	334.20	57.59	31.61	22.24	15.93	46.73	9.65 (toluene) 0.54 (lead)	10.19
Major Source Threshold	250	250	250	250	250	250	10	25

- (a) This existing stationary source is major for PSD because the emissions of carbon monoxide (CO), an attainment pollutant, are greater than two hundred fifty (>250) tons per year, and this existing stationary source is not one of the twenty-eight (28) listed source categories.
- (b) Fugitive Emissions
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

Federal Rule Applicability

The following federal rules are applicable to the source:

- (a) **New Source Performance Standards (NSPS):**
 The Electric Arc Furnace (EAF) is subject to the New Source Performance Standard for Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 17, 1983 (40 CFR 60, Subpart AAa), which is incorporated by reference as 326 IAC 12.

Nonapplicable portions of the NSPS will not be included in the permit. The Electric Arc Furnace (EAF) is subject to the following portions of Subpart AAa.

- (1) 40 CFR 60.270a.
- (2) 40 CFR 60.271a.
- (3) 40 CFR 60.272a.
- (4) 40 CFR 60.273a.
- (5) 40 CFR 60.274a.
- (6) 40 CFR 60.275a.

(7) 40 CFR 60.276a.

The provisions of 40 CFR 60 Subpart A – General Provisions, which are incorporated as 326 IAC 12-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 60, Subpart AAa.

(b) National Emission Standards for Hazardous Air Pollutants (NESHAP):
 The Electric Arc Furnace (EAF) is subject to the National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities (40 CFR Part 63, Subpart YYYYYY).

Nonapplicable portions of the NESHAP will not be included in the permit. The Electric Arc Furnace (EAF) is subject to the following portions of Subpart YYYYYY:

- (1) 40 CFR 63.10680(a), (b)(1), (c), and (d).
- (2) 40 CFR 63.10681(a) and (b).
- (3) 40 CFR 63.10685.
- (4) 40 CFR 63.10686.
- (5) 40 CFR 63.10690.
- (6) 40 CFR 63.10691.
- (7) 40 CFR 63.10692.
- (8) Table 1

The provisions of 40 CFR 63 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63 Subpart YYYYYY.

(c) Compliance Assurance Monitoring (CAM):
 Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to existing emission units that involve a pollutant-specific emission unit and meet the following criteria:

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

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each existing emission unit and specified pollutant subject to CAM:

Table 4: CAM Applicability Analysis							
Emission Unit	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (ton/yr)	Controlled PTE (ton/yr)	Major Source Threshold (ton/yr)	CAM Applicable (Y/N)	Large Unit (Y/N)
EAF - Lead	BH	Y	<10	<10	10	N	N
EAF - PM	BH	Y	>100	<100	100	Y	N
EAF - PM ₁₀	BH	Y	>100	<100	100	Y	N
DRK - PM	wet scrubber	Y	>100	<100	100	Y	N

Table 4: CAM Applicability Analysis							
Emission Unit	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (ton/yr)	Controlled PTE (ton/yr)	Major Source Threshold (ton/yr)	CAM Applicable (Y/N)	Large Unit (Y/N)
DRK - PM ₁₀	wet scrubber	Y	>100	<100	100	Y	N
Metal Powder Classifying - PM	BH	Y	>100	<100	100	Y	N
Metal Powder Classifying - PM ₁₀	BH	Y	>100	<100	100	Y	N
Pulverizing Surge Hoppers - PM	BH	Y	<100	<100	100	N	N
Pulverizing Surge Hoppers - PM ₁₀	BH	Y	<100	<100	100	N	N
Blender Packaging Systems - PM	BH	Y	>100	<100	100	Y	N
Blender Packaging Systems - PM ₁₀	BH	Y	>100	<100	100	Y	N
Premix Line - PM	BH	Y	>100	<100	100	Y	N
Premix Line - PM ₁₀	BH	Y	>100	<100	100	Y	N
Premix Line - VOC	condenser vacuum pump & chiller	Y	>100	<100	100	Y	N
Premix Line - Toluene	condenser vacuum pump & chiller	Y	>10	<10	10	Y	N
Premix Line - Total HAP	condenser vacuum pump & chiller	Y	>25	<25	25	Y	N

Based on this evaluation the requirements of 40 CFR Part 64, CAM are applicable to the:

- (1) Electric Arc Furnace (EAF) for PM and PM₁₀;
- (2) Drying Rotary Kiln (DRK) for PM and PM₁₀;
- (3) Metal Powder Classifying for PM and PM₁₀;
- (4) Blender Packaging Systems for PM and PM₁₀; and
- (4) Premix Line for PM, PM₁₀, toluene, total HAP, and VOC;

upon issuance of the Title V Renewal. A CAM plan will be incorporated into this Part 70 permit renewal.

State Rule Applicability - Entire Source

The following state rules are applicable to the source:

326 IAC 1-5-2 (Emergency Reduction Plans)

The source is subject to 326 IAC 1-6-3.

326 IAC 1-6-3 (Preventive Maintenance Plan)

The source is subject to 326 IAC 1-6-3.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit under 326 IAC 2-7, Part 70 program. Pursuant to this rule, the Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(3), an emission statement must be submitted triennially by July 1 beginning in 2006 and every 3 years/every year after. Therefore, the next emission statement for this source must be submitted by July 1, 2009. 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 Exemptions), opacity shall meet the following, unless otherwise stated in the 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.

326 IAC 6-4 (Fugitive Dust Emissions)

Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), the Permittee shall be in violation of 326 IAC 6-4 (Fugitive Dust Emissions) if any of the criteria specified in 326 IAC 6-4-2(1) through (4) are violated pursuant to 326 IAC 6-4-5(c). Observations of visible emissions crossing the property line of the source at or near ground level must be made by a qualified representative of IDEM.

326 IAC 9 (Carbon Monoxide Emission Limits)

Pursuant to 326 IAC 9 (Carbon Monoxide Emission Limits), the source is not subject to this rule because it is a stationary source which emits CO emissions and commenced operation before March 21, 1972.

State Rule Applicability – Individual Facilities

The following state rules are applicable to specific operations at the source:

326 IAC 2-2 (PSD)

The unrestricted potential to emit of this source is greater than two hundred fifty (250) tons per year of CO, PM, PM₁₀, and VOC; therefore, these pollutants have been reviewed under 326 IAC 2-2 (PSD).

PSD BACT for CO:

- (a) 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, the following shall apply to the EAF:
- (1) 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 (24) 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. If there are less than four (4) heats in one (1) day, the CO emissions on that day shall be averaged with the CO emissions on the next day that there are four (4) or more heats for purposes of determining compliance with the twenty-four (24) hour average.
 - (2) 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 constructed, calibrated, maintained, and operated to record output, documenting compliance with the CO limitations from the Electric Arc Furnace baghouse exhaust stack. 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.
- (b) 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.
- (c) 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, 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.

PSD Minor Limits for CO, Lead, NO_x, PM, PM₁₀, and VOC:

In 2005, an application was reviewed for a modification to increase the ladle size of the EAF (Source Modification No.: 071-20188-00016, issued on April 21, 2005). Since this modification resulted in increased utilization for all processes at the facility, this source elected to limit the potential to emit of CO, Lead, NO_x, PM, PM₁₀, and VOC for the entire source as follows:

(A) EAF:

- (1) The amount of metal poured from the EAF shall not exceed 82,750 tap tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (2) The lead (Pb) emissions from the EAF shall be limited to 0.013 pounds per tap tons of metal poured.
- (3) The NO_x emissions from the EAF shall be limited to 0.55 pounds per tap tons of metal poured.
- (4) Particulate Emissions:
 - (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 visible emissions from any building opening shall be limited to 6% opacity in any one (1) six (6) minute averaging period.
 - (c) The particulate matter (PM) emissions from the melt shop baghouse stack (S-6) shall be limited to 3.96 pounds per hour (lb/hr).
 - (d) The PM₁₀ emissions from the melt shop baghouse stack (S-6) shall be limited to 1.76 pounds per hour (lb/hr).
 - (e) The PM 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 emissions (insignificant activity) shall not exceed 0.83 pounds per hour (lb/hr).
 - (f) The 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 PM₁₀ emissions (insignificant activity) shall not exceed 0.5 pounds per hour (lb/hr).
 - (g) 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 emissions (insignificant activity) shall not exceed 0.17 pounds per hour (lb/hr).

- (h) 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 PM₁₀ emissions (insignificant activity) shall not exceed 0.1 pounds per hour (lb/hr).

The PM₁₀ emission limits include filterable and condensable PM₁₀.

- (5) The VOC emissions from the EAF shall be limited to 0.85 pounds per tap tons of metal poured.

(B) Drying Rotary Kiln (DRK):

- (1) The combined throughput of semi-finished steel powder to RF-1 and RF-2 shall not exceed 82,750 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (2) Particulate 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) PM emissions from each heater in the drying process shall not exceed 0.52 pounds per hour;
 - (e) PM₁₀ emissions from each heater in the drying process shall not exceed 0.3 pounds per hour;
 - (f) Visible emissions from stacks S-4 and S-5 of the two (2) Reduction / Annealing Furnaces (RF-1 and RF-2) shall not exceed 6% opacity in any one (1) six (6) minute averaging period.

(C) 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).
- (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).
- (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).
- (4) Fugitive emissions emitted from any building opening shall be limited to 6% opacity in any one (1) six (6) minute averaging period.
- (5) PM emissions from the baghouse (BS-1) controlling emissions from the Metal Powder Classifying facility shall not exceed 0.05 pounds per hour (lb/hr).

- (6) PM₁₀ emissions from the baghouse (BS-1) controlling emissions from the Metal Powder Classifying facility shall not exceed 0.03 pounds per hour (lb/hr);
 - (7) PM emissions from each of the two (2) baghouses (BS-2a and BS-2b) controlling emissions from the product surge hoppers shall not exceed 0.03 pounds per hour (lb/hr).
 - (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 pounds per hour (lb/hr);
 - (9) PM emissions from each of the five (5) baghouses (BS-3a, BS-3b, BS-3c, BS-3d1, and BS-3d2) controlling emissions from the Blender Packaging Systems shall not exceed 0.03 pounds per hour (lb/hr).
 - (10) PM₁₀ emissions from each of the five (5) baghouses (BS-3a, BS-3b, BS-3c, BS-3d1, and BS-3d2) controlling emissions from the Blender Packaging Systems shall not exceed 0.02 pounds per hour (lb/hr);
- (D) Premix Line:
- (1) PM emissions from the Process Bag Filter (BF-1) for Blender, BL-1, shall not exceed 1.6 pounds per hour (lb/hr).
 - (2) PM₁₀ emissions from the Process Bag Filter (BF-1) for Blender, BL-1, shall not exceed 1.8 pounds per hour (lb/hr).
 - (3) PM emissions from the Process Bag Filter (BF-3) for Blender, BL-2, shall not exceed 1.6 pounds per hour (lb/hr).
 - (4) PM₁₀ emissions from the Process Bag Filter (BF-3) for Blender, BL-2, shall not exceed 1.8 pounds per hour (lb/hr).
- (E) The direct and indirect heating units (Boiler B1, EAF and RF-1 and RF-2 burners, ladle and tundish preheat units, and flame suppression atomizer) shall burn only natural gas.
- (a) Source-wide natural gas usage shall be limited to 706.56 million cubic feet (MMCF) per twelve (12) consecutive month period, with compliance determined at the end of each month.
 - (b) CO emissions from natural gas combustion shall not exceed 84 pounds per million cubic feet (lb/MMCF).
 - (c) NO_x emissions from natural gas combustion shall not exceed 100 pounds per million cubic feet (lb/MMCF).
 - (d) PM emissions from natural gas combustion shall not exceed 1.9 pounds per million cubic feet (lb/MMCF).
 - (e) PM₁₀ emissions from natural gas combustion shall not exceed 7.6 pounds per million cubic feet (lb/MMCF).
 - (f) VOC emissions from natural gas combustion shall not exceed 5.5 pounds per million cubic feet (lb/MMCF).

Compliance with the CO BACT requirements and the above limits, in combination with potential emissions of CO, lead, NO_x, PM, PM₁₀, and VOC from all other emission units, will limit the potential to emit from the modification to increase the ladle size of the EAF (approved under Source Modification No.: 071-20188-00016) to less than

- (1) one hundred (100) tons CO per twelve (12) consecutive month period,
- (2) 0.6 tons lead (Pb) per twelve (12) consecutive month period,
- (3) forty (40) tons NO_x per twelve (12) consecutive month period,
- (4) twenty-five (25) tons PM per twelve (12) consecutive month period,
- (5) fifteen (15) tons PM₁₀ per twelve (12) consecutive month period, and
- (6) forty (40) tons VOC per twelve (12) consecutive month period,

and shall render 326 IAC 2-2 (PSD) not applicable to the modification to increase the ladle size of the EAF.

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

The consumption of toluene solvent in the 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 any single HAP and total HAPs shall be less than 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)]

Compliance with this toluene consumption limit for the Premix Line, including the base metal powder and additive process, and the laboratory scale pilot Blender line will limit the potential to emit from this modification to less than ten (10) tons per year of any single HAP and less than twenty-five (25) tons per year of any combination of HAPs. Therefore the requirements of 326 IAC 2-4.1 and the Clean Air Act Section 112 are not applicable to the addition of the Premix Line, including the base metal powder and additive process, and the laboratory scale pilot Blender line.

326 IAC 6-2 (Particulate Emissions Limitations for Source of Indirect Heating)

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), PM emissions from Boiler B1 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

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

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from each process shall not exceed the following pounds per hour emission limitations.

Table 5: Summary of Process Weight Rate Limits		
Process / Emission Unit	P (ton/hr)	E (lb/hr)
EAF	14.00	24.03
Ladle to Tundish Teeming	14.00	24.03
DRK	15.00	25.16
RF-1	6.00	13.62
RF-2	5.00	12.05
Metal Powder Classifying	14.00	24.03
Pulverizing Surge Hoppers	11.00	20.44
Blender Packaging Systems	18.00	28.43
Premix Line Blender BL-1	3.33	9.19
Premix Line	3.33	9.19
base metal powder and additive process	3.33	9.19
lab scale pilot Blender Line LSP-1	0.17	1.23
material handling	0.0001	0.01
slag handling - melt shop building	0.001	0.04

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:

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

All control equipment shall be in operation at all times the associated processes are in operation, in order to comply with these limits.

326 IAC 8-1-6 (New facilities; general reduction requirements)

- (a) Volatile Organic Compound (VOC) emissions shall be controlled through a scrap management plan to eliminate steel scrap with high residual oil content. Kobelco Metal Powder of America shall charge only scrap consistent with the Scrap Pollution Prevention Plan submitted on June 28, 2008, or subsequent revisions to the plan. Any changes made to the Scrap Pollution Prevention Plan shall be submitted to IDEM, OAQ thirty (30) days prior to implementing the changes.
- (b) The consumption of toluene solvent in the 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 shall be less than 25tons per 12 consecutive month period, respectively. The consumption of toluene solvent shall be calculated as follows:

$$\text{Toluene solvent consumption (gallons)} = [\text{Toluene solvent input to the new Premix Line Blender (BL-1) (gal) - Toluene solvent recovered in the Toluene Condenser (HX-1) (gal)}] + [\text{Toluene solvent input to the pilot Blender (BL-2) (gal) - Toluene solvent recovered in the pilot Toluene Condenser (HX-2) (gal)}]$$

Compliance with this toluene consumption limit for the Premix Line, including the base metal powder and additive process, and the laboratory scale pilot Blender line will limit the potential to emit from this modification to less than twenty-five (25) tons per year of VOC. Therefore the requirements of 326 IAC 8-1-6 are not applicable to the addition of the Premix Line, including the base metal powder and additive process, and the laboratory scale pilot Blender line.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Compliance Determination Requirements

The compliance monitoring requirements applicable to this source are as follows:

Table 6: Summary of Testing Requirements					
Emission Unit	Control Device	Timeframe for Testing	Pollutant	Frequency of Testing	Limit or Requirement
EAF	BH	270 days after issuance of renewal	CO Lead NO _x PM PM ₁₀ VOC	every 5 years	<100 tpy * <0.6 tpy * <40 tpy * <25 tpy * <15 tpy * <40 tpy *
RF-1 and RF-2	BH	270 days after issuance of renewal	PM PM ₁₀	every 5 years	<25 tpy * <15 tpy *
Metal Powder Classifying	BH	270 days after issuance of renewal	PM PM ₁₀	every 5 years	<25 tpy * <15 tpy *
Pulverizing Surge Hoppers	BH	270 days after issuance of renewal	PM PM ₁₀	every 5 years	<25 tpy * <15 tpy *
Blender Packaging Systems	BH	270 days after issuance of renewal	PM PM ₁₀	every 5 years	<25 tpy * <15 tpy *
Premix Line	BH	270 days after issuance of renewal	PM PM ₁₀	every 5 years	<25 tpy * <15 tpy *

* These are source-wide limits required to keep the 2005 modification to increase the ladle size to the EAF to less than PSD Thresholds.

All control equipment shall be in operation at all times the associated processes are in operation.

Compliance Monitoring Requirements

The compliance monitoring requirements applicable to this source are as follows:

Table 7: Summary of Compliance Monitoring Requirements				
Control	Parameter	Frequency	Range	Excursions and Exceedances
EAF Baghouse and doghouse enclosure	Pressure Drop	Daily	1 to 9 inches	Response Steps
	Visible Emissions		Normal-Abnormal	
DRK wet scrubber	Pressure Drop	Daily	17 to 23 inches	Response Steps
	Flow Rate		< 30 GPM	
	Visible Emissions		Normal-Abnormal	
Baghouses: <ul style="list-style-type: none"> • Boiler B1 • RF-1 & RF-2 • Metal Powder Classifying • Pulverizing Surge Hoppers • Blender Packaging Systems 	Pressure Drop	Weekly	1 to 9 inches	Response Steps
	Visible Emissions		Normal-Abnormal	
Premix Line Bag Filters: <ul style="list-style-type: none"> • Blender BL-1 • Blender BL-2 	Pressure Drop	Weekly	1 to 9 inches	Response Steps
	Visible Emissions		Normal-Abnormal	

This monitoring is required as part of the CAM plan submitted to IDEM with the permit renewal application.

These monitoring conditions are necessary because the control devices for the facilities must operate properly to ensure compliance with 326 IAC 2-2 (PSD), 326 IAC 2-7 (Part 70), 326 IAC 6-3 (Process Operations) and 40 CFR 64 (CAM).

Conclusion and Recommendation

The operation of this stationary metal powder manufacturing operation shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No. T 071-26381-00016.

An application for the purposes of this review was received on April 4, 2008. Additional information was received on November 12, 2008, and November 17, 2008. Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

The staff recommends to the Commissioner that the Part 70 Operating Permit Renewal be approved.

IDEM Contact

Questions regarding this proposed permit can be directed to:

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Please refer to Part 70 Operating Permit Renewal No. T 071-26381-00016 in all correspondence.

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

Appendix A – Emission Calculations
Technical Support Document (TSD)
Part 70 Operating Permit Renewal

Source Description and Location

Company Name: Kobelco Metal Powder of America, Inc.
Address City IN Zip: 1625 Bateman Drive, Seymour, IN 47274
County: Jackson
SIC / NAICS Code: 3399 (3311A)
Part 70 Operating Permit Renewal No.: T 071-26381-00016
Permit Reviewer: Kimberly Cottrell
Date: November 17, 2008

Summary of Potential to Emit

Process / Emission Unit	Uncontrolled Potential To Emit (ton/yr)								
	CO	NO _x	PM	PM ₁₀	SO ₂	VOC	HAP Toluene	HAP Lead	Combination HAPs
EAFF	867.24	23.13	544.43	544.43	18.31	67.45	0	1.54	1.54
Rotary Kiln Dryer	0	0	192.72	192.72	0	0	0	0	0
Boiler B1	4.40	5.24	0.10	0.40	0.01	0.07	0	0	0
Metal Classifying Facility	0	0	144.54	144.54	0	0	0	0	0
RF 1 & 2	48.18	0	0	0	0	0	0	0	0
RF 1 Burners	6.31	7.51	0.14	0.57	0.05	0.41	0	0	0
RF 2 Burners	6.31	7.51	0.14	0.57	0.05	0.41	0	0	0
Pulverizing Surge Hoppers	0	0	17.52	17.52	0	0	0	0	0
Packaging (4 BH)	0	0	35.04	35.04	0	0	0	0	0
Packaging (BS-3a)	0	0	87.60	122.64	0	0	0	0	0
Premix Line and Pilot Blender	0	0	91.97	91.97	0	321.48	321.48	0	321.48
Oxy Fuel and Coherent Jet Burners	10.51	12.51	0.24	0.95	0.08	0.69	0	0	0
Tundish Preheat, Flame Suppression Atomizer and Ladle Preheat 1	2.15	2.56	0.05	0.19	0.02	0.14	0	0	0
Ladle Preheat 2	0.24	0.29	0.01	0.02	0.00	0.02	0	0	0
Totals:	945.34	58.74	1,114.50	1,151.57	18.50	390.66	321.48	1.54	323.02

Process / Emission Unit	Limited Potential To Emit (ton/yr)								
	CO	NO _x	PM	PM ₁₀	SO ₂	VOC	HAP Toluene	HAP Lead	Combination HAPs
EAFF	263.56	22.76	21.72	10.34	15.72	35.17	0	0.54	0.54
Rotary Kiln Dryer	0	0	1.08	0.62	0	0	0	0	0
Boiler B1	4.40	5.24	0.10	0.40	0.03	0.29	0	0	0
Metal Classifying Facility	0	0	0.22	0.13	0	0	0	0	0
RF 1 & 2	41.38	0	0	0	0	0	0	0	0
RF 1 Burners	6.31	7.51	0.14	0.57	0.05	0.41	0	0	0
RF 2 Burners	6.31	7.51	0.14	0.57	0.05	0.41	0	0	0
Pulverizing Surge Hoppers	0	0	0.26	0.18	0	0	0	0	0
Packaging (5 BH)	0	0	0.66	0.44	0	0	0	0	0
Premix Line and Pilot Blender	0	0	7.01	7.88	0	9.65	9.65	0	9.65
Oxy Fuel and Coherent Jet Burners	9.46	11.26	0.21	0.86	0.07	0.62	0	0	0
Tundish Preheat, Flame Suppression Atomizer and Ladle Preheat 1	2.15	2.56	0.05	0.19	0.02	0.14	0	0	0
Ladle Preheat 2	1.05	1.25	0.02	0.10	0.01	0.07	0	0	0
Totals:	334.61	58.08	31.62	22.28	15.93	46.76	9.65	0.54	10.19

Past Actual Emissions (2002-2003)	235.98	19.16	6.94	7.77	1.63	7.79	2.99	0	2.99
PTE Increase (Limited PTE - Past Actual)	98.63	38.93	24.68	14.51	14.31	38.97	6.66	0.54	7.20
PSD Significant Level	100	40	25	15	40	40	NA	0.6	NA

Natural Gas Combustion <100 MMBtu/hr

Emission Unit	Heat Input Capacity	Potential Throughput	Installation Date
Boiler (B1)	12.55 MMBtu/hr	104.70 MMCF/yr	1989
Tundish Preheat	2.36 MMBtu/hr	19.69 MMCF/yr	1989
Flame Suppression Atomizer	1.45 MMBtu/hr	12.10 MMCF/yr	1989
Ladle Preheat 1	2.33 MMBtu/hr	19.44 MMCF/yr	1989
RF-1 burners	18.0 MMBtu/hr	150.17 MMCF/yr	2000
RF-2 burners	18.0 MMBtu/hr	150.17 MMCF/yr	2000
EAF oxy-fuel burner	9.5 MMBtu/hr	79.26 MMCF/yr	2000
Ladle Preheat 2	3.0 MMBtu/hr	25.03 MMCF/yr	2005
Coherent Jet injection lance & burner	9.5 MMBtu/hr	79.26 MMCF/yr	2005
EAF burner	4.0 MMBtu/hr	33.37 MMCF/yr	2005
EAF burner	4.0 MMBtu/hr	33.37 MMCF/yr	2005
Maximum Capacity:	84.7 MMBtu/hr	706.56 MMCF/yr	

	Potential To Emit - Criteria Pollutants						
	CO	NO _x	PM	PM ₁₀	PM _{2.5}	SO ₂	VOC
<i>Emission Factor (lb/MMCF)</i>	84	100	1.9	7.6	7.6	0.6	5.5
Boiler (B1)	1.00	1.20	0.02	0.09	0.09	0.01	0.07
Tundish Preheat	0.19	0.22	0.00	0.02	0.02	0.00	0.01
Flame Suppression Atomizer	0.12	0.14	0.00	0.01	0.01	0.00	0.01
Ladle Preheat 1	0.19	0.22	0.00	0.02	0.02	0.00	0.01
RF-1 burners	1.44	1.71	0.03	0.13	0.13	0.01	0.09
RF-2 burners	1.44	1.71	0.03	0.13	0.13	0.01	0.09
EAF oxy-fuel burner	0.76	0.90	0.02	0.07	0.07	0.01	0.05
Ladle Preheat 2	0.24	0.29	0.01	0.02	0.02	0.00	0.02
Coherent Jet injection lance & burner	0.76	0.90	0.02	0.07	0.07	0.01	0.05
EAF burner	0.32	0.38	0.01	0.03	0.03	0.00	0.02
EAF burner	0.32	0.38	0.01	0.03	0.03	0.00	0.02
Uncontrolled Potential To Emit (lb/hr)	6.78	8.07	0.15	0.61	0.61	0.05	0.44
Uncontrolled Potential To Emit (ton/yr)	29.68	35.33	0.67	2.68	2.68	0.21	1.94

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

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

	Potential To Emit - Hazardous Air Pollutants										Combination HAPs
	HAPs - Organics					HAPs - Metals					
	Benzene	Dichloro-benzene	Formaldehyde	Hexane	Toluene	Lead	Cadmium	Chromium	Manganese	Nickel	
<i>Emission Factor (lb/MMCF)</i>	2.1E-03	1.2E-03	7.5E-02	1.8	3.4E-03	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Boiler (B1)	2.5E-05	1.4E-05	9.0E-04	2.2E-02	4.1E-05	6.0E-06	1.3E-05	1.7E-05	4.5E-06	2.5E-05	0.02
Tundish Preheat	4.7E-06	2.7E-06	1.7E-04	4.0E-03	7.6E-06	1.1E-06	2.5E-06	3.1E-06	8.5E-07	4.7E-06	0.00
Flame Suppression Atomizer	2.9E-06	1.7E-06	1.0E-04	2.5E-03	4.7E-06	6.9E-07	1.5E-06	1.9E-06	5.2E-07	2.9E-06	0.00
Ladle Preheat 1	4.7E-06	2.7E-06	1.7E-04	4.0E-03	7.5E-06	1.1E-06	2.4E-06	3.1E-06	8.4E-07	4.7E-06	0.00
RF-1 burners	3.6E-05	2.1E-05	1.3E-03	3.1E-02	5.8E-05	8.6E-06	1.9E-05	2.4E-05	6.5E-06	3.6E-05	0.03
RF-2 burners	3.6E-05	2.1E-05	1.3E-03	3.1E-02	5.8E-05	8.6E-06	1.9E-05	2.4E-05	6.5E-06	3.6E-05	0.03
EAF oxy-fuel burner	1.9E-05	1.1E-05	6.8E-04	1.6E-02	3.1E-05	4.5E-06	1.0E-05	1.3E-05	3.4E-06	1.9E-05	0.02
Ladle Preheat 2	6.0E-06	3.4E-06	2.1E-04	5.1E-03	9.7E-06	1.4E-06	3.1E-06	4.0E-06	1.1E-06	6.0E-06	0.01
Coherent Jet injection lance & burner	1.9E-05	1.1E-05	6.8E-04	1.6E-02	3.1E-05	4.5E-06	1.0E-05	1.3E-05	3.4E-06	1.9E-05	0.02
EAF burner	8.0E-06	4.6E-06	2.9E-04	6.9E-03	1.3E-05	1.9E-06	4.2E-06	5.3E-06	1.4E-06	8.0E-06	0.01
EAF burner	8.0E-06	4.6E-06	2.9E-04	6.9E-03	1.3E-05	1.9E-06	4.2E-06	5.3E-06	1.4E-06	8.0E-06	0.01
Uncontrolled Potential To Emit (lb/hr)	1.7E-04	9.7E-05	6.0E-03	1.5E-01	2.7E-04	4.0E-05	8.9E-05	1.1E-04	3.1E-05	1.7E-04	0.15
Uncontrolled Potential To Emit (ton/yr)	7.4E-04	4.2E-04	0.03	0.64	1.2E-03	1.8E-04	3.9E-04	4.9E-04	1.3E-04	7.4E-04	0.67

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

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

326 IAC 6-2 Evaluation

Boilers	Installation Date	Rating (MMBtu/hr)	Q (MMBtu/hr)	Pt (lb/MMBtu)	Applicable Rule
Boiler (B1)	1989	12.55	12.55	0.565	326 IAC 6-2-4

[326 IAC 6-2-4] $Pt = \frac{1.09}{Q^{0.26}}$

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

326 IAC 6-3-2 Particulate Emission Rate Limitations

PM Control Device	Stack/Vent	Process	Process Weight, P		P ≤ 60,000 lb/hr
			each unit P (lb/hr)	each unit P (ton/hr)	E = 4.10 P ^{0.67} E (lb/hr)
doghouse evacuation system enclosure and baghouse	S-6	EAF	28,000	14.00	24.03
none	EAF enclosure	ladle to tundish teeming	28,000	14.00	24.03
wet scrubber	S-2	DRK	30,000	15.00	25.16
none	S-4	RF-1	12,000	6.00	13.62
none	S-5	RF-2	10,000	5.00	12.05
BS-1	no stack	Metal Powder Classifying	28,000	14.00	24.03
BS-2a & BS-2b	no stack	Pulverizing Surge Hoppers	22,000	11.00	20.44
BS-3a, BS-3b, BS-3c, BS-3d1 & BS-3d2	no stack	Blender Packaging Systems	36,000	18.00	28.43
BF-1 and BF-2a	SS-1	Premix Line Blender BL-1	6,666	3.33	9.19
BF-3	no stack	lab scale pilot Blender BL-2	333.3	0.17	1.23

Premix Line - 2001 Modification (071-14702-00016)

Total estimated annual solvent input rate ¹ =	88,500	gallons/yr =	321.48	tons/yr VOC/HAP
Loss Rate ² =	3.00%	=	311.83	tons/yr VOC/HAP recovered
		Solvent Density =	7.265	lbs/gallon
Limited VOC/Toluene Emission Rate ³ =		=	9.64	tons/yr
Blender BL-1 Maximum Production Capacity =	6,666	lb/hr =	29,197	tons/yr PM/PM10
Loss Rate ⁴ =	0.0003%	=	29,197	tons/yr PM/PM10 recovered
Limited PM/PM10 Emission Rate ⁴ =		=	0.088	tons/yr
Blender BL-2 Maximum Production Capacity =	333.3	lb/hr =	1,460	tons/yr PM/PM10
Loss Rate ⁴ =	0.0003%	=	1,460	tons/yr PM/PM10 recovered
Limited PM/PM10 Emission Rate ⁴ =		=	0.004	tons/yr
		Total Limited PM/PM10 Emission Rate =	0.092	tons/yr
		Estimated Control Efficiency =	99.9%	
		Total Uncontrolled PM/PM10 Emission Rate =	91.97	tons/yr

Notes:

1. This represents the total usage for the Premix line and the laboratory scale pilot blender. Solvent used is 100% toluene.
2. Loss rate represents worst case expected and is the toluene input rate minus the toluene recovered.
3. Limited VOC/Toluene emission rate (tons/yr) = [Solvent input rate (gal/yr) - {Solvent input rate (gal/yr) x 1 - Loss Rate (%) } x Solvent Density (lb/gal) x 1 ton/2000 lbs]
4. Due to the intrinsic high density of the metal powder, particulate matter emissions from the premixing process are negligible (<0.1 tons/yr).

Uncontrolled Potential to Emit															
Emission Unit	Date Installed or modified	Maximum Hourly Rate (tons/hour)	Proposed usage (tons/year)	Emission Factor	Controlled Emission Factor (lb/ton)	Source of Emission Factor	Overall Efficiency %	Potential	Potential	Potential	Potential	Potential	Potential	Potential	Potential
								CO (Tons/Year)	NOx (Tons/Year)	PM (Tons/Year)	PM10 (Tons/Year)	SOx (Tons/Year)	VOC (Tons/Year)	Toluene (Tons/Year)	PB (Tons/Year)
EAF	installed 1989	14.00	85,750	PM	11.30	AP-42	99.9%	867.24	23.13	544.43	544.43	18.31	67.45		1.54
	Modified 2000 2005	11 Bottleneck at RF1 and RF2	TAP WEIGHT LIMIT 96,360	PM10	11.30	AP-42	99.9%								
Rotary Kiln Dryer	2002	15.00	85,750	PM	0.20	Title V permit	95%			192.72	192.72				
Boiler B1 SCC: 10300602	1989	12.55 MMBTU/hr	105 MMCF/yr	PM	1.9	AP-42	0%	4.40	5.24	0.10	0.40	0.01	0.07	4.E-05	6.E-06
				PM10 ²	7.6	AP-42	0%								
				SOx	0.6	AP-42	0%								
				NOx	100	AP-42	0%								
				VOC	5.5	AP-42	0%								
				CO	84	AP-42	0%								
Metal Classifying Facility	1989	14.00	85,750	PM	0.03	Man. Data ³	99%			144.54	144.54				
				PM10	0.03 lbs/hr	Man. Data ³	99%								
RF 1 & 2		11.00	85,750	CO	1.00	Stack Test ⁴	0%	48.18							
RF 1 Burners Natural Gas	2000	18 MMBTU	150 MMCF	PM	1.9	AP-42	0%	6.31	7.51	0.14	0.57	0.05	0.41	3.E-04	4.E-05
				PM10	7.6	AP-42	0%								
				SOx	0.6	AP-42	0%								
				NOx	100	AP-42	0%								
				VOC	5.5	AP-42	0%								
				CO	84	AP-42	0%								
RF 2 Burners Natural Gas	2000	18 MMBTU	150 MMCF	PM	1.9	AP-42	0%	6.31	7.51	0.14	0.57	0.05	0.41	3.E-04	4.E-05
				PM10	7.6	AP-42	0%								
				SOx	0.6	AP-42	0%								
				NOx	100	AP-42	0%								
				VOC	5.5	AP-42	0%								
				CO	84	AP-42	0%								
Pulverizing Surge Hoppers (one at RF-1 and RF-2)	1989	11.00	85,750	PM	0.02	Man. Data ⁵	99%			17.52	17.52				
				PM10	0.02 lbs/hr each	Man. Data ⁵	99%								
Packaging (4 BH) (four baghouses limited to 0.02 lbs/hr each)	1989	18.00	85,750	PM	0.02	Man. Data ⁵	99%			35.04	35.04				
				PM10	0.02 lbs/hr each	Man. Data ⁵	99%								
Packaging (BS-3a) (PM and PM10 from BS-3a will be limited to 0.05 and 0.07 pound per hour, respectively, based on stack test)				PM	0.05	stack test	99%			87.60	122.64				
				PM10	0.07 lbs/hr	stack test	99%								
Premix Line and Pilot Blender	2001	7.265 lb/gal		VOC	88,500	Title V permit	0%			91.97	91.97		321.48	321.48	
6666 lb/hr - Blender BL-1	2001	6999.3 lb/hr		PM	9.19	Title V permit	99.9997%								
333.3 lb/hr - Blender BL-2	2001			PM	1.23	Title V permit	99.9997%								
Oxy Fuel and Coherent Jet Burners	2000 2005	30 MMBTU	250 MMCF	PM	1.9	AP-42	0%	10.51	12.51	0.24	0.95	0.08	0.69	4.E-04	6.E-05
				PM10 ²	7.6	AP-42	0%								
				SOx	0.6	AP-42	0%								
				NOx	100	AP-42	0%								
				VOC	5.5	AP-42	0%								
				CO	84	AP-42	0%								
Tundish Preheat Flame Suppression Atomizer Ladle Preheat 1	1989	6.14 MMBTU	51 MMCF	PM	1.9	AP-42	0%	2.15	2.56	0.05	0.19	0.02	0.14	9.E-05	1.E-05
				PM10 ²	7.6	AP-42	0%								
				SOx	0.6	AP-42	0%								
				NOx	100	AP-42	0%								
				VOC	5.5	AP-42	0%								
				CO	84	AP-42	0%								
Ladle Preheat 2	2005	#REF! MMBTU	#REF! MMCF	PM	1.9	AP-42	0%	0.24	0.29	0.01	0.02	0.002	0.02	1.E-05	1.E-06
				PM10 ²	7.6	AP-42	0%								
				SOx	0.6	AP-42	0%								
				NOx	100	AP-42	0%								
				VOC	5.5	AP-42	0%								
				CO	84	AP-42	0%								
Totals								945.34	58.74	1,114.50	1,151.57	18.50	390.66	321.48	1.54

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: 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.

Baseline Actual Emission Calculations - 2005 Modification (071-20226-00016)

Emission Unit	Date Installed or modified	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	
										CO (Tons/Year)	NOx (Tons/Year)	PM (Tons/Year)	PM10 (Tons/Year)	SOx (Tons/Year)	VOC (Tons/Year)	Toluene (Tons/Year)	PB (Tons/Year)
EAF	installed 1989 Modified 2000 2005	14.00 metal	61,549 metal TAP WEIGHT	61,631 metal TAP WEIGHT	61,590 metal TAP WEIGHT	PM PM10 SOx NOx VOC CO Pb	0.17 0.17 0.05 0.10 0.13 6.37 0.001	Stack Test ¹ Stack Test ¹ Title V permit Title V permit Title V permit Title V permit Title V permit	99.9% 99.9% 0% 0% 0% 0% 99.90%	196.16	3.08	5.24	5.24	1.54	4.00		3.E-05
Rotary Kiln Dryer	2002	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% 95%			0.31	0.31				
Boiler SCC: 10300602	1989	12.55 MMBTU	79 MMCF	36 MMCF	58 MMCF	PM PM10 ² SOx NOx VOC CO	1.9 7.6 0.6 100 5.5 84	AP-42 AP-42 AP-42 AP-42 AP-42 AP-42	0% 0% 0% 0% 0% 0%	2.42	2.88	0.05	0.22	0.02	0.16		
Metal Classifying Facility	1989	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 ³ Man. Data ³	99% 99%			0.91	0.91				
RF 1 & 2 RF 1 RF 2	1989 1995	11.00 6.0 5.0	50,863	59,614	55,238	CO	1.0	Stack Test ⁴	0%	27.62							
RF 1 Burners Natural Gas	2000	18.00 MMBTU	93 MMCF	48 MMCF	70 MMCF	PM PM10 SOx NOx VOC CO	1.9 7.6 0.6 100 5.5 84	AP-42 AP-42 AP-42 Title V permit ⁵ AP-42 see above	0% 0% 0% 0% 0% 0%	2.96	3.52	0.07	0.27	0.02	0.19		
RF 2 Burners Natural Gas	2000	18.00 MMBTU	70 MMCF	38 MMCF	54 MMCF	PM PM10 SOx NOx VOC CO	1.90 7.60 0.60 157.83 5.50 84	AP-42 AP-42 AP-42 Title V permit ⁵ AP-42 AP-42	0% 0% 0% 0% 0% 0%	2.26	4.25	0.05	0.20	0.02	0.15		
Pulverizing Surge Hoppers (one at RF-1 and RF-2)	1989	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 ⁶ Man. Data ⁶	99% 99%			0.05	0.05				
Packaging (four baghouses)	1989	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 ⁶ Man. Data ⁶	99% 99%			0.06	0.06				
Premix Line and Pilot Blender 6666 lb/hr - Blender BL-1 333.3 lb/hr - Blender BL-2	2001 2001	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/ toluene PM ⁸ PM10 ⁸	2656 gal/yr 9.19 1.23 lb/hr	Title V permit Title V permit Title V permit	0% 99.9997% 99.9997%			0.10	0.10		2.99	2.99	
Oxy Fuel and Coherent Jet Burners	2000 2005	MMCF/Day 0.034 0.055 0.056	75 MMCF	40 MMCF	57 MMCF	PM PM10 ² SOx NOx VOC CO ⁷	1.9 7.6 0.6 100 5.5 84	AP-42 AP-42 AP-42 AP-42 AP-42 AP-42	0% 0% 0% 0% 0% 0%	2.41	2.87	0.05	0.22	0.02	0.16		
Tundish Preheat Flame Suppression Atomizer Ladle Preheat 1	1989	6.14 MMBTU	51 MMCF	51 MMCF	51 MMCF	PM PM10 ² SOx NOx VOC CO	1.9 7.6 0.6 100 5.5 84	AP-42 AP-42 AP-42 AP-42 AP-42 AP-42	0% 0% 0% 0% 0% 0%	2.15	2.56	0.05	0.19	0.02	0.14		
Totals										235.98	19.16	6.94	7.77	1.63	7.79	2.99	0

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.
 8: All PM and PM10 associated with the Premix Line and Pilot Blender goes into the product.
 317 MMCF used in MMCF used in 2002 - plant wide

Limited Potential Emission Calculations

Emission Unit	Date Installed or modified	Maximum Hourly Rate (tons/hour)	Proposed usage (tons/year)	Emission Factor	Emission Factor (lb/ton)	Source of Emission Factor	Overall Efficiency %	Future Potential	Future Potential	Future Potential	Future Potential	Future Potential	Future Potential	Future Potential	Future Potential	
								CO (Tons/Year)	NOx (Tons/Year)	PM (Tons/Year)	PM10 (Tons/Year)	SOx (Tons/Year)	VOC (Tons/Year)	Toluene (Tons/Year)	PB (Tons/Year)	
EAF	installed 1989 Modified 2000 2005	14.00	82,750 TAP WEIGHT LIMIT 96,360	PM PM10 SOx NOx VOC CO Pb	0.53 0.25 0.38 0.55 0.85 6.37 0.013	Title V permit Title V permit AP-42 Title V permit Title V permit Title V permit Title V permit	99.9% 99.9% 0% 0% 0% 0% 99.9%	263.56	22.76	21.72	10.34	15.72	35.17	0.54		
								60.17	5.20	4.96	2.36	3.59	8.03	0.12		
								lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr		
								ladle to tundish teeming		0.83	0.50	3.64	2.19			
slag pot & slag dumping		0.17	0.10	0.74	0.44											
		lb/hr	lb/hr	tpy	tpy											
				3.96	1.76	17.34	7.72									
				lb PM/hr	lb PM10/hr	ton PM/yr	ton PM10/yr									
Rotary Kiln Dryer	2002	15.00	82,750	PM PM10	0.52 0.30 lb/hr	Title V permit Title V permit	95% 95%									
Boiler SCC: 10300602	1989	12.55 MMBTU	105 MMCF	PM PM10 ² SOx NOx VOC CO ⁷	1.9 7.6 0.6 100 5.5 84	AP-42 AP-42 AP-42 AP-42 AP-42	0% 0% 0% 0% 0% 0%	4.40	5.24	0.10	0.40	0.03	0.29	4.E-05	6.E-06	
								1.00	1.20	0.02	0.09	0.01	0.07	0.00	0.00	
								lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	
Metal Classifying Facility	1989	14.00	82,750	PM PM10	0.05 0.03 lbs/hr	Title V permit Title V permit	99% 99%			0.22	0.13					
RF 1 & 2	1989 1995	11.00 6.0 5.0	82,750	CO	1.00	Title V permit	0% 0%	41.38	RF1	RF2						
								9.45	5.15	4.29						
								lb/hr	lb/hr	lb/hr						
RF 1 Burners Natural Gas	2000	18 MMBTU	150 MMCF	PM PM10 ² SOx NOx VOC CO ⁷	1.90 7.60 0.60 100 5.50 84	AP-42 AP-42 AP-42 AP-42 AP-42	0% 0% 0% 0% 0% 0%	6.31	7.51	0.14	0.57	0.05	0.41	3.E-04	4.E-05	
								1.44	1.71	0.03	0.13	0.01	0.09	0.00	0.00	
								lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	
RF 2 Burners Natural Gas	2000	18 MMBTU	150 MMCF	PM PM10 ² SOx NOx VOC CO ⁷	1.90 7.60 0.60 100 5.50 84	AP-42 AP-42 AP-42 AP-42 AP-42	0% 0% 0% 0% 0% 0%	6.31	7.51	0.14	0.57	0.05	0.41	3.E-04	4.E-05	
								1.44	1.71	0.03	0.13	0.01	0.09	0.00	0.00	
								lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	
Pulverizing Surge Hoppers (one at RF-1 and RF-2)	1989	11.00	82,750	PM PM10	0.03 0.02 lbs/hr each	Title V permit Title V permit	99% 99%			0.26	0.18					
Packaging (five baghouses limited to 0.03 lbs PM/hr each) (five baghouses limited to 0.02 lbs PM10/hr each)	1989	18.00	82,750	PM PM10	0.03 0.02 lbs/hr each	Title V permit Title V permit	99% 99%			0.66	0.44					
Premix Line and Pilot Blender 6666 lb/hr - Blender BL-1 333.3 lb/hr - Blender BL-2	2001 2001 2001	7.265 lb/gal 1.52 0.08 lb PM/hr	ratio BL-1 : BL-2 20 1.71 0.09 lb PM10/hr	VOC toluene PM PM10	2656 gal/yr 1.6 1.8 lb/hr	Title V permit Title V permit Title V permit	0% 99.9997% 99.9997%	7.01	7.88			9.65	9.65			
										6.67	7.51					
										0.334	0.375					
Oxy Fuel and Coherent Jet Burners (includes new burners)	2000 2005	27.0 MMBTU	225 MMCF	PM PM10 ² SOx NOx VOC CO ⁷	1.90 7.60 0.60 100 5.50 84	AP-42 AP-42 AP-42 AP-42 AP-42	0% 0% 0% 0% 0% 0%	9.46	11.26	0.21	0.86	0.07	0.62	4.E-04	6.E-05	
								2.16	2.57	0.05	0.20	0.02	0.14	0.00	0.00	
								lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	
Tundish Preheat Flame Suppression Atomizer Ladle Preheat 1	1989	6.14 MMBTU	51 MMCF	PM PM10 ² SOx NOx VOC CO ⁷	1.9 7.6 0.6 100 5.5 84	AP-42 AP-42 AP-42 AP-42 AP-42	0% 0% 0% 0% 0% 0%	2.15	2.56	0.05	0.19	0.02	0.14	9.E-05	1.E-05	
								0.49	0.58	0.01	0.04	0.004	0.03	0.00	0.00	
								lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	
Ladle Preheat 2	2005	3.0 MMBTU	25 MMCF	PM PM10 ² SOx NOx VOC CO ⁷	1.9 7.6 0.6 100 5.5 84	AP-42 AP-42 AP-42 AP-42 AP-42	0% 0% 0% 0% 0% 0%	1.05	1.25	0.02	0.10	0.01	0.07	1.E-05	1.E-06	
								0.24	0.29	0.01	0.02	0.002	0.02	0.00	0.00	
								lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	
Totals								334.61	58.08	31.40	22.15	15.93	46.76	9.65	0.54	

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.

Future Potential Minus Baseline Actual Emission Calculations

Emission Unit	Date Installed or modified	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	Future Potential	Past Actual	Net Increase
		CO (tpy)	CO (tpy)	CO (tpy)	NOx (tpy)	NOx (tpy)	NOx (tpy)	PM (tpy)	PM (tpy)	PM (tpy)	PM10 (tpy)	PM10 (tpy)	PM10 (tpy)	SOx (tpy)	SOx (tpy)	SOx (tpy)	VOC (tpy)	VOC (tpy)	VOC (tpy)	toluene (tpy)	toluene (tpy)	toluene (tpy)	PB (tpy)	PB (tpy)	PB (tpy)
EAF	installed 1989 Modified 2000 2005	263.56	196.16	67.40	22.76	3.08	19.68	21.72	5.24	16.49	10.34	5.24	5.11	15.72	1.54	14.18	35.17	4.00	31.17	0	0	0	5.E-01	3.E-05	5.E-01
Rotary Kiln Dryer	2002	0	0	0	0	0	0	1.08	0.31	0.77	0.62	0.31	0.31	0	0	0	0	0	0	0	0	0	0	0	0
Boiler SCC: 10300602	1989	4.40	2.42	1.98	5.24	2.88	2.36	0.10	0.05	0.04	0.40	0.22	0.18	0.03	0.02	0.01	0.29	0.16	0.13	0	0	0	0	0	0
Metal Classifying Facility	1989	0	0	0	0	0	0	0.22	0.91	-0.69	0.13	0.91	-0.78	0	0	0	0	0	0	0	0	0	0	0	0
RF 1 & 2	1989 1995	41.38	27.62	13.76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RF 1 Natural Gas	2000	6.31	2.96	3.35	7.51	3.52	3.99	0.14	0.07	0.08	0.57	0.27	0.30	0.05	0.02	0.02	0.41	0.19	0.22	0	0	0	0	0	0
RF 2 Natural Gas	2000	6.31	2.26	4.04	7.51	4.25	3.26	0.14	0.05	0.09	0.57	0.20	0.37	0.05	0.02	0.03	0.41	0.15	0.26	0	0	0	0	0	0
Pulverizing Surge Hoppers	1989	0	0	0	0	0	0	0.26	0.05	0.21	0.18	0.05	0.12	0	0	0	0	0	0	0	0	0	0	0	0
Packaging	1989	0	0	0	0	0	0	0.66	0.06	0.60	0.44	0.06	0.38	0	0	0	0	0	0	0	0	0	0	0	0
Premix Line and Pilot Blender	2001 2001 2001	0	0	0	0	0	0	7.01	0.10	6.91	7.88	0.10	7.78	0	0	0	9.65	2.99	6.66	9.65	2.99	6.66	0	0	0
Oxy Fuel and Coherent Jet Burners	2000 2005	9.46	2.41	7.05	11.26	2.87	8.40	0.21	0.05	0.16	0.86	0.22	0.64	0.07	0.02	0.05	0.62	0.16	0.46	0	0	0	0	0	0
Tundish Preheat Flame Suppression Atomizer Ladle Preheat 1	1989	2.15	2.15	0	2.56	2.56	0	0.05	0.05	0	0.19	0.19	0	0.02	0.02	0	0.14	0.14	0	0	0	0	0	0	0
Ladle Preheat 2	2005	1.05		1.05	1.25		1.25	0.02		0.02	0.10		0.10	0.01		0.01	0.07		0.07	0		0			0
Totals		334.61	235.98	98.63	58.08	19.16	38.93	31.62	6.94	24.68	22.28	7.77	14.51	15.93	1.63	14.31	46.76	7.79	38.97	9.65	2.99	6.66	0.54	0	0.54
Threshold Levels:				100			40			25			15			40			40			10			0.6